pow 4/19/01

Volume 1

- INVESTIGATIVE REPORT - VOLUNTARY CLEANUP PROGRAM

575 EAST MILL STREET
CITY OF LITTLE FALLS
HERKIMER COUNTY, NEW YORK
SITE NO. V00223-6

September 2000
Revised April 2001

Prepared For:

THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
REGION 6
ATTN: DARREL SWEREDOSKI, P.E.
REGIONAL HAZARDOUS WASTE REMEDIATION ENGINEER

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NOMENCLATURE

The following terms and abbreviations may appear in this report.

ASP	Analytical Services Protocol; a set of analytical rules stipulated by NYSDEC for VCP and other contractual investigations in New York State. (very similar to CLP)
Background Level	An analyte concentration in ambient soil or water near the subject site
Cleanup Objective	An analyte concentration that is a goal for site remediation
Cleanup Objective (site specific)	An analyte concentration that is a goal for site remediation, but reflects the background level present.
CLP	Contract Laboratory Protocol; a set of federal analytical rules stipulated by EPA for labs that it contracts directly with.
CRQL	Contract required quantitation limit (the lowest reporting level required by NYSDEC/ASP or EPA rules)
IDL	Instrument Detection Limit (the lowest level that the laboratory instrument can detect, always less than MDL or CRQL)
IWP	Investigative Work Plan (usually an appendix to the VCA)
J	A "J" associated with a laboratory result means that the value is estimated. The "J" may be assigned by the lab or by a data validator and is usually assigned because the number is small (less than CRQL) or there was a deficiency in the QC associated with the test.
MDL	Method Detection Limit (typically 2-5x idl)
PAH	Polynuclear Aromatic Hydrocarbon (also "PNA")
SVOA	Semi-volatile Organic Analyte (an analytical category within TCL)
TAL	Target Analyte List (An EPA analytical list)
TCL	Target Compound List (An EPA analytical list)
VCA	Voluntary Cleanup Agreement (also VCP Agreement)
VCP	Voluntary Cleanup Program
VOA	Volatile Organic Analyte (an analytical category within TCL)

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1.0 INTRODUCTION AND BACKGROUND

1.1 General

This report presents findings of a Voluntary Cleanup Program (VCP) investigation conducted by United Dominion Industries, Inc. and Feldmeier Equipment, Inc., who are volunteers in Agreement D6-0001-99-11 with New York State Department of Environmental Conservation (NYSDEC). The agreement was executed on 3-20-2000. The investigation was conducted in accordance with an approved Investigative Work Plan (IWP) found in Exhibit "B" of the Contract Agreement. The IWP is also included as an appendix in this report.

Buck Engineering, LLC conducted this investigation under contract with the volunteers. Buck Environmental Labs, Inc. provided laboratory analyses and GeoLogic NY, Inc. provided Geoprobe sampling services.

1.2 Prior Site Investigations

Environmental site assessments have been performed at this site for various parties. Copies of the following site assessment reports were provided to NYSDEC with the initial VCP application:

Buck Engineering, Phase I Environmental Site Assessment: Waukesha Cherry-Burrell Property, 3/98

Delta Environmental Consultants, Inc., Phase I Environmental Assessment: Waukesha Cherry-Burrell Facility, 11/97

Delta Environmental Consultants, Inc., Phase II Environmental Assessment: Waukesha Cherry-Burrell Facility, 6/98

1.3 Objectives

The following objectives emanated from the prior site investigations and were defined in the Investigative Work Plan (attached as an appendix).

1.31 Soil Background Levels (Objective 1)

The Delta Phase 2 investigation identified polynuclear aromatic hydrocarbons (PAH's) and metals at some locations on the site. To determine if these levels are significantly different from ambient levels in the area, samples from three locations were obtained; HE-1, HE-2, and HE-3. Each sample was taken from a shallow hand excavation (0-6"). The sampling locations were east of the boiler building along the central portion of the east property line, on adjoining property west of the site and north of the old tannery site on the south side of East Mill Street.

1.32 Groundwater Quality (Objective 2)

The Delta Phase 2 investigation included some groundwater sampling, but the data were very limited due in part to limitations of the sampling method (temporary Geoprobe points) and the absence of water bearing formations. Four 2" PVC monitoring wells were installed in the current study to allow sampling and assessment of the site groundwater. Three wells (MW-1, MW-3, MW-5) are along the southern perimeter of the manufacturing facility to assess downgradient water quality and one well (MW-4) is downgradient of the petroleum storage tank location. The well positions are shown on the attached site map. (MW-2 was not installed.)

1.33 Gas Manufacturing Site (Objective 3)

A coal gasification facility was indicated at the western portion of the site on Sanborn maps dated 1884, 1891, 1897, 1900, 1906 and 1911. Facilities that manufactured methane and other low-molecular weight gases from coal for lighting and heating purposes typically produced tar-like wastes that were often disposed of on or near the point of manufacture. These wastes included abundant amounts of polynuclear aromatic hydrocarbons (PAH's) and volatile aromatic compounds. The Delta Phase 2 investigation identified various levels of PAH's in soil from the general vicinity where this plant was located at the turn of the century. Three soil borings were obtained to confirm the Delta findings.

1.34 Tannery Site (Objective 4)

As indicated on the site plan, a slaughterhouse and tannery operation was located at the eastern area of the site in the 19th century. The tannery structures appear to have been aligned with a surface stream, possibly for waste disposal purposes. None of the structures from the original tannery operations remain; however, the existing unused 7-story structure was constructed near the end of tannery operations at the site. Much of the original tannery operation's footprint has been covered by construction of the easternmost portion of the current manufacturing building. Tannery operations typically included a "beam room", boiling vats, caustic solutions, and sometimes used chromium salt solutions for the actual tanning process. Some tanneries also used pesticides to prevent infestation of the stored hides. There have not been tannery operations at this site for approximately 100 years. In order to evaluate potential impact to soil and groundwater, three backhoe test pits (TP-3, TP-4, TP-5) were excavated in the general area of the tannery and MW-5 was constructed in a downgradient position.

1.35 Petroleum Above Ground Storage Tanks (Objective 5)

Two existing above ground storage tanks (AST's) containing #2 fuel oil are located on the site. These AST's previously contained #4 or #6 fuel oil. A NYSDEC spill event was registered and closed in 1989 after completion of a soil remediation project. The Delta Phase 2 site assessment identified PAH's in the soil. Two backhoe test pits (TP-1, TP-2) and monitoring well MW-4 were excavated at locations downgradient from the AST's to assess potential impacts on soil and groundwater.

1.36 Electropolishing Wastes (Objective 6)

Electropolishing operations have been conducted in the old tank shop building for several years. Electropolishing can be thought of as reverse electroplating which removes metal from the object rather than adding metal to it. The process fluid, therefore, includes relatively high concentrations of the metal that was electropolished. Since the products have typically been stainless steel, the process waste fluids would be expected to include chromium and nickel as constituents. These waste fluids are handled properly in the current operations; however, prior investigators have raised questions about former disposal methods. Feldmeier Equipment personnel believe that the process was initiated in the 1970's on the second floor of the facility. All of this waste was reportedly shipped off-site as hazardous due to the high pH characteristic. In approximately 1990 the process was re-located to its current location at which time the sub-floor collection vessels were installed. The liquids are pumped from these collection vessels to a nearby treatment system that precipitates the metals by raising the pH (sludge is shipped as hazardous waste) and the wastewater is then neutralized and discharged to the municipal sewer under an industrial pre-treatment permit.

In order to evaluate potential impacts to soil and groundwater, two soil borings (SB-1, SB-2) were advanced in the general area of the current electropolishing and wastewater pre-treatment operations locations. MW-3 is located approximately 80' downgradient from these locations.

1.37 Exposure Pathways (Objective 7)

The final objective was to identify any exposure pathways by which contaminants could be transported off-site or the public could be exposed to contaminants from the site. Separation distances to municipal water supplies, schools, residences, and parks were mapped and identified. Municipal storm water discharges were identified and estimated positions shown on a site plan. A prominent feature on the site is a surface stream/storm drain that passed beneath the plant in a stone-walled conduit (tunnel) to the Mohawk River on the south border of the site. Although the major municipal storm flows have been diverted to an underground concrete pipe at the east end of the site, the tunnel under the plant appears to be connected to some municipal street drains and minor flow continues to be evident. The tunnel was visually examined for presence of discharge pipes that could emanate from the facility. The estimated sampling locations from the tunnel stream are shown on the site map.

1.4 Report Organization

1.41 Objective Numbers

The report presents results organized by the objective numbers described above and various tables and drawings refer to these objective numbers for organizational purposes.

1.42 Analytical Data Presentation

Over five thousand analytical results were generated in this study. These data are presented in three different formats for use by various parties as follows:

NYSDEC Category B Analytical Summary Package - This package presents all data in the form required by the VCP Agreement and is attached to this report as an appendix. The full Category B deliverables package is submitted to NYSDEC under separate cover.

Analytical Results by Objective - To facilitate review of the data by objective number, this appendix has been provided showing all analytical results by objective and sample description.

Tables in Section 5 - Tables of selected analytical data are included in the Section 5 Analytical Results. These tables typically present only values greater than the laboratory method detection limit (MDL) and are included to support the discussion in the text.

2.0 GEOLOGY AND HYDROLOGY

The subject site is located in the Mohawk River Valley south of the Adirondack Mountains in New York State. This portion of the state is part of the glaciated central region of the United States. The Mohawk River runs eastward through a gorge immediately south of the subject site. This section of river has been tied into the New York State Barge Canal System and water levels in the river are controlled by locks located up and downstream. The portion of the Mohawk River bordering the site on the south appears to be the original river channel with the barge canal located several hundred feet south of the river.

Geology of the Little Falls area consists of both Pre-Cambrian and Ordovician age rock. Bedrock outcroppings are prevalent on the valley walls, riverbed, and on the steep cliffs to the south of the site. Exposed bedrock on the subject property consists of metamorphic Pre-Cambrian syenitic gneiss. Additional bedrock in the Mohawk River Valley in the City of Little Falls consists of sedimentary Ordovician age Beekmantown and Saratoga Springs group dolomite and limestone. The dolomite and limestone are located on the higher elevations to the south of the City and on the north slope in the residential section of the City. Massive boulders and outcrops of gneiss can be observed in the Mohawk River channel. An additional outcrop of the gneiss can be observed at the north side of the subject site behind the boiler plant adjacent to the railroad bed.

The site history and soil boring/excavation activities at the site indicate that the majority of the unconsolidated soils on the site consist of non-virgin fill material. The filled soils consist of sand, gravel, bricks, construction debris, cinders, slag, wood, and concrete. The unconsolidated soil depths at the site range from exposed rock at the north side of the site, to 3-6 feet on East Mill Street and under the building, to 16 to 20+ feet adjacent to the Mohawk River. Subsurface structures have been constructed at the site and include a tunnel that diverts a small stream to the Mohawk River. The walls of the tunnel near the confluence with the Mohawk River are constructed of massive blocks of cut rock and boulders. Miscellaneous former building foundation structures are also located on the property.

Surface drainage is from north to south following topographic features to the Mohawk River. A surface stream is indicated on maps of the site from the 1800's. The stream flowed southeasterly to the Mohawk River through the eventual site of the tannery operations. The stream was eventually housed in a stone culvert (tunnel) to facilitate road traffic and building construction on the site. In recent years the tunnel flow was intercepted on East Mill Street and directed through concrete pipe along the west side of the New Tank Building (see "stormwater easement" on the site plan). The remaining tunnel east of the concrete storm drain intercept is still in place and apparently receives storm water from some catch basins along East Mill Street. The tunnel continues along East Mill Street and passes underneath various UDI buildings until it reaches the Mohawk River near the southeast corner of the property. The lower 150' of the tunnel (near the Mohawk outfall) appears to be receiving groundwater influx as the stream runs continuously. The Mohawk River flows to the east along the southern border of the UDI site.

Ground water under the site is present in limited amounts at the bedrock/soil interface. Water table elevations were obtained from four monitoring wells on 6-22-00. A plot of estimated isopotentiometric water surfaces is indicated on the site plan and confirms that groundwater flows to the southeast.

3.0 SAMPLING NARRATIVE

3.1 Background

Site activities at 575 East Mill Street were conducted on April 11, 13, 14, 17, 18, May 23, and June 22, 2000. The April activities consisted of installation of groundwater monitoring wells, investigation of the tunnel outfall, and the collection of soil, surface water, and groundwater samples. Soil samples were collected from the surface, from soil boring samples, and from test pits. Surface water samples were collected from the stream running through the tunnel. Groundwater samples were collected from groundwater monitoring wells installed at the site.

After preliminary data from the April sampling indicated volatile organic contaminants in MW-1, that well was re-purged and re-sampled on 5-23-00 by Ernest Spencer of this firm. Data from both sampling events are included in this report.

After preliminary data from the April sampling indicated high turbidity levels in metals samples from the monitoring wells, the wells were re-sampled for metals on 6-22-00 by Joseph Meldrim of this firm. In accordance with correspondence to Phillip Waite, P.E. of 6-21-00, the monitoring wells were re-developed and resampled for dissolved (field filtered) metals and for total metals. All well samples were analyzed for total metals while those wells with greater than 50 NTU turbidity were also analyzed for dissolved metals.

Eric Monsen of Buck Environmental Laboratories was on site for the duration of excavation, test pit, well drilling, and well installation activities. Mr. Monsen also performed and coordinated all sampling, well development, and tunnel outfall investigation activities at the site.

Soils from the boreholes, test pits, and drilling operations were screened with a 10.2 eV Photo-ionization Detector (PID). PID screening was conducted on both raw soil and soil head space. Ernest Spencer and Joseph Meldrim of Buck Environmental Laboratories assisted in sampling activities. Phillip Waite, P.E., of the New York State Department of Environmental Conservation, was on site during site activities on April 11, 13, and 14, 2000. Jacob Haas of Feldmeier Equipment, Inc. was at the facility for the duration of on-site activities and coordinated access at the facility for the sampling/drilling equipment.

Borehole augering and monitoring well installation activities were performed by GeoLogic NY, Inc. of Cortland, New York. Backhoe services were provided by Feldmeier Equipment.

3.2 Soil Background Samples

Three (3) soil background samples (HE-1,2,3) were collected from the perimeter of the property on April 11, 2000. These samples were used to characterize background metals concentrations in the surface soils at the perimeter of the site. Samples were collected from the surface to a depth of approximately 6". Samples were collected using a separate disposable scoop at each sample location. Sample HE-1 came from a position near the northern property limit slightly east of the fuel oil storage tanks and consisted of brown and black organic soil with some sand and gravel. Sample HE-2 was obtained from near the eastern property limit northeast of the prior tannery location at the edge of the gravel parking area. The sample consisted of gray sand and gravel. Sample HE-3 was obtained from the west side of the site on the George Lumber property and consisted of dark

brown top soil from a grassed area between the paved parking lot and the fence separating the subject site from the lumber yard. No odors or evidence of visible metals contamination were observed in these soil samples. Soil background samples were analyzed for metals and SVOA's. (See the "Superfund Target Compound List (TCL)" in the Appendix for analytical definitions and abbreviations.)

3.3 Test Pits

Soil samples were collected from five (5) test pits at the site on April 11, 2000. The test pits were excavated with a backhoe. Groundwater was encountered in TP-2 and a sample was obtained. The backhoe bucket was de-contaminated at each test pit location between test pits using a brush, lab soap, and a hose. The following paragraphs summarize the test pit activities:

TP-1: This test pit was located in the aboveground storage tank (AST) area. The test pit was excavated to a depth of 1' when bedrock was encountered. Soils in the test pit consisted of brownish black organic soil. No groundwater was encountered in this test pit. There were no fuel-like odors on the soil from the test pit and PID readings were non-detect. A soil sample was collected from the bottom of this test pit for metals, cyanide, VOA's, and SVOA's.

TP-2: This test pit was located in the aboveground storage tank area. The test pit was excavated to a depth of 1.5' when bedrock was encountered. Soils in the test pit consisted of brownish black wet organic soil. There were no fuel-like odors on the soil from the test pit and PID readings were non-detect. Water filled the test pit shortly after the excavation was complete. A soil and water sample were collected from the bottom of this test pit for metals, cyanide, VOA's, and SVOA's.

TP-3: This test pit was located in the former tannery site and was excavated to a depth of 5'. Soils in the test pit consisted of fill material such as ash, slag, and bricks. There were no fuel-like odors on the material from the test pit and PID readings were non-detect. No groundwater was encountered in this test pit. A soil sample was collected from the bottom of this test pit for metals, cyanide, VOA's, SVOA's, pesticides and PCB's.

TP-4: This test pit was located in the former tannery site and was excavated to a depth of 4.5'. Soils in the test pit consisted of brown top soil from the surface to 2', brown soil with pieces of solid black tar-like material interspersed from 2' to 4.5', and a thin layer of black sludge-like material at the bedrock interface. There was a tar-like odor on the black sludge-like material from the bottom of the excavation and PID readings on this material were in the 15 ppm range. No odors were observed on other soils from this test pit and all other PID readings were non-detect. No groundwater was encountered in this test pit. A soil sample was collected from the bottom of this test pit for metals, cyanide, VOA's, SVOA's, pesticides and PCB's.

TP-5: This test pit was located east of the former tannery site and was excavated to a depth of 5.5'. Soils in the test pit consisted of sand and gravel fill material . There were no fuel-like odors on the material from the test pit and PID readings were non-detect. No groundwater was encountered in this test pit. A soil sample was collected from the bottom of this test pit for metals, cyanide, VOA's, SVOA's, pesticides and PCB's.

3.4 Tunnel Stream Samples

Two (2) surface water samples were collected from the tunnel stream on April 11, 2000. Tunnel stream samples were analyzed for metals, VOA's, SVOA's, and cyanide. The downstream tunnel stream sample to be analyzed for cyanide was collected on April 17, 2000. The first tunnel stream sample was called the "Exppathwaydown" sample and was collected from a downstream point approximately 50 feet prior to the stream entering the Mohawk River. (The water level in the Mohawk River was running high on April 11, 2000 and the last 35 to 40 feet of the tunnel creek were flooded with turbid river water.) The second sample was called the "Exppathwayup" sample and was collected at the upstream end of the tunnel. Access to the upper end of the tunnel was difficult and the sample was collected approximately 75 feet north of East Mill Street, not at the extreme end of the tunnel.

3.5 Soil Borings

A total of five (5) soil borings were completed. SB-1 was completed in the wastewater pre-treatment area, SB-2 was completed in the electropolishing area (both inside the plant), and the other three (3) borings (SB-3, SB-4, SB-5) were in the former coal gas manufacturing area.

SB-1: This boring was performed on April 13, 2000 inside the building in the former electropolish area. Split spoon soil samples were obtained from directly below the concrete floor to a depth of 5.3' when auger refusal was encountered. The concrete was 6" thick. Soils encountered in the boring consisted of loose dry black ash and slag from 6" to 2', dry brownish black ash and slag from 2' to 4', moist brown sand and gravel from 4' to 5.3'. Auger refusal was encountered at the 5.3' depth. No groundwater was encountered in this boring. No odors were observed on the soils from this boring and all PID readings were non-detect. Two samples were collected from this borehole for metals analysis. One sample was collected from the 6" to 1' depth and the other sample was collected from the 4' to 5.3' depth.

SB-2: This boring was performed on April 13, 2000 inside the building in the former electropolish area. Split spoon soil samples were obtained from directly below the concrete floor to a depth of 3.2' when auger refusal was encountered. The concrete was 6" thick. Soils encountered in the boring consisted of dry brown silty sand from 6" to 2' and moist brown silty sand from 2' to 3.2'. Auger refusal was encountered at the 3.2' depth. No groundwater was encountered in this boring. No odors were observed on the soils from this boring and all PID readings were non-detect. Two samples were collected from this borehole for metals analysis. One sample was collected from the 6" to 1' depth and the other sample was collected from the 2' to 3.2' depth.

SB-3: This boring was performed on April 13, 2000 outside the building in the former coal gas manufacturing area. Split spoon soil samples were obtained from the surface to a depth of 6.8' when auger refusal was encountered. Asphalt and concrete were encountered from the surface to 6". Soils encountered from 6" to 2' consisted of brown sandy soil. Soils encountered in the remainder of the borehole consisted of red brick fragments with brown sandy soil from 2' to 4', brown silty sand from 4' to 6', brown silty sand and red brick fragments from 6' to 6.8'. No odors were observed on the soil from the boring and no groundwater was encountered in the borehole. A PID reading of 2 ppm (headspace) was observed on the soils from the 6 to 6.8' depth. All other PID readings on soils from this borehole were non-detect. Soil samples for

metals and SVOA analysis were collected from the 6' to 6.8' depth and a soil sample for VOA analysis was collected from the 6.8' depth.

SB-4: This boring was performed on April 13, 2000 outside the building in the former coal gas manufacturing area. Split spoon soil samples were obtained from the surface to a depth of 22.5' when auger refusal was encountered. Asphalt and concrete were encountered from the surface to 6". Soils encountered in this borehole consisted of brown silt and gravel from the 6" to 2' depth, red brick fragments and sand from 2' to 8', brown, gray, and black ash and cinders with wood from 8' to 11', brown silt from 11' to 12', dark gray coarse sand from 12' to 14', gray sand and ash from 14' to 16', red brick fragments, cinders, and wet gravel from 16 to 18', wet gravel from 18 to 21', and silty sand from 20 to 22', and wet gravel from 22 to 22.5'. All of the soils encountered in the boring appeared to be fill material. No odors were observed on any of the soils from this borehole. The highest PID reading from this borehole was 5 ppm (headspace) on the soil from the 8' to 10' depth. A PID reading of 1 ppm (headspace) was observed on soils from the 4' to 6' depth. A PID reading of 2 ppm was observed on soils from the 14' to 16' depth. All other PID readings on soils from this borehole were non-detect. Water was encountered at the 17' depth in the borehole. Soil samples for metals and SVOA analysis were collected from the 8' to 10' depth and a soil sample for VOA analysis was collected from the 20 to 22' depth.

SB-5: This boring was performed on April 14, 2000 outside the building in the former coal gas manufacturing area. Split spoon soil samples were obtained from the surface to a depth of 6.6' when auger refusal was encountered. Asphalt and concrete were encountered from the surface to 6". Soils encountered from 6" to 2' consisted of dry gravel. Soils encountered in the remainder of the borehole consisted of sand and gravel from 2' to 4', red brick fragments from 4' to 4.5', and brown silty sand with brown silty sand and red brick fragments from 6' to 6.8'. A void was encountered from the 4.5' to 6' depth. Split spoon recovery from this borehole was poor. No odors were observed on the soil from the boring and no groundwater was encountered in the borehole. All PID readings on soils from this borehole were non-detect. A single composite soil sample was collected from this borehole from soils at the 1-2' depth and 4' to 6.6' depth for metals, SVOA's, and VOA's.

3.6 Groundwater Monitoring Wells

A total of four (4) groundwater monitoring wells were installed at the site. The original scope of work called for the installation of five wells; however repeated auger refusal was encountered at the location of MW-2 and this well was not installed. The wells were installed on April 13 and 14, 2000. Well driller's logs for the monitoring well installation are included in an appendix. The following paragraphs discuss the monitoring well installation, soils encountered during the drilling operations, well development, and sampling:

MW-1: This monitoring well was installed on April 13, 2000 adjacent to the building in the western portion of the site. Split spoon soil samples were obtained from the surface to a depth of 12.3' when auger refusal was encountered. Asphalt and concrete were encountered from the surface to 3". Soils encountered from 3" to 2' consisted of dry brown sand and gravel. Soils encountered in the remainder of the borehole consisted of brown/black sand and gravel from 2' to 4', brown/black sand and gravel with ash and cinders from 4' to 12.3'. No odors were observed on the soil from the split spoons and groundwater was encountered at 9.58'. PID readings on soils from the 8' to 10' depth were in the 1 ppm range (head space). PID readings on

soils from the 10' to 12' depth were in the 5 ppm range. All other PID readings from the split spoon samples from this borehole were non-detect. The bottom of the well casing was set at 11.3'.

MW-2: This monitoring well was originally intended to be the up-gradient well at the northwest corner of the property but was not installed due to repeated auger refusal at the 2' depth. Three (3) attempts were made at different locations on April 14, 2000 to penetrate solid material encountered at the 2' depth. Auger refusal was encountered on each of the three attempts. After discussions with Phillip Waite, it was determined that the investigation would be completed without an upgradient water sample.

MW-3: This monitoring well was installed on April 14, 2000 on the southern property line between the building and the Mohawk River. Split spoon soil samples were obtained from the surface to a depth of 16.5' when auger refusal was encountered. Gravel was encountered from the surface to 1'. Soils encountered from 1' to 2' consisted of dry brown sand. Soils encountered in the remainder of the borehole consisted of coarse gravel from 2' to 7', brown sand and gravel from 7' to 16.5'. No odors were observed on the soil from the split spoons and groundwater was encountered at 14.26'. PID readings on soils from the split spoons were all non-detect. The bottom of the well casing was set at 16.3'.

MW-4: This monitoring well was installed on April 14, 2000 in the parking area immediately east of the boiler house and south of the petroleum AST area. Split spoon soil samples were obtained from the surface to a depth of 7.6' when auger refusal was encountered. Asphalt was present from the surface to 3". Soils encountered in the remainder of the borehole consisted of coarse gravel from 3" to 2', dark brown sand and gravel from 2' to 7.6'. No odors were observed on the soil from the split spoons and groundwater was encountered at 2.44'. PID readings on soils from the split spoons were all non-detect. The bottom of the well casing was set at 6.9'.

MW-5: This monitoring well was installed on April 14, 2000 in the parking area at the east end of the property between the building and the Mohawk River. Split spoon soil samples were obtained from the surface to a depth of 10' when auger refusal was encountered. Soils encountered in the borehole consisted of brown sand from 0' to 2', brown and black sand and gravel and red brick fragments from 4' to 8', concrete from 8' to 8.5', coarse brown sand and fine gravel from 8.5 to 10'. No odors were observed on the soil from the split spoons and no groundwater was encountered in the well. A PID reading of 1 ppm (head space) was detected on the soil from the 8' to 9' depth. PID readings on other soils from the split spoons were all non-detect.

The monitoring wells were developed on April 14, 2000 using laboratory decontaminated hand bailers. All of the wells were low yield wells and recharge periods were necessary between purging sessions. Approximately 5 well volumes of water were removed from each well during the well development process.

Groundwater from the monitoring wells was analyzed for metals, VOA's, SVOA's, and cyanide. The wells were sampled on April 17, 2000 by Ernest Spencer of Buck Environmental Labs. Monitoring well MW-5 was dry on April 14, 2000 and the well was not developed. On April 17, 2000 a small quantity of water was present in MW-5 and a metals sample was collected. MW-5 did not recharge and no additional groundwater samples were collected from MW-5 for the remainder of this project.

Water yield from monitoring well MW-3 was very low and only a metals sample was collected from this sample point on April 17, 2000. The remaining sample bottles for MW-3 were filled by Jacob Haas of Feldmeier Equipment on April 18, 2000. The bottles were picked-up by Buck Environmental Laboratories on April 18, 2000 and delivered to the laboratory. On May 23, 2000, Eric Monsen made another trip to the site and collected a second VOA sample from MW-1 for confirmation purposes. On June 22, 2000, Joseph Meldrim made a trip to the site and collected additional metals samples from MW-1, 3, and 4 due to excessive turbidity on the original April samples.

3.7 Dissolved Metals/TAGM 4015-Discussion

In the initial sampling event at Little Falls (4-17-00) metals samples were collected without recording turbidity. In most cases, the wells produced a minimal water column and recovery was poor. After noting the amount of sediments in sample containers, a request was made to Phillip Waite to allow re-sampling and analysis for filtered samples. Mr. Waite agreed provided that both filtered and unfiltered samples were obtained and there was adequate documentation.

TAGM HWR-88-4015 presents NYSDEC policy on the non-alteration of groundwater samples collected for metals analysis, as well as provides guidance for situations where the policy may be amended. Section F of the TAGM stipulates a protocol of six steps for allowing filtration of samples that exceed 50 NTU turbidity. In summary, the filtration must be conducted in accordance with EPA SW-846 protocol, filtered and unfiltered samples must be collected jointly, sequential analysis of total and then filtered samples is recommended, flocs and precipitates must not be filtered out, documentation of the filtering method must be provided, and sampling of a comparison well is recommended.

In the second sampling event (6-22-00) MW-1, MW-3, MW-4, and MW-5 were purged of three well volumes (or to dryness) in the morning. In the afternoon the wells were sampled and turbidity measured as follows:

MW-1	60 NTU
MW-3	1600 NTU
MW-4	240 NTU
MW-5	did not recover

Because turbidity exceeded 50 NTU, samples were filtered through a positive pressure .45 um membrane filter in accordance with SW-846 requirements and a second, unfiltered, sample was also obtained. Both samples (filtered and unfiltered) were analyzed and reported. No precipitation or flocculation was noted by the field technician. Monitoring Well 4 was an upgradient comparison well, but it displayed the same poor recovery and turbidity problems as the other wells. We believe the requirements of TAGM HWR-88-4015 were met and that the filtered data provide the most representative groundwater data.

4.0 LABORATORY QUALITY CONTROL/QUALITY ASSURANCE

Samples were analyzed at Buck Environmental Laboratories, Inc. in Cortland, NY. Buck is approved by the NYS Department of Health ELAP program and holds approval number 10795. Buck is also accredited by ELAP as an ASP/CLP lab in all four approval categories.

In accordance with the IWP, all laboratory analysis was conducted as Level 4 work and a complete ASP Category B data package will be submitted to NYSDEC. This report includes an *Analytical Summary* of the complete Category B deliverables package.

A Data Usability Summary Report *(DUSR)* has also been prepared and is submitted with the Analytical Summary. The DUSR assessed difficulties encountered in the laboratory analysis and provided an opinion on the usability of the data.

The DUSR indicates that IWP stipulated QC samples (trip blanks, rinsate blanks, matrix spikes, and duplicate analyses) were used and specific details are presented in the DUSR. Sample custody was properly documented and the data were deemed usable for the intended purpose of this project.

5.0 Analytical Results

Analytical data are presented in this report in three different formats.

- *Analytical Summary Package (NYSDEC ASP)*
  (This is the most complete data set and is located in the appendix.)
- *Summary of Results by Objective*
  (Form 1 results are organized by objective number and sample name; located in appendix.)
- *Tables in Section 5.0 (this section)*
  (These tables generally show only those analytes identified above the laboratory detection limit. Tables are distributed in the text in the location of the relevant discussion.)

For a complete list of analytes for VOA, SVOA and TAL metals, please refer to the Appendix "Superfund Target Compound List."

The tables that follow in this section include references to TAGM 4046 "cleanup objectives". TAGM 4046 refers to a Division Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046) dated 1/24/94 from NYSDEC. This document provides guidance in developing cleanup objectives for inactive hazardous waste sites. The Appendices in the TAGM 4046 provide information for comparison purposes. TAGM 4046 recommendations and guidance values are to be used for soils to develop site specific cleanup objectives considering human health issues, groundwater/drinking water quality, the current background levels and analytical detection limits.

In the absence of regulatory standards for soil, this report compares analytical results to "cleanup objectives" determined from TAGM 4046 criteria.

Each of the sampling positions described below is indicated on the site map along with shaded areas, which depict the locations of the former tannery and manufactured gas facilities.

5.1 Soil Background Levels (Objective 1)

TAGM 4046 recommends choosing the most stringent of several cleanup criteria, except that the cleanup objective should not be lower than the "background level" nor should it be lower than the laboratory analytical method detection limit. Because the area around the subject site was believed likely to have ambient levels of metals and SVOA's in soil, this phase of the investigation was intended to establish background levels for those compounds. These background levels were then used to establish cleanup objectives in accordance with TAGM 4046.

5.1 Soil Background Levels (Objective 1) (continued)

To meet this objective three soil samples were hand excavated from depths of 1-6" from the surface. Sample HE-1 came from a position near the northern property limit slightly east of the fuel oil storage tanks. Sample HE-2 was obtained from near the eastern property limit northeast of the prior tannery location. Sample HE-3 was obtained from the west side of the site on the George Lumber property. The individual SVOA and metal analytes that were detected above MDL are summarized in Tables 5.1 and 5.2.

All three samples had detectable SVOA's (Table 5.1); however, the measured values were significantly lower than the levels presented in TAGM 4046 Appendix for cleanup objectives.

Table 5.1

Sampled 4-11-00

Soil Background Levels – SVOA's

Parameter	HE-1 ug/kg	HE-2 ug/kg	HE-3 ug/kg	MEAN (Site Background) ug/kg	TAGM 4046 Cleanup Objective [1] ug/kg (ppb)
Phenanthrene	<5240	78 J	260 J	113	50,000
Fluoranthene	1260 J	188 J	382 J	610	50,000
Pyrene	1090 J	146 J	349 J	528	50,000
Benzo (a) anthracene	<5240	88 J	150 J	79	224 or MDL
Chrysene	<5240	97 J	164 J	87	400
bis (2-Ethylheyxyl) phthalate	<5240	168 J	477	159	50,000
Benzo (b) fluoranthene	<5240	90 J	<432	30	1,100
Benzo (k) fluoranthene	<5240	86 J	<432	29	1,100
Benzo (a) pyrene	<5240	85 J	105 J	63	61 or MDL
All other analytes were nondetect at the limit indicated below:					
	<5240	<355	<432		

1. As per TAGM 4046, Appendix A, Table 2

5.1 Soil Background Levels (Objective 1) (continued)

It can be seen from Table 5.2 that the measured soil metals background levels were typical of (or lower than) "Eastern USA Background" levels. The column "Cleanup Objective" displays guidelines for use in establishing site-specific cleanup objective levels.

Table 5.2
Soil Background Levels - Metals

Parameter	HE-1 (4/11/00) mg/kg	HE-2 (4/11/00) mg/kg	HE-3 (4/11/00) mg/kg	MEAN (Site Background) mg/kg	Eastern USA Background[1] mg/kg (ppm)	TAGM 4046 Cleanup Objective 2 mg/kg (ppm)
Aluminum, total	2430	618	6030	3026	33,000	SB
Antimony, total	17.3	< 103	< 119	5.8	N/A	SB
Arsenic, total	13.9	7.5	36.1	19.2	3-12 **	7.5 or SB
Barium, total	43	10	36.7	29.9	15-600	300 or SB
Beryllium, total	< 15.6	< 10.3	< 11.9	ND[3]	0-1.75	0.16 or SB
Cadmium, total	< 15.6	< 10.3	< 11.9	ND[3]	0.1-1	1
Calcium, total	57200	109000	12500	59567	130-35,000 **	SB
Chromium, total	44.2	19.6	50.8	38.2	1.5-40 **	10 or SB
Cobalt, total	8.1	< 30.8	4	4.0	2.5-60 **	30 or SB
Copper, total	34.1	9.1	143	62.1	1-50	25 or SB
Iron, total	18500	8180	15200	13960	2,000-550,000	2000 or SB
Lead, total	78.2	9.1	14.8	34	****	SB****
Magnesium, total	11800	48000	4890	21563	100-5,000	SB
Manganese, total	437	791	546	591	50-5,000	SB
Mercury, total	0.091	< 0.0492	< 0.0624	0.03	0.001-0.2	0.1
Nickel, total	63.2	15.1	19.5	32.6	0.5-25	13 or SB
Potassium, total	748	210	606	521	8,500-43,000 **	SB
Selenium, total	< 62.3	< 41.1	< 47.8	ND[3]	0.1-3.9	2 or SB
Silver, total	0.032	0.042	0.034	0.036	N/A	SB
Sodium, total	345	284	< 1600	210	6,000-8,000	SB
Thallium, total	17.3	8.5	< 71.7	8.6	N/A	SB
Vanadium, total	58.2	7.4	13.4	26.3	1-300	150 or SB
Zinc, total	441	83.4	261	262	9-50	20 or SB

1. As per TAGM 4046, Appendix A,
** New York State background
****Background levels for lead vary widely, dependent upon site location (rural vs. suburban/metropolitan)
2. As per TAGM 4046, Appendix A, Table 4
****Background levels for lead vary widely, dependent upon site location (rural vs. suburban/metropolitan)
3. Lab unable to achieve detection limit at or less than cleanup objective due to matrix interferences. See paragraph below.

N/A is not available
SB is site background
ND is non-detect

Metals Detection Limits Comments

Initial attempts to analyze soil samples for metals were unsuccessful due to poor spike recoveries attributable to the sample matrix. The samples were diluted 1:10 to minimize the matrix interference and the quality control parameters improved and were acceptable. The dilution resulted in increased detection limits which, in some cases, exceeded the TAGM 4046 cleanup objective. Table 5.2 indicates that Beryllium, Cadmium, and Selenium were not detected in any of the background samples, but the detection limits were approximately an order of magnitude higher than TAGM 4046 cleanup objectives.

5.1 Soil Background Levels (Objective 1) (continued)

The Little Falls cleanup objectives can be determined by comparing the site background with the TAGM 4046 Cleanup Objective guidelines. The Little Falls cleanup objective is presented on subsequent tables for comparison purposes.

Table 5.3
Determination of Little Falls Soil Cleanup Objectives

Parameter	Mean (Site Background) mg/kg (ppm)	TAGM 4046 Cleanup Objective [1] mg/kg (ppm)	Little Falls Cleanup Objective mg/kg (ppm)
Aluminum, total	**3026**	SB	3026
Antimony, total	**5.8**	SB	5.8
Arsenic, total	**19.2**	7.5 or SB	19.2
Barium, total	**29.9**	300 or SB	300
Beryllium, total	**ND**	0.16 or SB	0.16
Cadmium, total	**ND**	1	1
Calcium, total	**59567**	SB	59567
Chromium, total	**38.2**	10 or SB	38.2
Cobalt, total	**4.0**	30 or SB	30
Copper, total	**62.1**	25 or SB	62.1
Iron, total	**13960**	2000 or SB	13960
Lead, total	**34**	SB****	34
Magnesium, total	**21563**	SB	21563
Manganese, total	**591**	SB	591
Mercury, total	**0.03**	0.1	0.1
Nickel, total	**32.6**	13 or SB	32.6
Potassium, total	**521**	SB	521
Selenium, total	**ND**	2 or SB	2
Silver, total	**0.036**	SB	0.036
Sodium, total	**210**	SB	210
Thallium, total	**8.6**	SB	8.6
Vanadium, total	**26.3**	150 or SB	150
Zinc, total	**262**	20 or SB	262

1. As per TAGM 4046, Appendix A, Table 4

5.2 Groundwater Quality (Objective 2)

In order to determine if groundwater underlying the site had been impacted, four monitoring wells were installed. (Five monitoring wells were described in the IWP, but the augers repeatedly met refusal at 2.0' at the location for MW-2 without encountering water. Monitoring well MW-2 was therefore not installed.) MW-1 was intended to monitor groundwater in the vicinity of a former gasometer location. MW-3 was intended to be downgradient (south) of the "old tank shop" and electropolishing area. MW-4 was intended to represent groundwater downgradient (south) of the fuel oil storage area. MW-5 was intended to represent groundwater downgradient (south) of the former tannery operation. The groundwater samples were analyzed for VOA's, SVOA's, and inorganics.

5.2 Groundwater Quality (Objective 2) (continued)

VOA's detected above MDL's are summarized in Tables 5.4 and 5.5.

Table 5.4
Groundwater Quality - VOA's

MW-1, MW-4 & MW-5 sampled 4-17-00; MW-3 sampled 4-18-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
MW-1			
Acetone	50	15	No
Benzene	0.7	71	**Yes**
Toluene	5	13	**Yes**
Ethylbenzene	5	58	**Yes**
Xylene (total)	5	36	**Yes**
MW-3			
No VOA 95-1 analytes were detected			No
MW-4			
No VOA 95-1 analytes were detected			No
MW-5			
No VOA 95-1 analytes were detected			No

* TAGM 4046, Appendix A, Table 1

No VOA's were detected in MW-3, MW-4, or MW-5 as indicated in Table 5.4. Benzene, toluene, ethylbenzene, and xylenes were detected at levels exceeding the cleanup objectives in MW-1. Because these results were somewhat unexpected, a re-sample of MW-1 was conducted on 5-23-00. Table 5.5 indicates that results from the re-sample were similar, but at lower concentrations than the original sampling. It should also be noted that no acetone was detected in the second sampling, which supports the explanation that the acetone presence in the original sample is believed to be a laboratory artifact.

Table 5.5
MW-1 – Re-Sample- VOA's

Parameter	Cleanup Objective* (ppb)	4/17/00 (ppb)	5/23/00 (ppb)
MW-1: Groundwater Quality			
Acetone	50	15	< 10
Benzene	0.7	71	45
Toluene	5	13	6
Xylene (Total)	5	36	7

* TAGM 4046, Appendix A, Table 1

5.2 Groundwater Quality (Objective 2) (continued)

SVOA data for the monitoring wells is presented in the Table 5.6.

Table 5.6
Groundwater Quality - SVOA's

MW-1, MW-4 and MW-5 sampled 4-17-00; MW-3 sampled 4-18-00.

Parameter	Cleanup Objective (ppb)	Result (ppb)	Exceeds Objective
MW-1			
Naphthalene	10*	11	**Yes**
Acenaphthene	20*	20	No
Dibenzofuran	5**	3	No
Fluorene	50	7	No
Carbazole	50	7	No
Di-n-butylphthalate	50*	2	No
MW-3			
Phenanthrene	50	10	No
Anthracene	50	3	No
Fluoranthene	50	14	No
Pyrene	50	11	No
Benzo (a) anthracene	0.002**	6	**Yes**
Chrysene	0.002**	7	**Yes**
bis (2-Ethylhexyl) phthalate	50*	5	No
Benzo (b) fluoranthene	0.002**	4	**Yes**
Benzo (k) fluoranthene	0.002**	6	**Yes**
Indeno (1, 2, 3-cd) pyrene	0.002**	4	**Yes**
Benzo (g, h, i) perylene	5**	4	No
MW-4			
bis (2-Ethylhexyl) phthalate	50*	2	No
MW-5			
No SVOA 95-2 analytes were detected			No

* 6NYCRR Part 703.5 Water Quality Standards
**Not listed in 703.4, but exceeds TAGM 4046, Appendix A, Table 2

Five SVOA's were detected in MW-1 at, or less than, TAGM 4046 cleanup objectives as indicated in Table 5.6. One SVOA (naphthalene) was detected at 11 ug/l compared to a cleanup objective of 10 ug/l.

Eleven SVOA's were detected in MW-3 at levels between 4-14 ug/l. Nine of these compounds were qualified as estimates because they were at concentrations less than CLP quantitation limits (CRQL's). Depending on interpretation, five of these compounds (or all of these compounds) are at concentrations less than the TAGM 4046 cleanup objective.

No SVOA's were detected in MW-4 or MW-5 except for low level phthalate believed to be a laboratory artifact.

5.2 Groundwater Quality (Objective 2) (continued)

Table 5.7 presents analytical data from the original April sampling event (high turbidity) along with total and dissolved data from the 6-22-00 sampling event. All results are compared to regulatory limits and exceedances noted.

Table 5.7
Groundwater Quality – Metals

MW-1							
Parameter	Cleanup Objective ug/l*	4/17/00 Total ug/l	4/17/00 Exceeds Objective	6/22/00 Total ug/l	6/22/00 Exceeds Objective	6/22/00 Filtered ug/l	Filtered Exceeds Objective
Aluminum	N/A	39300	No	526	No	<8	No
Antimony	3	<10	No	<10	No	<10	No
Arsenic	50	174	**Yes**	57.9	**Yes**	24.8	No
Barium	1000	371	No	98.1	No	85.8	No
Beryllium	N/A	3.5	No	<1	No	<1	No
Cadmium	10	3.3	No	<1	No	<1	No
Calcium	N/A	198000	No	145000	No	142000	No
Chromium	50	143	**Yes**	2.2	No	<1	No
Cobalt	5	43.6	**Yes**	3	No	<3	No
Copper	200	92.5	No	5.6	No	5.5	No
Iron	300	64400	**Yes**	2880	**Yes**	302	**Yes**
Lead	25	0.73	No	1.1	No	<0.5	No
Magnesium	35000	37700	**Yes**	10800	No	10800	No
Manganese	300	2160	**Yes**	588	**Yes**	567	**Yes**
Mercury	2	0.88	No	0.526	No	<0.4	No
Nickel	100	71	No	<2	No	<2	No
Potassium	N/A	18500	No	13700	No	13400	No
Selenium	10	9.4	No	0.79	No	<0.5	No
Silver	50	55.6	**Yes**	28	No	27.4	No
Sodium	20000	48700	**Yes**	41500	**Yes**	43300	**Yes**
Thallium	8	1.3	No	<6	No	<6	No
Vanadium	14	84.5	**Yes**	<3	No	<3	No
Zinc	300	234	No	134	No	24.7	No
Cyanide	100	89.2	No				
Turbidity	5 NTU			60 NTU	**Yes**		

* 6NYCRR Part 703.5 Water Quality Standards

5.2 Groundwater Quality (Objective 2) (continued)

Table 5.7 (continued)
Groundwater Quality – Metals

MW-3							
Parameter	Cleanup Objective ug/l	4/17/00 Total ug/l	4/17/00 Exceeds Objective	6/22/00 Total ug/l	6/22/00 Exceeds Objective	6/22/00 Filtered ug/l	Filtered Exceeds Objective
Aluminum	N/A	54700	No	6770	No	57.9	No
Antimony	3	<10	No	<10	No	<10	No
Arsenic	50	27.1	No	8.4	No	<5	No
Barium	1000	745	No	118	No	15.7	No
Beryllium	N/A	5.2	No	<1	No	<1	No
Cadmium	10	7.4	No	<1	No	<1	No
Calcium	N/A	253000	No	62500	No	41200	No
Chromium	50	125	Yes	15.1	No	<1	No
Cobalt	5	67.9	Yes	8.7	Yes	<3	No
Copper	200	611	Yes	80.7	No	6.9	No
Iron	300	95800	Yes	11600	Yes	21.6	No
Lead	25	12	No	1.3	No	<0.5	No
Magnesium	35000	43000	Yes	6550	No	3540	No
Manganese	300	3100	Yes	406	Yes	40.4	No
Mercury	2	26.2	Yes	7.44	Yes	0.556	No
Nickel	100	113	Yes	13	No	<2	No
Potassium	N/A	8880	No	2160	No	811	No
Selenium	10	11.3	Yes	1.4	No	1.4	No
Silver	50	68	Yes	9.6	No	6.1	No
Sodium	20000	5500	No	1550	No	3020	No
Thallium	8	3.6	No	<6	No	<6	No
Vanadium	14	108	Yes	19.5	Yes	<3	No
Zinc	300	2110	Yes	285	No	30.5	No
Cyanide	100	1.2	No				
Turbidity	5 NTU			1600 NTU	Yes		

* 6NYCRR Part 703.5 Water Quality Standards

5.2 Groundwater Quality (Objective 2) (continued)

Table 5.7 (continued)
Groundwater Quality – Metals

MW-4							
Parameter	**Cleanup Objective* ug/l**	**4/17/00 Total ug/l**	**4/17/00 Exceeds Objective**	**6/22/00 Total ug/l**	**6/22/00 Exceeds Objective**	**6/22/00 Filtered ug/l**	**Filtered Exceeds Objective**
Aluminum	N/A	101000	No	1710	No	<8	No
Antimony	3	<10	No	<10	No	<10	No
Arsenic	50	156	**Yes**	9.7	No	<5	No
Barium	1000	2550	**Yes**	100	No	61.9	No
Beryllium	N/A	12.1	No	<1	No	<1	No
Cadmium	10	33.8	**Yes**	<1	No	<1	No
Calcium	N/A	393000	No	125000	No	112000	No
Chromium	50	330	**Yes**	4.2	No	<1	No
Cobalt	5	259	**Yes**	5.6	**Yes**	<3	No
Copper	200	1140	**Yes**	19.2	No	4.5	No
Iron	300	491000	**Yes**	11600	**Yes**	1700	**Yes**
Lead	25	12.3	No	21.6	No	<0.5	No
Magnesium	35000	88900	**Yes**	11000	No	9550	No
Manganese	300	4300	**Yes**	214	No	169	No
Mercury	2	10.3	**Yes**	0.482	No	<0.4	No
Nickel	100	388	**Yes**	2.6	No	<2	No
Potassium	N/A	29700	No	10900	No	9420	No
Selenium	10	24.4	**Yes**	<0.5	No	<0.5	No
Silver	50	230	**Yes**	31.2	No	26.9	No
Sodium	20000	193000	**Yes**	152000	**Yes**	138000	**Yes**
Thallium	8	3	No	<6	No	<6	No
Vanadium	14	245	**Yes**	6.3	No	<3	No
Zinc	300	2190	**Yes**	47	No	21	No
Cyanide	100	<1	No				
Turbidity	5 NTU			240 NTU	**Yes**		

* 6NYCRR Part 703.5 Water Quality Standards

5.2 Groundwater Quality (Objective 2) (continued)

Table 5.7 (continued)
Groundwater Quality – Metals

MW-5							
Parameter	Cleanup Objective* ug/l	4/17/00 Total	4/17/00 Exceeds Objective	6/22/00 Total ug/l	6/22/00 Exceeds Objective	6/22/00 Filtered ug/l	Filtered Exceeds Objective
Aluminum	N/A	12300	No				
Antimony	3	<10	No				
Arsenic	50	13.5	No				
Barium	1000	279	No				
Beryllium	N/A	<1	No				
Cadmium	10	7.7	No				
Calcium	N/A	185000	No				
Chromium	50	149	**Yes**				
Cobalt	5	18.4	**Yes**				
Copper	200	318	**Yes**				
Iron	300	41900	**Yes**				
Lead	25	7.5	No				
Magnesium	35000	6580	No				
Manganese	300	732	**Yes**				
Mercury	2	12.6	**Yes**				
Nickel	100	49.2	No				
Potassium	N/A	5510	No				
Selenium	10	8.7	No				
Silver	50	30.9	No				
Sodium	20000	11000	No				
Thallium	8	1.6	No				
Vanadium	14	44.8	**Yes**				
Zinc	300	501	**Yes**				
Cyanide	100	-	-				
Turbidity	5 NTU						

Well dry - Not sampled

* 6NYCRR Part 703.5 Water Quality Standards

It can be seen that metals concentrations in the original sampling event (4-18-00) exceed metals concentrations in the 6-22-00 re-sample by a large amount (Table 5.7). This substantial difference is attributed to the high turbidity (and actual sediments) present in the original sample. The wells were carefully purged prior to the 6-22-00 re-sample to reduce turbidity, but it is apparent that even with this effort, the turbidity generally exceeded 50 NTU on the 6-22-00 event. The filtered samples further reduced the metals concentrations. It is suggested that the most representative data are the filtered metals data of 6-22-00. The MW-5 sample of 4-18-00 was difficult to obtain at that date and no water could be obtained at all on 6-22-00 from this well. It is suggested that the MW-5 metals data are not reliable due to excessive turbidity and sediments. See further discussion of dissolved metals and TAGM 4015 requirements in section 3.7.

Overall it is concluded that groundwater has not been impacted at MW-4 or MW-5 positions. Groundwater at MW-3 appears to be slightly impacted by SVOA's that may have originated from residue of prior gas manufacturing at the site. Groundwater at MW-1 has been impacted by VOA's and SVOA's. The VOA's exceed groundwater standards. All of the compounds detected at MW-1 could have originated from residue of gas

manufacturing, but the VOA's may also be an artifact from fuel spillage in the parking area of the tank plant.

5.3 Gas Manufacturing Site (Objective 3)

In order to determine if the former gas manufacturing impacted soil or groundwater west of the tank building, three soil borings were advanced (SB-3, SB-4, and SB-5) and one monitoring well was constructed. (The monitoring well, MW-1, was also discussed in the groundwater section above.) VOA's detected above MDL's are summarized in Tables 5.8.

Table 5.8
Gas Manufacturing Site - VOA's
SB-3, SB-4 sampled 4-13-00; SB-5 sampled 4-14-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
SB-3: 6.8' Gas Manufacturing (soil)			
Methylene Chloride	100	4	No
Acetone	200	12	No
SB-4: 20'-22' Gas Manufacturing (soil)			
Methylene Chloride	100	6	No
Acetone	200	5	No
SB-5: Gas Manufacturing (soil) Composite from 1'-2' and 4'-6.6'			
Methylene Chloride	100	18	No

* TAGM 4046, Appendix A, Table 1

All three soil samples, as presented in Table 5.8, had low level acetone contamination and two of the soil samples had low level methylene chloride contamination. While these VOA analyte concentrations meet the TAGM 4046 cleanup objective, it is suspected that these may be laboratory artifacts. No other VOA's were detected in the soil samples, but MW-1 had aromatic VOA's (BTEX) in the groundwater. MW-1 is located at the site of a previous gasometer used to store manufactured gas.

5.3 Gas Manufacturing Site (Objective 3) (continued)

SVOA data for the soil borings at the Gas Manufacturing site are presented in Table 5.9.

Table 5.9
Gas Manufacturing Site-SVOA's

SB-3, SB-4 sampled 4-13-00; SB-5 sampled 4-14-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
SB-3: 6'-6.8' Gas Manufacturing (soil)			
Acenaphthylene	50000	1580	No
Phenanthrene	50000	8030	No
Anthracene	50000	1330	No
Fluoranthene	50000	7710	No
Pyrene	50000	19600	No
Benzo (a) anthracene	224	4960	**Yes**
Chrysene	400	5100	**Yes**
bis (2-Ethylhexyl) phthalate	50000	132000	**Yes**
Benzo (b) fluoranthene	1100	4810	**Yes**
Benzo (k) fluoranthene	1100	5570	**Yes**
Benzo (a) pyrene	3960	5290	**Yes**
Ideno (1, 2, 3-cd) pyrene	3200	6700	**Yes**
Benzo (g, h, i) perylene	50000	9100	No
SB-4: 8'-10' Gas Manufacturing (soil)			
Phenanthrene	50000	348	No
Fluoranthene	50000	920	No
Pyrene	50000	882	No
Benzo (a) anthracene	224	347	**Yes**
Chrysene	400	457	**Yes**
bis (2-Ethylhexyl) phthalate	50000	103	No
Benzo (b) fluoranthene	1100	328	No
Benzo (k) fluoranthene	1100	365	No
Benzo (a) pyrene	500	312	No
Ideno (1, 2, 3-cd) pyrene	3200	205	No
Dibenzo (a, h) anthracene	14	121	**Yes**
Benzo (g, h, i) perylene	50000	286	No
SB-5: Gas Manufacturing (soil) Composite from 1'-2' and 4'-6.6'			
Acenaphthene	50000	943	No
Fluorene	50000	1240	No
Phenanthrene	50000	9350	No
Anthracene	50000	3350	No
Carbazole	50	1080	**Yes**
Fluoranthene	50000	13500	No
Pyrene	50000	16900	No
Benzo (a) anthracene	224	9240	**Yes**
Chrysene	400	8520	**Yes**
Benzo (b) fluoranthene	1100	7610	**Yes**
Benzo (k) fluoranthene	1100	7790	**Yes**
Benzo (a) pyrene	4110	7780	**Yes**
Ideno (1, 2, 3-cd) pyrene	3200	5180	**Yes**
Dibenzo (a, h) anthracene	14	2570	**Yes**
Benzo (g, h, i) perylene	50000	5650	No

* TAGM 4046, Appendix A, Table 2

5.3 Gas Manufacturing Site (Objective 3) (continued)

All three soil boring samples had SVOA's in the form of PAH's. The PAH's were varied with each sample having from 9-13 PAH's per location. The diversity of PAH's suggests a coal-tar origin rather than a petroleum origin. The finding of PAH contamination in soil west of the new tank building is consistent with that reported in the Delta Environmental Consultants, Inc. investigation of 6-98.

Table 5.10 presents inorganic data for the Gas Manufacturing Site.

Table 5.10
Gas Manufacturing Site - Metals

SB-3, SB-4 sampled 4-13-00, SB-5 sampled 4-14-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
SB-3: 6'-6.8' Gas Manufacturing (soil)			
Aluminum	3026	3140	**Yes**
Antimony	5.8	< 133	***
Arsenic	19.2	9.2	No
Barium	300	110	No
Beryllium	0.16	< 11.3	***
Cadmium	1	< 11.3	***
Calcium	59567	128000	**Yes**
Chromium	38.2	9.3	No
Cobalt	30	< 34	***
Copper	62.1	12.6	No
Cyanide	**	0.13	**
Iron	13960	10800	No
Lead	34	259	**Yes**
Magnesium	21563	30900	**Yes**
Manganese	591	574	No
Mercury	0.1	0.22	**Yes**
Nickel	32.6	7.2	No
Potassium	521	417	No
Selenium	2	< 45.3	***
Silver	0.036	0.027	No
Sodium	210	375	**Yes**
Thallium	8.6	< 67.9	***
Vanadium	150	27.3	No
Zinc	262	176	No

* TAGM 4046, Appendix A, Table 4 and this report, Table 5.3
***Lab unable to achieve detection limit at or less than cleanup objective.

5.3 Gas Manufacturing Site (Objective 3) (continued)

Table 5.10 (continued)
Gas Manufacturing Site - Metals
SB-3, SB-4 sampled 4-13-00, SB-5 sampled 4-14-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
SB-4: 8'-10' Gas Manufacturing (soil)			
Aluminum	3026	14400	**Yes**
Antimony	5.8	< 146	***
Arsenic	19.2	11.1	No
Barium	300	88.9	No
Beryllium	0.16	5.6	**Yes**
Cadmium	1	< 14.6	***
Calcium	59567	3450	No
Chromium	38.2	10	No
Cobalt	30	32.3	**Yes**
Copper	62.1	288	**Yes**
Cyanide	**	0.0785	**
Iron	13960	12000	No
Lead	34	169	**Yes**
Magnesium	21563	1440	No
Manganese	591	719	**Yes**
Mercury	0.1	1.3	**Yes**
Nickel	32.6	41.7	**Yes**
Potassium	521	506	No
Selenium	2	< 58.6	***
Silver	0.036	0.036	No
Sodium	210	< 1960	***
Thallium	8.6	9.0	**Yes**
Vanadium	150	20.6	No
Zinc	262	224	No
SB-5: Gas Manufacturing - (soil) Composite from 1'-2' and 4'-5.6'			
Aluminum	3026	3080	**Yes**
Antimony	5.8	< 107	***
Arsenic	19.2	10.6	No
Barium	300	1290	**Yes**
Beryllium	0.16	< 10.7	***
Cadmium	1	1.6	**Yes**
Calcium	59567	99400	**Yes**
Chromium	38.2	14.9	No
Cobalt	30	< 32.2	***
Copper	62.1	20.4	No
Cyanide	**	< 0.0599	**
Iron	13960	12200	No
Lead	34	467	**Yes**
Magnesium	21563	36500	**Yes**
Manganese	591	780	**Yes**
Mercury	0.1	0.091	No
Nickel	32.6	8.4	No
Potassium	521	486	No
Selenium	2	< 42.9	***
Silver	0.036	0.035	No
Sodium	210	275	**Yes**
Thallium	8.6	< 64.3	***
Vanadium	150	22.1	No
Zinc	262	686	**Yes**

* TAGM 4046, Appendix A, Table 4 and this report, Table 5.3
***Lab unable to achieve detection limit at or less than cleanup objective.

Metals concentrations in soils from the three soil borings were unremarkable as shown in Table 5.10, except for elevated lead levels and elevated mercury levels in SB-3 and SB-4.

5.4 Tannery Site (Objective 4)

A slaughterhouse and tannery operation was located at the eastern area of the site in the 19th century. In order to address possible impacts from this tannery activity, the IWP specified three backhoe test pits. TP-3, TP-4, and TP-5 were excavated for this objective. As indicated in Section 3.3, soil samples from these test pits were analyzed for volatiles, semi-volatiles, pesticides, metals and cyanides. No groundwater was encountered at the test pit depths, but pieces of tar-like material were interspersed at 2-4.5' in TP-4 and a thin layer of black tar-like material was encountered at the soil-bedrock interface. The TP-4 sample was obtained at the bedrock interface and was comprised principally of the black tar-like material.

Volatile compounds for the Tannery site are presented in the following table.

Table 5.11
Tannery Site - VOA's
Sampled 4-11-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
TP-3 Tannery Site (soil)			
Methylene Chloride	100	3	No
TP-4 Tannery Site (soil)			
Methylene Chloride	100	3	No
Tetrachloroethene	1400	6	No
TP-5 Tannery Site (soil)			
No VOA 95-1 Analytes were detected			No

* TAGM 4046, Appendix A, Table 1

5.4 Tannery Site (Objective 4) (continued)

Semi-volatile compounds at the Tannery site are presented in the following table.

Table 5.12
Tannery Site - SVOA's
Sampled 4-11-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
TP-3 Tannery Site (soil)			
No SVOA 95-2 Analytes were detected			No
TP-4 Tannery Site (soil)			
Napthalene	13000	14500	**Yes**
2-Methylnaphthalene	36400	7010	No
Acenaphthene	50000	18300	No
Dibenzofuran	6200	16200	**Yes**
Fluorene	50000	24400	No
Phenanthrene	50000	120000	**Yes**
Anthracene	50000	26400	No
Carbazole	50000	30800	No
Fluoranthene	50000	79800	**Yes**
Pyrene	50000	98400	**Yes**
Benzo (a) anthracene	224	61400	**Yes**
Chrysene	400	43000	**Yes**
bis (2-Ethylhexyl) phthalate	50000	1730	No
Benzo (b) fluoranthene	1100	36500	**Yes**
Benzo (k) fluoranthene	1100	39800	**Yes**
Benzo (a) pyrene	61	42500	**Yes**
Indeno (1, 2, 3-cd) pyrene	3200	41800	**Yes**
Dibenzo (a, h) anthracene	14	20900	**Yes**
Benzo (g, h, i) perylene	50000	52300	**Yes**
TP-5 Tannery Site (soil)			
Phenanthrene	50000	72	No
Fluoranthene	50000	157	No
Pyrene	50000	181	No
Chrysene	400	73	No
bis (2-Ethylhexyl) phthalate	50000	228	No

* TAGM 4046, Appendix A, Table 2

Table 5.12 indicates that no remarkable organic contaminants were detected in TP-3 immediately north of the current (vacant) seven-story building. TP-5 results (near the eastern property boundary) were also unremarkable except for traces of four PAH compounds. TP-4 (the black tar-like sample) had no significant volatiles, pesticides or inorganics, but had elevated levels of 18 semi-volatile compounds representing virtually all PAH's on the Target Compound List.

5.4 Tannery Site (Objective 4) (continued)

Metals data for the Tannery Site is presented in Table 5.13.

Table 5.13
Tannery Site - Metals
Sampled 4-11-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
TP-3 Tannery Site (soil)			
Aluminum	3026	3210	**Yes**
Arsenic	19.2	46	**Yes**
Barium	300	122	No
Cadmium	1	1.4	**Yes**
Calcium	59567	29200	No
Chromium	38.1	521	**Yes**
Copper	62.1	65.2	**Yes**
Iron	13960	33700	**Yes**
Lead	34	125	**Yes**
Magnesium	21563	2290	No
Manganese	591	112	No
Mercury	0.1	0.34	**Yes**
Nickel	32.6	35.6	**Yes**
Potassium	521	751	**Yes**
Silver	0.036	0.032	No
Thallium	8.6	12.2	**Yes**
Vanadium	150	26.6	No
Zinc	262	103	No
TP-4 Tannery Site (soil)			
Aluminum	3026	6470	**Yes**
Arsenic	19.2	10.4	No
Barium	300	136	No
Cadmium	1	2.7	**Yes**
Calcium	59567	55800	No
Chromium	38.1	101	**Yes**
Cobalt	30	27.1	No
Copper	62.1	255	**Yes**
Iron	13960	17700	**Yes**
Lead	34	202	**Yes**
Magnesium	21563	3820	No
Manganese	591	407	No
Mercury	0.1	0.96	**Yes**
Nickel	32.6	70.4	**Yes**
Potassium	521	521	No
Silver	0.036	4.8	**Yes**
Vanadium	150	17.4	No
Zinc	262	499	**Yes**
Cyanide	**	0.16	**

*TAGM 4046, Appendix A, Table 4 and this report, Table 5.3

5.4 Tannery Site (Objective 4) (continued)

Metals data for the Tannery Site is continued in Table 5.13.

Table 5.13 (continued)
Tannery Site - Metals
Sampled 4-11-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
TP-6 Tannery Site (soil)			
Aluminum	3026	5880	**Yes**
Arsenic	19.2	16	No
Barium	300	69.5	No
Cadmium	1	1.2	**Yes**
Calcium	59600	85700	**Yes**
Chromium	38	11.8	No
Cobalt	30	3.2	No
Copper	62.1	36.3	No
Iron	13960	31100	**Yes**
Lead	34	11.4	No
Magnesium	21563	7960	No
Manganese	591	878	**Yes**
Nickel	32.6	22.1	No
Potassium	521	702	**Yes**
Silver	0.036	0.028	No
Sodium	210	327	**Yes**
Thallium	8.6	7.6	No
Vanadium	150	18.1	No
Zinc	262	77.7	No

*TAGM 4046, Appendix A, Table 4 and this report, Table 5.3

Metals data in Table 5.13 indicate concentrations of arsenic, chromium, copper, lead, mercury, nickel, and silver exceeding background levels in one or both of the test pit soil samples from TP-3 or TP-4. The soil sample from TP-5 had no significant elevated metals concentrations other than the minerals.

5.5 Petroleum AST's (Objective 5)

In accordance with the IWP, two shallow test pits (less than 2' deep) were excavated (TP-1 and TP-2). MW-4 is also in a position downgradient from the current AST's and the 1989 spill. A soil sample was also obtained from the construction of MW-4 at a depth of 6-8'.

VOA's for the Petroleum AST's are shown in Table 5.14.

Table 5.14
Petroleum AST's - VOA's

TP-1, TP-2 (soil & water) sampled 4-11-00; MW-4 sampled 4-14-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
TP-1 Petroleum AST's (soil)			
Methylene Chloride	100	4	No
1, 1, 1-Trichloroethane	800	4	No
Trichloroethene	700	64	No
Tetrachloroethene	1400	56	No
Toluene	1500	5	No
TP-2 Petroleum AST's (soil)			
No VOA 95-1 analytes were detected			No
TP-2 Petroleum AST's (water)			
No VOA 95-1 analytes were detected			No
MW-4 AST's 6'-8' (soil)			
Methylene Chloride	100	13	No
Acetone	200	8	No

* TAGM 4046, Appendix A, Table 1

The soil sample from TP-1 had trichloroethene at 64 ug/kg and tetrachloroethene at 56 ug/kg, but no volatile fuel components were identified.

5.3 Petroleum AST's (Objective 5) (continued)

SVOA's for the Petroleum AST's are presented in the Table 5.15.

Table 5.15
Petroleum AST's – SVOA's

TP-1, TP-2 (soil & water) sampled 4-11-00; MW-4 sampled 4-14-00

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
TP-1 Petroleum AST's (soil)			
1, 3-Dichlorobenzene	1600	3110	**Yes**
1, 4-Dichlorobenzene	8500	1760	No
1, 2-Dichlorobenzene	7900	6550	No
Napthalene	13000	1090	No
2-Methylnaphthalene	36400	4340	No
Pyrene	50000	1900	No
bis (2-Ethylhexyl) phthalate	50000	10200	No
Benzo (g, h, i) perylene	50000	1560	No
TP-2 Petroleum AST's (soil)			
Phenanthrene	50000	283	No
Anthracene	50000	283	No
Fluoranthene	50000	482	No
Pyrene	50000	370	No
Benzo (a) anthracene	224	200	No
Chrysene	400	297	No
Benzo (b) fluoranthene	1100	283	No
Benzo (k) fluoranthene	1100	262	No
Benzo (a) pyrene	61	201	**Yes**
TP-2 Petroleum AST's (water)			
No SVOA 95-2 analytes were detected			No
MW-4 AST's-4'-6' (soil)			
4-Methylphenol	900	105	No
Napthalene	13000	174	No
Acenaphthene	41000	101	No
Dibenzofuran	6200	137	No
Fluorene	50000	174	No
Phenanthrene	50000	580	No
Anthracene	50000	166	No
Carbazole	50	125	**Yes**
Fluoranthene	50000	315	No
Pyrene	50000	712	No
Benzo (a) anthracene	224	232	**Yes**
Chrysene	400	275	No
bis (2-Ethylhexyl) phthalate	50000	106	No
Benzo (b) fluoranthene	50000	252	No
Benzo (k) fluoranthene	1100	260	No
Benzo (a) pyrene	61	218	**Yes**
Indeno (1, 2, 3-cd) pyrene	3200	253	No
Benzo (g, h, i) perylene	50000	284	No

* TAGM 4046, Appendix A, Table 2

The TP-1 soil sample also had 1,2- dichlorobenzene at 6550 ug/kg, 1,3-dichlorobenzene at 3110 ug/kg, 1,4-dichlorobenzene at 1760 ug/kg, and four PAH's in the 1000-4000 ug/kg range. The soil sample from TP-2 had no volatile organic compounds, but had fluoranthene at 482 ug/kg and eight other PAH's at estimated values ranging from 200-400 ug/kg.

Metals results (which are above the calculated detection limit) for the Petroleum AST's are presented in Table 5.16.

Table 5.16
Petroleum AST's - Metals

TP-1, TP-2 (soil & water) sampled 4-11-00; MW-4 sampled 4-14-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
TP-1 Petroleum ASTs (soil)			
Aluminum	3026	4020	**Yes**
Arsenic	19.2	25.1	**Yes**
Barium	300	122	No
Cadmium	1	3	**Yes**
Calcium	59567	5550	No
Chromium	38.2	140	**Yes**
Cobalt	30	6.7	No
Copper	62.1	436	**Yes**
Iron	13960	29200	**Yes**
Lead	34	723	**Yes**
Magnesium	21563	1870	No
Manganese	591	141	No
Mercury	0.1	0.3	**Yes**
Nickel	32.6	335	**Yes**
Potassium	521	580	**Yes**
Silver	0.036	0.11	**Yes**
Thallium	8.6	10.9	No
Vanadium	150	2700	**Yes**
Zinc	262	1110	**Yes**
Cyanide	**	5.2	**
TP-2 Petroleum ASTs (soil)			
Aluminum	3026	4690	**Yes**
Barium	300	96.9	No
Calcium	59567	109000	**Yes**
Chromium	38.2	10.4	No
Cobalt	30	5.5	No
Copper	62.1	42.9	No
Iron	13960	13400	No
Lead	34	68.1	**Yes**
Magnesium	21563	3500	No
Manganese	591	267	No
Mercury	0.1	0.26	**Yes**
Nickel	32.6	17.2	No
Potassium	521	464	No
Silver	0.036	0.055	**Yes**
Thallium	8.6	13.5	**Yes**
Vanadium	150	14.6	No
Zinc	262	275	**Yes**

*TAGM 4046, Appendix A, Table 4 and this report, Table 5.3

**Site-specific type of cyanide needs to be determined for establishment of soil cleanup objective

5.5 Petroleum AST's (Objective 5) (continued)

Table 5.16 (continued)
Petroleum AST's - Metals

TP-1, TP-2 (soil & water) sampled 4-11-00; MW-4 sampled 4-14-00

Parameter	Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
MW-4: AST's 4'-6' (soil)			
Aluminum	3026	3590	**Yes**
Arsenic	19.2	28.5	**Yes**
Barium	300	101	No
Cadmium	1	1.3	**Yes**
Calcium	59567	26700	No
Chromium	38.2	12.8	No
Copper	62.1	47.9	No
Iron	13960	29800	**Yes**
Lead	34	86.4	**Yes**
Magnesium	21563	14200	No
Manganese	591	315	No
Mercury	0.1	0.29	**Yes**
Nickel	32.6	14.7	No
Potassium	521	671	**Yes**
Silver	0.036	0.035	No
Vanadium	150	17.4	No
Zinc	262	75.5	No
Cyanide	**	0.081	**

Parameter	Cleanup Objective* (ppb)	Result (ppb)	Exceeds Objective
TP-2 Petroleum AST's (water)			
Aluminum	N/A	33800	No
Arsenic	50	103	**Yes**
Barium	1000	529	No
Beryllium	N/A	3.4	No
Cadmium	10	4	No
Calcium	N/A	233000	No
Chromium	50	42.8	No
Cobalt	5	48.4	**Yes**
Copper	200	203	**Yes**
Iron	300	65200	**Yes**
Lead	25	5.1	No
Magnesium	35000	33000	No
Manganese	300	1850	**Yes**
Mercury	2	2.1	**Yes**
Nickel	100	69.4	No
Potassium	N/A	9800	No
Selenium	10	12.1	**Yes**
Silver	50	85.8	**Yes**
Sodium	20000	216000	**Yes**
Thallium	8.6	2.3	**No**
Vanadium	14	111	**Yes**
Zinc	300	947	**Yes**

*TAGM 4046, Appendix A, Table 4

**Site-specific type of cyanide needs to be determined for establishment of soil cleanup objective

5.4 Petroleum AST's (Objective 5) (continued)

The water sample from TP-2 was free of VOA or SVOA contamination, but several metals exceeded regulatory limits. As discussed in Section 2, page 15, the TP-2 water sample was high in silt and turbidity and the metals results should be viewed as non-representative of actual groundwater dissolved concentrations.

5.6 Electropolishing Operation (Objective 6)

Electropolishing operations have been conducted at the northern end of the old tank shop. In order to determine if electropolishing wastes had been released to the soil and/or groundwater under the building, two borings (SB-1, SB-2) were advanced through the concrete floor of the old tank building. The borings were advanced to the bedrock interface at 5.3' and 3.2' respectively (see para. 3.5). A sample was obtained from the first few inches of the boring and a second at the deepest point of the boring resulting in four samples from these borings. The soil samples were analyzed for TAL metals. A monitoring well (MW-3) was also positioned downgradient from the electropolishing operations to evaluate groundwater impact.

Soil from soil borings SB-1 and SB-2 are summarized in the Table 5.17.

Table 5.17
Electropolishing Operations - Metals
Sampled 4-13-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
SB-1 6"-1' Electropolishing Wastes (soil)			
Aluminum	3026	5810	**Yes**
Arsenic	19.2	15.1	No
Barium	300	35.6	No
Calcium	59567	43100	No
Chromium	38.2	8.8	No
Cobalt	30	3.9	No
Copper	62.1	20.9	No
Iron	13960	15800	**Yes**
Lead	34	6.9	No
Magnesium	21563	4610	No
Manganese	591	509	No
Nickel	32.6	17	No
Potassium	521	745	**Yes**
Silver	0.036	0.013	No
Vanadium	150	13.5	No
Zinc	262	88	No

*TAGM 4046, Appendix A, Table 4 and this report, Table 5.3

5.6 Electropolishing Operation (Objective 6) (continued)

Table 5.17 (continued)
Electropolishing Operations - Metals
Sampled 4-13-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
SB-2: 6"-1' Electropolishing Wastes (soil)			
Aluminum	3026	6010	**Yes**
Arsenic	19.2	21.6	**Yes**
Barium	300	79.7	No
Calcium	59567	35400	No
Chromium	38.2	12.3	No
Cobalt	30	4.1	No
Copper	62.1	56.1	No
Iron	13960	16800	**Yes**
Lead	34	90.6	**Yes**
Magnesium	21563	3690	No
Manganese	591	424	No
Mercury	0.1	0.21	**Yes**
Nickel	32.6	16.3	No
Potassium	520	973	**Yes**
Silver	0.036	0.043	**Yes**
Vanadium	150	16.7	No
Zinc	262	174	No
SB-1: 4'-5'3" Electropolishing Wastes (soil)			
Aluminum	3026	3010	No
Arsenic	19.2	16.3	No
Barium	300	3180	**Yes**
Cadmium	1	3.6	**Yes**
Calcium	59567	44200	No
Chromium	38.2	12.9	No
Copper	62.1	679	**Yes**
Iron	13960	13300	No
Lead	34	419	**Yes**
Magnesium	21563	4150	No
Manganese	591	367	No
Mercury	0.1	0.15	**Yes**
Nickel	32.6	11.4	No
Potassium	521	559	**Yes**
Silver	0.036	0.13	**Yes**
Thallium	32.5	14.9	No
Vanadium	150	10.1	No
Zinc	262	723	**Yes**
Cyanide	**	0.71	**

*TAGM 4046, Appendix A, Table 4 and this report, Table 5.3
**Site-specific type of cyanide needs to be determined for establishment of soil cleanup objective

5.6 Electropolishing Operation (Objective 6) (continued)

Table 5.17 (continued)
Electropolishing Operations - Metals
Sampled 4-13-00

Parameter	LF Cleanup Objective* (ppm)	Result (ppm)	Exceeds Objective
SB-2, 2'-3.2' Electropolishing Wastes (soil)			
Aluminum	3026	2650	No
Arsenic	19.2	7.6	No
Barium	300	30.3	No
Calcium	59567	87400	**Yes**
Chromium	38.2	5.8	No
Copper	62.1	10.5	No
Iron	13960	9710	No
Lead	34	12.9	No
Magnesium	21563	10800	No
Manganese	591	262	No
Nickel	32.6	8.3	No
Potassium	521	534	**Yes**
Silver	0.036	0.046	**Yes**
Sodium	210	194	No
Thallium	32.5	10.3	No
Vanadium	150	11.2	No
Zinc	262	43.4	No

*TAGM 4046, Appendix A, Table 4 and this report, Table 5.3

It can be seen from Table 5.17, that there was no significant contamination of the top soil samples taken from SB-1 and SB-2 nor from the deep soil sample taken at SB-2. The deep soil sample from SB-1 had barium, cadmium, copper, lead, mercury, and silver concentrations exceeding either the site background level or the cleanup objective. Groundwater from MW-3 (downgradient from SB-1 and SB-2) had no metals concentrations in exceedance of regulatory limits.

5.7 Exposure Pathways (Objective 7)

The IWP identified surface water flowing in the tunnel under the eastern portion of the facility into the Mohawk River as a potential exposure pathway (discussion of the tunnel is presented at para. 4.7 of the IWP). In order to better assess other exposure pathways, the investigation identified the following information.

5.71 Municipal Water Supply

The municipal water supply is located approximately 2 miles north of the site and consists of spring-fed reservoirs. The distance of this water supply and its upgradient location rule out any public exposure pathway from contaminants at the subject site.

5.72 Schools

The nearest school is Benton Hall Academy elementary school located approximately 1/4 mile northeast of the site. The school is several major streets and a rail crossing away from the subject site. The lack of exposure routes and the distance to the school mitigate public exposure to school children from site contaminants.

5.73 Parks and Play Areas

Sterzinar Park is located within 1500' of the west property limit. This park has no recreational areas for children and its most prominent feature is a historical monument. The limited facilities and use of this park mitigates any public exposure from site contaminants.

5.74 Residences

The area around the site is primarily industrial and commercial. There are no contiguous residential uses and the nearest residences are approximately 1500 feet to the west and 500 ft to the north (across railroad tracks). The lack of exposure routes and the distance to the residences mitigate public exposure to the residents from site contaminants.

5.75 Surface Water in Tunnel

In order to evaluate the surface water as an exposure pathway, a visual examination of the tunnel was made from near the Mohawk River outfall to the northern property line at East Mill Street. Additionally a surface water sample was obtained from these two tunnel positions (*Exppathwayup, Exppathwaydown*). These two samples were analyzed for TCL SVOA, VOA analytes and TAL metals.

Acetone (12 ug/l) was identified in the downstream sample, while acetone (9 ug/l), 1,2-dichloroethene (4J ug/l), and trichloroethene (2J ug/l) were identified in the upstream sample. With the exception of a trace of di-n-butyl phthalate, no semi-volatile organics were identified in either sample. No metals exceeding regulatory limits were identified.

The visual examination identified numerous pipe discharges to the tunnel. Many of these pipes (approximately half) appeared to be abandoned from previous activities on the site. Many of the pipes that appeared active were roof drain outfalls. No obvious discharges of process or wastewater were identified. Because the analytical results indicated no regulatory exceedances, no further investigation of the unidentified pipes was made.

6.0 *DISCUSSION AND CONCLUSIONS*:

Overall, the data collected are deemed adequate for Department review and no further sampling is recommended. The investigators' specific conclusions by objective follow:

6.1 Soil Background Levels

Zinc, copper, and magnesium concentrations in ambient soil were at levels exceeding published data for the Eastern United States. Concentrations of other metals were lower than, or within, published data ranges.

All three control samples used to establish background concentrations had PAH's in varying concentrations (Table 5.1). The PAH's were typically at low concentration and were all less than TAGM 4046, Appendix A, Table 2 cleanup objectives.

6.2 Groundwater Quality

Groundwater quality underlying the site is generally good with no regulatory exceedances identified in MW-4, MW-5 and the water sample from TP-2. Groundwater in the local area at MW-1 has been contaminated by benzene and other aromatic hydrocarbons exceeding regulatory limits (Tables 5.4 and 5.5). Groundwater from MW-1 and MW-3 has PAH concentrations exceeding regulatory limits.

The contaminants identified in MW-1 and MW-3 are consistent with coal gas manufacturing residue, but the VOC's in MW-1 may also be an artifact from fuel spillage in the parking area of the new tank building.

6.3 Gas Manufacturing Site

Soils west of the new tank building have been impacted by PAH's at concentrations near or exceeding the cleanup objective. (This soil contamination was also identified in a 6-98 investigation by Delta Environmental Consultants, Inc.) The general character and location of the PAH contamination is consistent with the prior use of the site as a coal gas manufacturing and storage facility. (The estimated locations of the previous gasometers and coal gas manufacturing structures are indicated on the site map and on the Sanborn map).

6.4 Tannery Site

Elevated levels of arsenic, chromium, copper, lead, mercury, nickel, and silver exceeding background levels were identified in one or both of the test pit soil samples from TP-3 or TP-4 (Table 5.13). Soil from TP-4 also indicated the presence of tar-like material at the soil/bedrock interface. No pesticide residue was identified in soils from the tannery area. It is not known whether this material is fugitive building material tar or coal-tar residue from gas manufacturing operations located several hundred feet west of the sampling point. Several PAH's were identified at high level in TP-4 and at low concentrations in TP-5 (Table 5.12). The PAH's are consistent with tar or coal-tar based material.

Because TP-3 and TP-4 were excavated through non-indigenous fill, the source of the metals and PAH's cannot be determined with confidence. While tannery wastes are a possible source of chromium or arsenic, they are not believed to be a source for the other metals identified above ambient levels. Coal ash is a likely source for the metals found in TP-3 and TP-4. Any coal tar product is a possible source for the PAH's. The absence of these contaminants in groundwater from downgradient MW-5 suggests that the contaminants are non-mobile.

6.5 Petroleum Above Ground Storage Tanks

There was no visual indication of contamination from the petroleum storage tank area or the previous spill. Shallow surface soil from TP-1 has been contaminated with low-level halogenated compounds. These compounds are not generally associated with petroleum distillates and their source is unknown. Shallow soil from TP-1 and TP-2 had low levels of PAH contamination. The PAH diversity is atypical for petroleum products, but is typical of coal tar. The PAH's and some of the halogenated compounds may have originated from former manufactured gas operations. Groundwater from MW-4 was free of contamination.

It is concluded that the petroleum above ground storage tanks have not significantly impacted soil or groundwater.

6.6 Electropolishing Wastes

Three of four soil samples from the general area of electropolishing operations indicated that there had been no impact on soil or groundwater quality (Table 5.17). The deep soil sample from TP-1 indicated that soil quality had been impacted by elevated metals concentrations. Electropolishing wastes would be expected to include nickel and chromium from the stainless steel alloys being processed. The absence of elevated levels of nickel and chromium in TP-1 suggests that the source for the metals in TP-1 (deep) may have been something other than electropolishing operations. Groundwater from MW-3 indicates that groundwater quality has not been significantly impacted by electropolishing or other processes in the tank shop.

6.7 Exposure Pathways

Review of potential exposure pathways indicated that there are no schools, playgrounds, or residences contiguous to the site. Human exposure to contaminants at the site appears to be limited to direct dermal contact or ingestion of soil and water. Due to the industrial use of the site and the presence of paving or buildings over many of the sampling areas, no direct human contact with contaminants is likely. There are no potable water receptors downgradient of the site.

Groundwater flows to the Mohawk River which is a potential contaminant transport mechanism. The best indicator of contaminant migration would be results of the groundwater sampling (see para. 6.2). It is concluded that volatile organic compounds and PAH's may be being transported to the Mohawk River by groundwater flow.

The tunnel stream represents an additional transport mechanism. There were no exceedances of surface water standards at the outfall to the Mohawk River and therefore it is concluded that no transport of site contaminants is occurring by this mechanism.

7.0 CLOSURE AND CERTIFICATION

This investigation and report have been conducted by Buck Engineering, LLC. In accordance with p.1, para. H of the VCP Investigation Agreement, this firm is authorized to provide engineering services in New York State under Article 145 of the New York State Education Law and is registered with the New York State Education Department to do so. The information and opinions provided in this report are presented accurately and factually to the best of our knowledge and information as attested by our signatures below.

The investigators attest that this VCP investigation was conducted in accordance with the Investigative Work Plan dated August 1999 and approved by NYSDEC.

Wayne C. Matteson, P.E.
Project Engineer

Eric H. Monsen
Project Geologist and Safety Officer

Phillip H. Shaffner, V.P.
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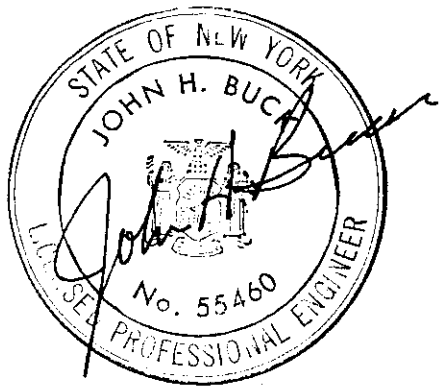

John H. Buck, P.E.
President

8.0 REFERENCES

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APPENDICES

A. Sample Identification Summary

B. Superfund Target Analyte List

C. Summary of Results by Objective

D. Sanborn Map. 1891

E. Site Plan – Sampling Locations

F. Well Logs, Field Observation Log, Chains of Custody

G. Work Plan (without Appendices)

H. Analytical Summary Package (NYSDEC ASP)

I. DUSR

SAMPLE IDENTIFICATION SUMMARY

Testing Report
575 East Mill Street
Little Falls, NY

COC	FRACTION	SAMPLE DATE	MATRIX	OBJECTIVE NUMBER	SAMPLE IDENTIFICATION	TESTING				
						VOA's	SVOA's	PESTICIDES	TAL METALS	CYANIDE
0004131	01	4/11	Soil	1	HE-1 SOIL BACKGROUND	-	X	-	X	X
	02	4/11	Soil	1	HE-2 SOIL BACKGROUND	-	X	-	X	X
	03	4/11	Soil	1	HE-3 SOIL BACKGROUND	-	X	-	X	X
	04	4/11	Soil	5	TP-1 PETROLEUM AST'S	X	X	-	X	X
	05	4/11	Soil	5	TP-2 PETROLEUM AST'S	X	X	-	X	X
	06	4/11	Soil	4	TP-3 TANNERY SITE	X	X	X	X	X
	07	4/11	Soil	QC	TP-3 MS	X	X	X	X	X
	08	4/11	Soil	QC	TP-3 MSD	X	X	X	X	X
	09	4/11	Soil	QC	TP-3 FIELD DUP	X	X	X	X	X
	10	4/11	Soil	4	TP-4 TANNERY SITE	X	X	X	X	X
	11	4/11	Soil	4	TP-5 TANNERY SITE	X	X	X	X	X
0004132	01	4/11	Water	5	TP-2 PETROLEUM AST'S	X	X	-	X	-
	02	4/11	Water	7	EXPOSURE PATH, CREEK-DOWNSTREAM	X	X	-	X	-
	03	4/11	Water	7	EXPOSURE PATH, CREEK-UPSTREAM	X	X	-	X	-
	04	4/11	Water	QC	TRIP BLANK	X	-	-	-	-
0004180	01	4/13	Soil	6	SB-1: 6"-1' ELECTROPOLISHING WASTES	-	-	-	X	X
	02	4/13	Soil	6	SB-1: 4'-5.3' ELECTROPOLISHING WASTES	-	-	-	X	X
	03	4/13	Soil	6	SB-2: 6"-1' ELECTROPOLISHING WASTES	-	-	-	X	X
	04	4/13	Soil	6	SB-2: 2'-3.2' ELECTROPOLISHING WASTES	-	-	-	X	X
	05	4/13	Soil	3	SB-3: 6'-6.8' GAS MANUFACTURING	-	X	-	X	X
	06	4/13	Soil	3	SB-3: 6.8' GAS MANUFACTURING	X	-	-	-	-
	07	4/13	Soil	3	SB-4: 8'-10' GAS MANUFACTURING	-	X	-	X	X
	08	4/13	Soil	3	SB-4: 20'-22' GAS MANUFACTURING	X	-	-	-	-
	09	4/13	Water	QC	TRIP BLANK	X	-	-	-	-
	10	4/14	Soil	3	SB-5: GAS MANUFACTURING	X	X	-	X	X
	11	4/14	Soil	5	MW-4: AST'S-4'-6'	-	X	-	X	X
	12	4/14	Soil	5	MW-4: AST'S-6'-8'	X	-	-	-	-
0004206	01	4/17	Water	QC	EQUIPMENT BLANK	X	X	-	X	X
	02	4/17	Water	2	MW-1	X	X	-	X	X
	03	4/17	Water	2	MW-3	-	-	-	X	-
	04	4/17	Water	2	MW-4	X	X	-	X	X
	05	4/17	Water	QC	MW-4 MS	X	X	-	X	X
	06	4/17	Water	QC	MW-4 MSD	X	X	-	-	X
	07	4/17	Water	QC	MW-4 FIELD DUP	-	-	-	X	-
	08	4/17	Water	2	MW-5	-	-	-	X	-
	09	4/17	Water	QC	TRIP BLANK	X	-	-	-	-
	10	4/17	Water	7	EXPOSURE PATH, CREEK-DOWNSTREAM	-	-	-	-	X
0004245	01	4/18	Water	2	MW-3	X	X	-	-	X
0005307	01	5/23	Water	2	MW-1	X	-	-	-	-
	02	5/23	Water	QC	TRIP BLANK	X	-	-	-	-
0006302	01	6/22	Water	2	MW-1	-	-	-	X	-
	02	6/22	Water	2	MW-3	-	-	-	X	-
	03	6/22	Water	2	MW-4	-	-	-	X	-
	04	6/22	Water	QC	RINSE BLANK	-	-	-	X	-

Superfund Target Compound List (TCL)

Volatile Organic Analytes (VOA's)

Methods and Quantitation Limits[1]

COMPOUND NAME	METHOD	WATER	SOIL
Chloromethane	95-1	10 ug/L	10 ug/kg
Bromomethane	95-1	10 ug/L	10 ug/kg
Vinyl chloride	95-1	10 ug/L	10 ug/kg
Chloroethane	95-1	10 ug/L	10 ug/kg
Methylene chloride	95-1	10 ug/L	10 ug/kg
Acetone	95-1	10 ug/L	10 ug/kg
Carbon disulfide	95-1	10 ug/L	10 ug/kg
1,1-Dichloroethylene	95-1	10 ug/L	10 ug/kg
1,1-Dichloroethane	95-1	10 ug/L	10 ug/kg
1,2-Dichloroethylene(total)	95-1	10 ug/L	10 ug/kg
Chloroform	95-1	10 ug/L	10 ug/kg
1,2-Dichloroethane	95-1	10 ug/L	10 ug/kg
2-Butanone	95-1	10 ug/L	10 ug/kg
1,1,1-Trichloroethane	95-1	10 ug/L	10 ug/kg
Carbon tetrachloride	95-1	10 ug/L	10 ug/kg
Bromodichloromethane	95-1	10 ug/L	10 ug/kg
1,2-Dichloropropane	95-1	10 ug/L	10 ug/kg
cis-1,3-Dichloropropene	95-1	10 ug/L	10 ug/kg
Trichloroethene	95-1	10 ug/L	10 ug/kg
Dibromochloromethane	95-1	10 ug/L	10 ug/kg
1,1,2-Trichloroethane	95-1	10 ug/L	10 ug/kg
Benzene	95-1	10 ug/L	10 ug/kg
trans-1,3-Dichloropropene	95-1	10 ug/L	10 ug/kg
Bromoform	95-1	10 ug/L	10 ug/kg
4-Methyl-2-pentanone	95-1	10 ug/L	10 ug/kg
2-Hexanone	95-1	10 ug/L	10 ug/kg
Tetrachloroethene	95-1	10 ug/L	10 ug/kg
Toluene	95-1	10 ug/L	10 ug/kg
1,1,2,2-Tetrachloroethane	95-1	10 ug/L	10 ug/kg
Chlorobenzene	95-1	10 ug/L	10 ug/kg
Ethyl benzene	95-1	10 ug/L	10 ug/kg
Styrene	95-1	10 ug/L	10 ug/kg
Xylenes (total)	95-1	10 ug/L	10 ug/kg

Semi-Volatile Organic Analytes (SVOA's)

Methods and Quantitation Limits[2]

Polynuclear Aromatic Hydrocarbons (PAH's) in **boldface**

COMPOUND NAME	METHOD	WATER	SOIL
Phenol	95-2	10 ug/L	330 ug/kg
bis(2-Chloroethyl)ether	95-2	10 ug/L	330 ug/kg
2-Chlorophenol	95-2	10 ug/L	330 ug/kg
1,3-Dichlorobenzene	95-2	10 ug/L	330 ug/kg
1,4-Dichlorobenzene	95-2	10 ug/L	330 ug/kg
1,2-Dichlorobenzene	95-2	10 ug/L	330 ug/kg
2-Methylphenol	95-2	10 ug/L	330 ug/kg
2,2'-oxybis(1-Chloro-propane)	95-2	10 ug/L	330 ug/kg
4-Methylphenol	95-2	10 ug/L	330 ug/kg
N-Nitroso-di-N-propylamine	95-2	10 ug/L	330 ug/kg
Hexachloroethane	95-2	10 ug/L	330 ug/kg
Nitrobenzene	95-2	10 ug/L	330 ug/kg
Isophorone	95-2	10 ug/L	330 ug/kg
2-Nitrophenol	95-2	10 ug/L	330 ug/kg
2,4-Dimethylphenol	95-2	10 ug/L	330 ug/kg
bis(2-Chloroethoxy)methane	95-2	10 ug/L	330 ug/kg
2,4-Dichlorophenol	95-2	10 ug/L	330 ug/kg
1,2,4-Trichlorobenzene	95-2	10 ug/L	330 ug/kg
Naphthalene	95-2	10 ug/L	330 ug/kg
4-Chloroaniline	95-2	10 ug/L	330 ug/kg
Hexachlorobutadiene	95-2	10 ug/L	330 ug/kg
4-Chloro-3-methylphenol	95-2	10 ug/L	330 ug/kg
2-Methylnaphthalene	95-2	10 ug/L	330 ug/kg
Hexachlorocyclopentadiene	95-2	10 ug/L	330 ug/kg
2,4,6-Trichlorophenol	95-2	10 ug/L	330 ug/kg
2,4,5-Trichlorophenol	95-2	25 ug/L	800 ug/kg
2-Chloronaphthalene	95-2	10 ug/L	330 ug/kg
2-Nitroaniline	95-2	25 ug/L	800 ug/kg
Dimethylphthalate	95-2	10 ug/L	330 ug/kg
Acenaphthylene	95-2	10 ug/L	330 ug/kg
2,6-Dinitrotoluene	95-2	10 ug/L	330 ug/kg
3-Nitroaniline	95-2	25 ug/L	800 ug/kg
Acenaphthene	95-2	10 ug/L	330 ug/kg
2,4-Dinitrophenol	95-2	25 ug/L	800 ug/kg
4-Nitrophenol	95-2	25 ug/L	800 ug/kg
Dibenzofuran	95-2	10 ug/L	330 ug/kg
2,4-Dinitrotoluene	95-2	10 ug/L	330 ug/kg
Diethylphthalate	95-2	10 ug/L	330 ug/kg
4-Chlorophenyl phenyl ether	95-2	10 ug/L	330 ug/kg
Fluorene	95-2	10 ug/L	330 ug/kg
4-Nitroaniline	95-2	25 ug/L	800 ug/kg
4,6-Dinitro-2-methylphenol	95-2	25 ug/L	800 ug/kg
N-Nitrosodiphenylamine	95-2	10 ug/L	330 ug/kg
4-Bromophenyl phenyl ether	95-2	10 ug/L	330 ug/kg
Hexachlorobenzene	95-2	10 ug/L	330 ug/kg
Pentachlorophenol	95-2	25 ug/L	800 ug/kg

Semi-Volatile Organic Analytes (SVOA's) (continued)

Phenanthrene	95-2	10 ug/L	330 ug/kg
Anthracene	95-2	10 ug/L	330 ug/kg
Carbazole	95-2	10 ug/L	330 ug/kg
Di-n-butyl phthalate	95-2	10 ug/L	330 ug/kg
Fluoranthene	95-2	10 ug/L	330 ug/kg
Pyrene	95-2	10 ug/L	330 ug/kg
Butyl benzyl phthalate	95-2	10 ug/L	330 ug/kg
3,3'-Dichlorobenzidine	95-2	10 ug/L	330 ug/kg
Benz[a]anthracene	95-2	10 ug/L	330 ug/kg
Chrysene	95-2	10 ug/L	330 ug/kg
bis(2-Ethlhexyl)phthalate	95-2	10 ug/L	330 ug/kg
Di-n-octyl phthalate	95-2	10 ug/L	330 ug/kg
Benzo[b]fluoranthene	95-2	10 ug/L	330 ug/kg
Benzo[k]fluoranthene	95-2	10 ug/L	330 ug/kg
Benzo[a]pyrene	95-2	10 ug/L	330 ug/kg
Indeno(1,2,3-cd)pyrene	95-2	10 ug/L	330 ug/kg
Dibenz[a,h]anthracene	95-2	10 ug/L	330 ug/kg
Benzo[g,h,i]perylene	95-2	10 ug/L	330 ug/kg

Pesticide & PCB Analytical Methods and QuantitationLimits[3]

COMPOUND NAME	METHOD	WATER	SOIL
Alpha-BHC	95-3	0.05 ug/L	1.7 ug/kg
Beta-BHC	95-3	0.05 ug/L	1.7 ug/kg
Delta-BHC	95-3	0.05 ug/L	1.7 ug/kg
Gamma-BHC (Lindane)	95-3	0.05 ug/L	1.7 ug/kg
Heptachlor	95-3	0.05 ug/L	1.7 ug/kg
Aldrin	95-3	0.05 ug/L	1.7 ug/kg
Heptachlor epoxide	95-3	0.05 ug/L	1.7 ug/kg
Endosulfan I	95-3	0.05 ug/L	1.7 ug/kg
Dieldrin	95-3	0.10 ug/L	3.3 ug/kg
4,4'-DDE	95-3	0.10 ug/L	1.7 ug/kg
Endrin	95-3	0.10 ug/L	3.3 ug/kg
Endosulfan II	95-3	0.10 ug/L	3.3 ug/kg
4,4'-DDD	95-3	0.10 ug/L	3.3 ug/kg
Endosulfan sulfate	95-3	0.10 ug/L	3.3 ug/kg
4,4'-DDT	95-3	0.10 ug/L	3.3 ug/kg
Methoxychlor	95-3	0.50ug/L	17.0 ug/kg
Endrin ketone	95-3	0.10 ug/L	3.3 ug/kg
Endrin aldehyde	95-3	0.10 ug/L	3.3 ug/kg
Alpha-chlordane	95-3	0.05 ug/L	1.7 ug/kg
Gamma-chlordane	95-3	0.05 ug/L	1.7 ug/kg
Toxaphene	95-3	5.0 ug/L	170. ug/kg
AROCLOR-1016	95-3	1.0 ug/L	33.0 ug/kg
AROCLOR-1221	95-3	2.0 ug/L	67.0 ug/kg
AROCLOR-1232	95-3	1.0 ug/L	33.0 ug/kg
AROCLOR-1242	95-3	1.0 ug/L	33.0 ug/kg
AROCLOR-1248	95-3	1.0 ug/L	33.0 ug/kg
AROCLOR-1254	95-3	1.0 ug/L	33.0 ug/kg
AROCLOR-1260	91-3	1.0 ug/L	33.0 ug/kg

Superfund Target Analyte List (TAL)

Inorganic Analytical Methods and Quantitation Limits[4]
(TAL Metals)

COMPOUND NAME	METHOD	WATER	SOIL
Aluminum	200.7 CLP-M*	200 ug/L	20 mg/kg
Antimony	200.7 CLP-M*	60 ug/L	6 mg/kg
Arsenic	200.7 CLP-M*	10 ug/L	1 mg/kg
Barium	200.7 CLP-M*	200 ug/L	20 mg/kg
Beryllium	200.7 CLP-M*	5 ug/L	0.5 mg/kg
Cadmium	200.7 CLP-M*	5 ug/L	0.5 mg/kg
Calcium	200.7 CLP-M*	5000 ug/L	500 mg/kg
Chromium	200.7 CLP-M*	10 ug/L	1 mg/kg
Cobalt	200.7 CLP-M*	50 ug/L	5 mg/kg
Copper	200.7 CLP-M*	25 ug/L	2.5 mg/kg
Iron	200.7 CLP-M*	100 ug/L	10 mg/kg
Lead	200.7 CLP-M*	3 ug/L	0.3 mg/kg
Magnesium	200.7 CLP-M*	5000 ug/L	500 mg/kg
Manganese	200.7 CLP-M*	15 ug/L	1.5 mg/kg
Mercury	245.1 CLP-M*	0.2 ug/L	0.02 mg/kg
Nickel	200.7 CLP-M*	40 ug/L	4 mg/kg
Potassium	200.7 CLP-M*	5000 ug/L	500 mg/kg
Selenium	200.7 CLP-M*	5 ug/L	0.5 mg/kg
Silver	200.7 CLP-M*	10 ug/L	1 mg/kg
Sodium	200.7 CLP-M*	5000 ug/L	500 mg/kg
Thallium	200.7 CLP-M*	10 ug/L	1mg/kg
Vanadium	200.7 CLP-M*	50 ug/L	5 mg/kg
Zinc	200.7 CLP-M*	20 ug/L	2 mg/kg
Cyanide	335.2 CLP-M**	10 ug/L	1 mg/kg

* CLP-M modified for the Contract Laboratory Program
** Processed by LaChat Flow Injection Analyzer

Notes
[1] Soil limits are based on "As Received" basis (0% moisture).
[2] Soil limits are based on "As Received" basis (0% moisture).
[3] Soil limits are based on "As Received" basis (0% moisture).
[4] Limits are reported as liquid matrix. Soil limits based on 0% moisture.
[5] Limits are reported as concentrations in extract.
[6] Cyanide measured as HCN, Sulfide measured as H_2S.

Compound list and quantitation limits from N.Y.S.D.E.C. Analytical Services Protocol, October, 1995. MDL's and IDL's are laboratory and instrument specific, and are typically lower than the quantitation limit by factors of 2-10.

SUMMARY OF RESULTS BY OBJECTIVE

Objective 1: Soil Backgrounds

Objective 2: Groundwater Quality

Objective 3: Gas Manufacturing Site

Objective 4: Tannery Site

Objective 5: Petroleum AST's

Objective 6: Electropolishing Wastes

Objective 7: Exposure Pathways

THE ORGANIC ANALYTICAL DATA SHEETS UTILIZE QUALIFIERS IN THEIR FORMATS WHICH ARE DEFINED AS FOLLOWS:

U - Indicates the compound was analyzed for but not detected. The reported value is the sample quantitation limit.
J - Indicates that this is an estimated value. For target analytes, this indicates that the compound is present below the contract quantitation limit but is above the instrument detection limit. For tentatively identified compounds, the quantitation is assumed to be a 1:1 response and the concentration is an estimated value.
E - Indicates that the reported value exceeds the calibration range of the method.
D - Indicates the presence of a compound in a secondary dilution analysis.
B - Indicates that the compound was also found in its associated blank and indicates possible laboratory contamination.
N - Indicates presumptive evidence of a tentatively identified compound. Identification is based on spectral matching using a mass spectral library and interpretation by a qualified specialist.

THE INORGANIC ANALYTICAL DATA SHEETS UTILIZE THREE QUALIFIER CATEGORIES IN THEIR FORMATS WHICH ARE DEFINED AS FOLLOWS:

Qualifier C category
B -Indicates that the reported value is less then the CRDL but greater or equal to the IDL
U - Indicates the compound was analyzed for but not detected.

Qualifier Q category
E - The reported value is estimated due to interference.
M - The precision from the duplicate injection was not met.
N - The spiked sample recovery was not within the control limits
S - The reported value was determined by the Method of Standard Additions.
W - The post-digestion spike for furnace AA analysis is outside of control limits while the sample absorbance is less then 50% of spike absorbance.
***** - The duplicate analysis is not within control limits.
+ - The correlation coefficient for the Method of Standard Additions is less then 0.995.

Qualifier M category
P - ICP
A - Flame AA
F - Furnace
PM - ICP with microwave digestion
AM - Flame AA with microwave digestion
FM - Furnace AA with microwave digestion
CV - Manual cold vapor AA
AV - Automated cold vapor AA
CA - Midi-distillation spectrophotometric
AS - Semi-automated spectrophotometric
C - Manual spectrophotometric
T - Titrimetic
" " - No data has been entered
NR - Analyte did not require analysis

Objective 1: Soil Backgrounds

Sample names:	HE-1 Soil Background HE-2 Soil Background HE-3 Soil Background
Analytical results:	SVOA TAL Metals

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

HE-1

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-01B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 36 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	5240	U
111-44-4	bis(-2-Chloroethyl)Ether	5240	U
95-57-8	2-Chlorophenol	5240	U
541-73-1	1,3-Dichlorobenzene	5240	U
106-46-7	1,4-Dichlorobenzene	5240	U
95-50-1	1,2-Dichlorobenzene	5240	U
95-48-7	2-Methylphenol	5240	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5240	U
106-44-5	4-Methylphenol	5240	U
621-64-7	N-Nitroso-di-n-propylamine	5240	U
67-72-1	Hexachloroethane	5240	U
98-95-3	Nitrobenzene	5240	U
78-59-1	Isophorone	5240	U
88-75-5	2-Nitrophenol	5240	U
105-67-9	2,4-Dimethyphenol	5240	U
120-83-2	2,4-Dichlorophenol	5240	U
120-82-1	1,2,4-Trichlorobenzene	5240	U
91-20-3	Naphthalene	5240	U
106-47-8	4-Chloroaniline	5240	U
87-68-3	Hexachlorobutadiene	5240	U
111-91-1	bis(-2-Chloroethoxy)methane	5240	U
59-50-7	4-Chloro-3-Methylphenol	5240	U
91-57-6	2-Methylnaphthalene	5240	U
77-47-4	Hexachlorocyclopentadiene	5240	U
88-06-2	2,4,6-Trichlorophenol	5240	U
95-95-4	2,4,5-Trichlorphenol	13100	U
91-58-7	2-Chloronaphthalene	5240	U
88-74-4	2-Nitroaniline	13100	U
131-11-3	Dimethylphthalate	5240	U
208-96-8	Acenaphthylene	5240	U
606-20-2	2,6-Dinitrotoluene	5240	U
99-09-2	3-Nitroaniline	13100	U
83-32-9	Acenaphthene	5240	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

HE-1

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-01B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 36 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	13100	U
100-02-7	4-Nitrophenol	13100	U
132-64-9	Dibenzofuran	5240	U
121-14-2	2,4-Dinitrotoluene	5240	U
84-66-2	Diethylphthalate	5240	U
7005-72-3	4-Chlorophenyl-phenylether	5240	U
86-73-7	Fluorene	5240	U
100-01-6	4-Nitroaniline	13100	U
534-52-1	4,6-Dinitro-2-methylphenol	13100	U
86-30-6	N-nitrosodiphenylamine (1)	5240	U
101-55-3	4-Bromophenyl-phenylether	5240	U
118-74-1	Hexachlorobenzene	5240	U
87-86-5	Pentachlorophenol	13100	U
85-01-8	Phenanthrene	5240	U
120-12-7	Anthracene	5240	U
86-74-8	Carbazole	5240	U
84-74-2	Di-n-butylphthalate	5240	U
206-44-0	Fluoranthene	1260	J
129-00-0	Pyrene	1090	J
85-68-7	Butylbenzylphthalate	5240	U
91-94-1	3,3'-Dichlorobenzidine	5240	U
56-55-3	Benzo(a)anthracene	5240	U
218-01-9	Chrysene	5240	U
117-81-7	bis(2-Ethylhexyl)phthalate	5240	U
117-84-0	Di-n-octylphthalate	5240	U
205-99-2	Benzo(b)fluoranthene	5240	U
207-08-9	Benzo(k)fluoranthene	5240	U
50-32-8	Benzo(a)pyrene	5240	U
193-39-5	Indeno(1,2,3-cd)pyrene	5240	U
53-70-3	Dibenzo(a,h)anthracene	5240	U
191-24-2	Benzo(g,h,i)perylene	5240	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

HE-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-01B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 36 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.356	2190	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.641	86000	NJ
3.		Unknown	4.458	3790	JB
4.	57-10-3	Hexadecanoic acid	17.067	1710	NJ
5.	2091-29-4	9-Hexadecenoic acid	18.292	2140	NJ
6.		Unknown Aliphatic	20.247	1060	J
7.	638-67-5	Tricosane	21.205	1760	NJ
8.	629-80-1	Hexadecanal	21.853	6090	NJ
9.	630-03-5	Nonacosane	22.105	4130	NJ
10.		Unknown Hydrocarbon	22.742	7680	J
11.		Unknown Aliphatic	22.946	2700	J
12.		Unknown	23.163	2080	J
13.		Unknown	24.644	3010	J
14.		Unknown	24.776	5680	J
15.		Unknown	24.885	2250	J
16.		Unknown	25.150	3970	J
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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

HE-1

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-01

Level (low/med): LOW Date Received: 4/12/00

% Solids: 63.6

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2430			P
7440-36-0	Antimony	17.3			P
7440-38-2	Arsenic	13.9			P
7440-39-3	Barium	43.0			P
7440-41-7	Beryllium	15.6	U		P
7440-43-9	Cadmium	15.6	U		P
7440-70-2	Calcium	57200			P
7440-47-3	Chromium	44.2			P
7440-48-4	Cobalt	8.1			P
7440-50-8	Copper	34.1			P
57-12-5	Cyanide	0.0774	U		AS
7439-89-6	Iron	18500			P
7439-92-1	Lead	78.2			P
7439-95-4	Magnesium	11800			P
7439-96-5	Manganese	437			P
7439-97-6	Mercury	0.091	B	N	CV
7440-02-0	Nickel	63.2			P
7440-09-7	Potassium	748	B		P
7782-49-2	Selenium	62.3	U		P
7440-22-4	Silver	0.032		N	F
7440-23-5	Sodium	345	B		P
7440-28-0	Thallium	17.3			P
7440-62-2	Vanadium	58.2			P
7440-66-6	Zinc	441		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

HE-2

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-02B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 6 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	355	U
111-44-4	bis(-2-Chloroethyl)Ether	355	U
95-57-8	2-Chlorophenol	355	U
541-73-1	1,3-Dichlorobenzene	355	U
106-46-7	1,4-Dichlorobenzene	355	U
95-50-1	1,2-Dichlorobenzene	355	U
95-48-7	2-Methylphenol	355	U
108-60-1	2,2'-oxybis(1-Chloropropane)	355	U
106-44-5	4-Methylphenol	355	U
621-64-7	N-Nitroso-di-n-propylamine	355	U
67-72-1	Hexachloroethane	355	U
98-95-3	Nitrobenzene	355	U
78-59-1	Isophorone	355	U
88-75-5	2-Nitrophenol	355	U
105-67-9	2,4-Dimethyphenol	355	U
120-83-2	2,4-Dichlorophenol	355	U
120-82-1	1,2,4-Trichlorobenzene	355	U
91-20-3	Naphthalene	355	U
106-47-8	4-Chloroaniline	355	U
87-68-3	Hexachlorobutadiene	355	U
111-91-1	bis(-2-Chloroethoxy)methane	355	U
59-50-7	4-Chloro-3-Methylphenol	355	U
91-57-6	2-Methylnaphthalene	355	U
77-47-4	Hexachlorocyclopentadiene	355	U
88-06-2	2,4,6-Trichlorophenol	355	U
95-95-4	2,4,5-Trichlorphenol	888	U
91-58-7	2-Chloronaphthalene	355	U
88-74-4	2-Nitroaniline	888	U
131-11-3	Dimethylphthalate	355	U
208-96-8	Acenaphthylene	355	U
606-20-2	2,6-Dinitrotoluene	355	U
99-09-2	3-Nitroaniline	888	U
83-32-9	Acenaphthene	355	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

HE-2

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-02B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 6 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	888	U
100-02-7	4-Nitrophenol	888	U
132-64-9	Dibenzofuran	355	U
121-14-2	2,4-Dinitrotoluene	355	U
84-66-2	Diethylphthalate	355	U
7005-72-3	4-Chlorophenyl-phenylether	355	U
86-73-7	Fluorene	355	U
100-01-6	4-Nitroaniline	888	U
534-52-1	4,6-Dinitro-2-methylphenol	888	U
86-30-6	N-nitrosodiphenylamine (1)	355	U
101-55-3	4-Bromophenyl-phenylether	355	U
118-74-1	Hexachlorobenzene	355	U
87-86-5	Pentachlorophenol	888	U
85-01-8	Phenanthrene	78	J
120-12-7	Anthracene	355	U
86-74-8	Carbazole	355	U
84-74-2	Di-n-butylphthalate	355	U
206-44-0	Fluoranthene	188	J
129-00-0	Pyrene	146	J
85-68-7	Butylbenzylphthalate	355	U
91-94-1	3,3'-Dichlorobenzidine	355	U
56-55-3	Benzo(a)anthracene	88	J
218-01-9	Chrysene	97	J
117-81-7	bis(2-Ethylhexyl)phthalate	168	J
117-84-0	Di-n-octylphthalate	355	U
205-99-2	Benzo(b)fluoranthene	90	J
207-08-9	Benzo(k)fluoranthene	86	J
50-32-8	Benzo(a)pyrene	85	J
193-39-5	Indeno(1,2,3-cd)pyrene	355	U
53-70-3	Dibenzo(a,h)anthracene	355	U
191-24-2	Benzo(g,h,i)perylene	355	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

HE-2

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-02B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 6 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	141-79-7	3-Penten-2-one, 4-methyl-	3.167	173	NJB
2.		Unknown	3.725	14500	JB
3.		Unknown	3.892	2300	J
4.		Unknown	4.129	180	J
5.		Unknown	4.567	2490	JB
6.		Unknown	5.456	193	JB
7.		Unknown	21.852	305	J
8.	205-99-2	Benz[e]acephenanthrylene (8C	22.302	165	NJ
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

HE-2

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-02

Level (low/med): LOW Date Received: 4/12/00

% Solids: 93.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	618			P
7440-36-0	Antimony	103	U		P
7440-38-2	Arsenic	7.5			P
7440-39-3	Barium	10.0	B		P
7440-41-7	Beryllium	10.3	U		P
7440-43-9	Cadmium	10.3	U		P
7440-70-2	Calcium	109000			P
7440-47-3	Chromium	19.6			P
7440-48-4	Cobalt	30.8	U		P
7440-50-8	Copper	9.1			P
57-12-5	Cyanide	0.0512	U		AS
7439-89-6	Iron	8180			P
7439-92-1	Lead	9.1			P
7439-95-4	Magnesium	48000			P
7439-96-5	Manganese	791			P
7439-97-6	Mercury	0.0492	U	N	CV
7440-02-0	Nickel	15.1			P
7440-09-7	Potassium	210	B		P
7782-49-2	Selenium	41.1	U		P
7440-22-4	Silver	0.042		N	F
7440-23-5	Sodium	284	B		P
7440-28-0	Thallium	8.5			P
7440-62-2	Vanadium	7.4			P
7440-66-6	Zinc	83.4		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

HE-3

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-03B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 23 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	432	U
111-44-4	bis(-2-Chloroethyl)Ether	432	U
95-57-8	2-Chlorophenol	432	U
541-73-1	1,3-Dichlorobenzene	432	U
106-46-7	1,4-Dichlorobenzene	432	U
95-50-1	1,2-Dichlorobenzene	432	U
95-48-7	2-Methylphenol	432	U
108-60-1	2,2'-oxybis(1-Chloropropane)	432	U
106-44-5	4-Methylphenol	432	U
621-64-7	N-Nitroso-di-n-propylamine	432	U
67-72-1	Hexachloroethane	432	U
98-95-3	Nitrobenzene	432	U
78-59-1	Isophorone	432	U
88-75-5	2-Nitrophenol	432	U
105-67-9	2,4-Dimethyphenol	432	U
120-83-2	2,4-Dichlorophenol	432	U
120-82-1	1,2,4-Trichlorobenzene	432	U
91-20-3	Naphthalene	432	U
106-47-8	4-Chloroaniline	432	U
87-68-3	Hexachlorobutadiene	432	U
111-91-1	bis(-2-Chloroethoxy)methane	432	U
59-50-7	4-Chloro-3-Methylphenol	432	U
91-57-6	2-Methylnaphthalene	432	U
77-47-4	Hexachlorocyclopentadiene	432	U
88-06-2	2,4,6-Trichlorophenol	432	U
95-95-4	2,4,5-Trichlorphenol	1080	U
91-58-7	2-Chloronaphthalene	432	U
88-74-4	2-Nitroaniline	1080	U
131-11-3	Dimethylphthalate	432	U
208-96-8	Acenaphthylene	432	U
606-20-2	2,6-Dinitrotoluene	432	U
99-09-2	3-Nitroaniline	1080	U
83-32-9	Acenaphthene	432	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

HE-3

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-03B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 23 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1080	U
100-02-7	4-Nitrophenol	1080	U
132-64-9	Dibenzofuran	432	U
121-14-2	2,4-Dinitrotoluene	432	U
84-66-2	Diethylphthalate	432	U
7005-72-3	4-Chlorophenyl-phenylether	432	U
86-73-7	Fluorene	432	U
100-01-6	4-Nitroaniline	1080	U
534-52-1	4,6-Dinitro-2-methylphenol	1080	U
86-30-6	N-nitrosodiphenylamine (1)	432	U
101-55-3	4-Bromophenyl-phenylether	432	U
118-74-1	Hexachlorobenzene	432	U
87-86-5	Pentachlorophenol	1080	U
85-01-8	Phenanthrene	260	J
120-12-7	Anthracene	432	U
86-74-8	Carbazole	432	U
84-74-2	Di-n-butylphthalate	432	U
206-44-0	Fluoranthene	382	J
129-00-0	Pyrene	349	J
85-68-7	Butylbenzylphthalate	432	U
91-94-1	3,3'-Dichlorobenzidine	432	U
56-55-3	Benzo(a)anthracene	150	J
218-01-9	Chrysene	164	J
117-81-7	bis(2-Ethylhexyl)phthalate	477	
117-84-0	Di-n-octylphthalate	432	U
205-99-2	Benzo(b)fluoranthene	432	U
207-08-9	Benzo(k)fluoranthene	432	U
50-32-8	Benzo(a)pyrene	105	J
193-39-5	Indeno(1,2,3-cd)pyrene	432	U
53-70-3	Dibenzo(a,h)anthracene	432	U
191-24-2	Benzo(g,h,i)perylene	432	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

HE-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-03B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 23 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.642	6460	JB
2.		Unknown	3.749	4160	JB
3.		Unknown	4.152	161	J
4.		Unknown	4.591	2270	JB
5.	475-20-7	Junipene	11.427	105	NJ
6.	143-07-7	Dodecanoic acid	15.918	116	NJ
7.		Unknown	16.939	183	J
8.		Unknown	17.011	222	J
9.	57-10-3	Hexadecanoic acid	17.083	335	NJ
10.	84-65-1	9,10-Anthracenedione	17.396	168	NJ
11.		Unknown	17.698	96	J
12.		Unknown	18.325	230	J
13.	238-84-6	11H-Benzo[a]fluorene	19.002	97	NJ
14.	511-15-9	Totarol	19.498	201	NJ
15.		Unknown	21.733	328	J
16.		Unknown	21.855	1230	J
17.		Unknown Aliphatic	22.099	507	J
18.	205-99-2	Benz[e]acephenanthrylene (8C	22.367	440	NJ
19.		Unknown Aliphatic	22.953	227	J
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U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

HE-3

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-03

Level (low/med): LOW Date Received: 4/12/00

% Solids: 77.2

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6030			P
7440-36-0	Antimony	119	U		P
7440-38-2	Arsenic	36.1			P
7440-39-3	Barium	36.7			P
7440-41-7	Beryllium	11.9	U		P
7440-43-9	Cadmium	11.9	U		P
7440-70-2	Calcium	12500			P
7440-47-3	Chromium	50.8			P
7440-48-4	Cobalt	4.0	B		P
7440-50-8	Copper	143			P
57-12-5	Cyanide	0.063	U		AS
7439-89-6	Iron	15200			P
7439-92-1	Lead	14.8			P
7439-95-4	Magnesium	4890			P
7439-96-5	Manganese	546			P
7439-97-6	Mercury	0.0624	U	N	CV
7440-02-0	Nickel	19.5			P
7440-09-7	Potassium	606			P
7782-49-2	Selenium	47.8	U		P
7440-22-4	Silver	0.034		N	F
7440-23-5	Sodium	1600	U		P
7440-28-0	Thallium	71.7	U		P
7440-62-2	Vanadium	13.4			P
7440-66-6	Zinc	261		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

_____

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_____

Objective 2: Groundwater Quality

Sample names:	MW-1 MW-3 MW-4 MW-5
Analytical results:	VOA SVOA TAL Metals

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-02B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: not dec. _____ Date Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	71	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	13	
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	58	
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	36	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-02B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: not dec. _____ Data Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 24

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.515	10	J
2.	0-00-0	CYCLOHEXENE, 1,3-DIMETHYL-	6.794	79	NJ
3.	56324-66-4	Cyclopentane, 2-ethylidene-1	7.813	8	NJ
4.		Unknown	8.107	6	J
5.	55308-20-8	Cycloheptene, methyl-	8.222	8	NJ
6.	98-82-8	Benzene, (1-methylethyl)-	9.960	78	NJ
7.		Unknown	10.083	6	J
8.	103-65-1	Benzene, propyl-	10.752	10	NJ
9.	620-14-4	Benzene, 1-ethyl-3-methyl-	10.973	12	NJ
10.	622-96-8	Benzene, 1-ethyl-4-methyl-	11.405	64	NJ
11.		Trimethylbenzene Isomer	11.772	10	J
12.	99-87-6	Benzene, 1-methyl-4-(1-methy	12.343	7	NJ
13.		Trimethylbenzene Isomer	12.474	43	J
14.	496-11-7	1H-Indene, 2,3-dihydro-	12.735	333	NJ
15.	141-93-5	Benzene, 1,3-diethyl-	12.997	49	NJ
16.	95-13-6	1H-Indene	13.136	50	NJ
17.	767-58-8	1H-Indene, 2,3-dihydro-1-met	13.854	22	NJ
18.	4218-48-8	Benzene, 1-ethyl-4-(1-methyl	14.156	11	NJ
19.	17059-52-8	Benzofuran, 7-methyl-	14.344	27	NJ
20.		Tetramethylbenzene Isomer	14.573	20	J
21.	874-35-1	1H-Indene, 2,3-dihydro-5-met	14.998	17	NJ
22.	3454-07-7	Benzene, 1-ethenyl-4-ethyl-	15.259	30	NJ
23.	767-59-9	1H-Indene, 1-methyl-	15.357	14	NJ
24.	767-59-9	1H-Indene, 1-methyl-	15.553	16	NJ
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0008

Matrix: (soil/water) WATER Lab Sample ID: 0005307-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/23/00

% Moisture: not dec. _____ Date Analyzed: 06/02/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	45	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	6	J
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (total)	10	U
		7	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0008

Matrix: (soil/water) WATER Lab Sample ID: 0005307-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/23/00

% Moisture: not dec. _____ Data Analyzed: 06/02/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	300-57-2	Benzene, 2-propenyl-	12.963	36	NJ
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-1

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-02C

Sample wt/vol: 980 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethyphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	11	
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorphenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	20	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-1

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-02C

Sample wt/vol: 980 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	3	J
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	7	J
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	7	J
84-74-2	Di-n-butylphthalate	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-02C

Sample wt/vol: 980 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/21/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	0-00-0	CYCLOHEXENE, 1,3-DIMETHYL-	3.357	21	NJ
2.		Volatile Target Analyte	3.809	27	J
3.		Volatile Target Analyte	4.189	13	J
4.		Ethylmethylbenzene Isomer	4.581	36	J
5.		Ethylmethylbenzene Isomer	5.341	28	J
6.		Trimethylbenzene Isomer	5.520	10	J
7.		Ethylmethylbenzene Isomer	5.960	26	J
8.	496-11-7	1H-Indene, 2,3-dihydro-	6.174	122	NJ
9.	135-01-3	Benzene, 1,2-diethyl-	6.317	48	NJ
10.	104-55-2	2-Propenal, 3-phenyl- (9CI)	7.055	18	NJ
11.	4265-25-2	Benzofuran, 2-methyl-	7.126	37	NJ
12.	17059-52-8	Benzofuran, 7-methyl-	7.198	8	NJ
13.	874-35-1	1H-Indene, 2,3-dihydro-5-met	7.650	18	NJ
14.	767-59-9	1H-Indene, 1-methyl-	7.816	42	NJ
15.	767-60-2	1H-Indene, 3-methyl-	7.900	27	NJ
16.	95-15-8	Benzo[b]thiophene	8.471	29	NJ
17.	105-60-2	2H-Azepin-2-one, hexahydro-	9.293	23	NJ
18.	4565-32-6	Benzo[b]thiophene, 2,3-dihyd	9.353	9	NJ
19.		Methylnaphthalene Isomer	10.139	73	J
20.	13615-40-2	1-Naphthalenol, 3-methyl-	13.816	8	NJ
21.	92-69-3	[1,1'-Biphenyl]-4-ol	14.917	7	NJ
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004206-02

Level (low/med): LOW Date Received: 4/18/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	39300			P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	174			P
7440-39-3	Barium	371			P
7440-41-7	Beryllium	3.5	B		P
7440-43-9	Cadmium	3.3	B		P
7440-70-2	Calcium	198000			P
7440-47-3	Chromium	143			P
7440-48-4	Cobalt	43.6	B	E	P
7440-50-8	Copper	92.5			P
57-12-5	Cyanide	89.2			AS
7439-89-6	Iron	64400		E	P
7439-92-1	Lead	0.73	B	N	F
7439-95-4	Magnesium	37700			P
7439-96-5	Manganese	2160			P
7439-97-6	Mercury	0.88		*N	CV
7440-02-0	Nickel	71.0			P
7440-09-7	Potassium	18500			P
7782-49-2	Selenium	9.4		N	P
7440-22-4	Silver	55.6		E	P
7440-23-5	Sodium	48700		E	P
7440-28-0	Thallium	1.3		*N	F
7440-62-2	Vanadium	84.5			P
7440-66-6	Zinc	234		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0013

Matrix (soil/water): WATER Lab Sample ID: 0006302-01

Level (low/med): LOW Date Received: 6/22/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	526			P
7440-36-0	Antimony	10	U		P
7440-38-2	Arsenic	57.9			P
7440-39-3	Barium	91.8	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	145000			P
7440-47-3	Chromium	2.2	B		P
7440-48-4	Cobalt	3	U		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	2880			P
7439-92-1	Lead	1.1		N	F
7439-95-4	Magnesium	10800			P
7439-96-5	Manganese	588			P
7439-97-6	Mercury	0.53			CV
7440-02-0	Nickel	2	U		P
7440-09-7	Potassium	13700			P
7782-49-2	Selenium	0.79	B		F
7440-22-4	Silver	28.0			P
7440-23-5	Sodium	41500			P
7440-28-0	Thallium	6	U		P
7440-62-2	Vanadium	3	U		P
7440-66-6	Zinc	134		*	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1 F

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0013

Matrix (soil/water): WATER Lab Sample ID: 0006302-01

Level (low/med): LOW Date Received: 6/22/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8	U		P
7440-36-0	Antimony	10	U		P
7440-38-2	Arsenic	24.8	B		P
7440-39-3	Barium	85.8	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	142000			P
7440-47-3	Chromium	1	U		P
7440-48-4	Cobalt	3	U		P
7440-50-8	Copper	5.5	B		P
7439-89-6	Iron	302			P
7439-92-1	Lead	0.5	U	N	F
7439-95-4	Magnesium	10800			P
7439-96-5	Manganese	567			P
7439-97-6	Mercury	0.2	U		CV
7440-02-0	Nickel	2	U		P
7440-09-7	Potassium	13400			P
7782-49-2	Selenium	0.5	U		F
7440-22-4	Silver	27.4			P
7440-23-5	Sodium	43300			P
7440-28-0	Thallium	6	U		P
7440-62-2	Vanadium	3	U		P
7440-66-6	Zinc	24.7			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN

ILM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004245-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/19/00

% Moisture: not dec. _____ Date Analyzed: 04/26/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004245-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/19/00

% Moisture: not dec. _____ Data Analyzed: 04/26/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-3

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004245-01B

Sample wt/vol: 920 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/19/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethyphenol	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
111-91-1	bis(-2-Chloroethoxy)methane	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorphenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	11	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-3

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004245-01B

Sample wt/vol: 920 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/19/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	27	U
100-02-7	4-Nitrophenol	27	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	27	U
534-52-1	4,6-Dinitro-2-methylphenol	27	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	27	U
85-01-8	Phenanthrene	10	J
120-12-7	Anthracene	3	J
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	14	
129-00-0	Pyrene	11	
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	6	J
218-01-9	Chrysene	7	J
117-81-7	bis(2-Ethylhexyl)phthalate	5	J
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	4	J
207-08-9	Benzo(k)fluoranthene	6	J
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	J
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	4	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004245-01B

Sample wt/vol: 920 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/19/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/21/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	105-60-2	2H-Azepin-2-one, hexahydro-	9.389	122	NJ
2.		Unknown	17.668	11	J
3.		Unknown Aliphatic	17.764	11	J
4.		Unknown	17.812	8	J
5.		Unknown	17.872	13	J
6.		Unknown Aliphatic	17.944	16	J
7.		Unknown Aliphatic	18.089	9	J
8.		Unknown Aliphatic	18.317	25	J
9.		Unknown	18.486	10	J
10.		Unknown	18.570	18	J
11.		Unknown	18.642	12	J
12.		Unknown Aliphatic	18.702	9	J
13.		Unknown	18.859	12	J
14.		Unknown Aliphatic	18.895	13	J
15.	2381-21-7	Pyrene, 1-methyl-	18.991	14	NJ
16.		Unknown	19.183	73	J
17.		Unknown Aliphatic	19.268	11	J
18.		Unknown	19.304	17	J
19.		Unknown	24.881	14	J
20.		Unknown	31.007	114	J
21.					
22.					
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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004206-03

Level (low/med): LOW Date Received: 4/18/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	54700			P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	27.1			P
7440-39-3	Barium	745			P
7440-41-7	Beryllium	5.2			P
7440-43-9	Cadmium	7.4			P
7440-70-2	Calcium	253000			P
7440-47-3	Chromium	125			P
7440-48-4	Cobalt	67.9		E	P
7440-50-8	Copper	611			P
7439-89-6	Iron	95800		E	P
7439-92-1	Lead	12.0		N	F
7439-95-4	Magnesium	43000			P
7439-96-5	Manganese	3100			P
7439-97-6	Mercury	26.2		*N	CV
7440-02-0	Nickel	113			P
7440-09-7	Potassium	8880			P
7782-49-2	Selenium	11.3		N	P
7440-22-4	Silver	68.0		E	P
7440-23-5	Sodium	5500		E	P
7440-28-0	Thallium	3.6		*N	F
7440-62-2	Vanadium	108			P
7440-66-6	Zinc	2110		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. 3 UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004245-01

Level (low/med): LOW Date Received: 4/19/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	1.2	B		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0013

Matrix (soil/water): WATER Lab Sample ID: 0006302-02

Level (low/med): LOW Date Received: 6/22/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6770			P
7440-36-0	Antimony	10	U		P
7440-38-2	Arsenic	8.4	B		P
7440-39-3	Barium	118	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	62500			P
7440-47-3	Chromium	15.1			P
7440-48-4	Cobalt	8.7	B		P
7440-50-8	Copper	80.7			P
7439-89-6	Iron	11600			P
7439-92-1	Lead	1.3		N	F
7439-95-4	Magnesium	6550			P
7439-96-5	Manganese	406			P
7439-97-6	Mercury	7.4			CV
7440-02-0	Nickel	13.0	B		P
7440-09-7	Potassium	2160	B		P
7782-49-2	Selenium	1.4			F
7440-22-4	Silver	9.6	B		P
7440-23-5	Sodium	1550	B		P
7440-28-0	Thallium	6	U		P
7440-62-2	Vanadium	19.5	B		P
7440-66-6	Zinc	285		*	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3 F

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0013

Matrix (soil/water): WATER Lab Sample ID: 0006302-02

Level (low/med): LOW Date Received: 6/22/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.9	B		P
7440-36-0	Antimony	10	U		P
7440-38-2	Arsenic	5	U		P
7440-39-3	Barium	15.7	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	41200			P
7440-47-3	Chromium	1	U		P
7440-48-4	Cobalt	3	U		P
7440-50-8	Copper	6.9	B		P
7439-89-6	Iron	21.6	B		P
7439-92-1	Lead	0.5	U	N	F
7439-95-4	Magnesium	3540	B		P
7439-96-5	Manganese	40.4			P
7439-97-6	Mercury	0.56			CV
7440-02-0	Nickel	2	U		P
7440-09-7	Potassium	811	B		P
7782-49-2	Selenium	1.4			F
7440-22-4	Silver	6.1	B		P
7440-23-5	Sodium	3020	B		P
7440-28-0	Thallium	6	U		P
7440-62-2	Vanadium	3	U		P
7440-66-6	Zinc	30.5			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-04B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: not dec. _____ Date Analyzed: 04/20/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-04B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: not dec. _____ Data Analyzed: 04/20/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-4

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-04C

Sample wt/vol: 985 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/20/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethyphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorphenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-4

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-04C

Sample wt/vol: 985 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/20/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004206-04C

Sample wt/vol: 985 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/18/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/20/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	503-74-2	Butanoic acid, 3-methyl-	3.416	2	NJ
2.	111-90-0	Ethanol, 2-(2-ethoxyethoxy)-	5.608	4	NJ
3.	105-60-2	2H-Azepin-2-one, hexahydro-	9.221	13	NJ
4.		Unknown	13.580	4	JB
5.		Unknown	18.565	4	J
6.	123-95-5	Octadecanoic acid, butyl est	19.673	2	NJ
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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004206-04

Level (low/med): LOW Date Received: 4/18/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	101000			P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	156			P
7440-39-3	Barium	2550			P
7440-41-7	Beryllium	12.1			P
7440-43-9	Cadmium	33.8			P
7440-70-2	Calcium	393000			P
7440-47-3	Chromium	330			P
7440-48-4	Cobalt	259		E	P
7440-50-8	Copper	1140			P
57-12-5	Cyanide	1	U		AS
7439-89-6	Iron	491000		E	P
7439-92-1	Lead	12.3		N	F
7439-95-4	Magnesium	88900			P
7439-96-5	Manganese	4300			P
7439-97-6	Mercury	10.3		*N	CV
7440-02-0	Nickel	388			P
7440-09-7	Potassium	29700			P
7782-49-2	Selenium	24.4		N	P
7440-22-4	Silver	230		E	P
7440-23-5	Sodium	193000		E	P
7440-28-0	Thallium	3.0		*N	F
7440-62-2	Vanadium	245			P
7440-66-6	Zinc	2190		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0013

Matrix (soil/water): WATER Lab Sample ID: 0006302-03

Level (low/med): LOW Date Received: 6/22/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1710			P
7440-36-0	Antimony	10	U		P
7440-38-2	Arsenic	9.7	B		P
7440-39-3	Barium	100.0	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	125000			P
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt	5.6	B		P
7440-50-8	Copper	19.2	B		P
7439-89-6	Iron	11600			P
7439-92-1	Lead	21.6		N	F
7439-95-4	Magnesium	11000			P
7439-96-5	Manganese	214			P
7439-97-6	Mercury	0.48			CV
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	10900			P
7782-49-2	Selenium	0.5	U		F
7440-22-4	Silver	31.2			P
7440-23-5	Sodium	152000			P
7440-28-0	Thallium	6	U		P
7440-62-2	Vanadium	6.3	B		P
7440-66-6	Zinc	47.0		*	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4 F

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0013

Matrix (soil/water): WATER Lab Sample ID: 0006302-03

Level (low/med): LOW Date Received: 6/22/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8	U		P
7440-36-0	Antimony	10	U		P
7440-38-2	Arsenic	5	U		P
7440-39-3	Barium	61.9	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	112000			P
7440-47-3	Chromium	1	U		P
7440-48-4	Cobalt	3	U		P
7440-50-8	Copper	4.5	B		P
7439-89-6	Iron	1700			P
7439-92-1	Lead	0.5	U	N	F
7439-95-4	Magnesium	9550			P
7439-96-5	Manganese	169			P
7439-97-6	Mercury	0.2	U		CV
7440-02-0	Nickel	2	U		P
7440-09-7	Potassium	9420			P
7782-49-2	Selenium	0.5	U		F
7440-22-4	Silver	26.9			P
7440-23-5	Sodium	138000			P
7440-28-0	Thallium	6	U		P
7440-62-2	Vanadium	3	U		P
7440-66-6	Zinc	21.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004206-08

Level (low/med): LOW Date Received: 4/18/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12300			P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	13.5			P
7440-39-3	Barium	279			P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	7.7			P
7440-70-2	Calcium	185000			P
7440-47-3	Chromium	149			P
7440-48-4	Cobalt	18.4	B	E	P
7440-50-8	Copper	318			P
7439-89-6	Iron	41900		E	P
7439-92-1	Lead	7.5		N	F
7439-95-4	Magnesium	6580			P
7439-96-5	Manganese	732			P
7439-97-6	Mercury	12.6		*N	CV
7440-02-0	Nickel	49.2			P
7440-09-7	Potassium	5510			P
7782-49-2	Selenium	8.7		N	P
7440-22-4	Silver	30.9		E	P
7440-23-5	Sodium	11000		E	P
7440-28-0	Thallium	1.6		*N	F
7440-62-2	Vanadium	44.8	B		P
7440-66-6	Zinc	501		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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Objective 3: Gas Manufacturing Site

Sample names:	SB-3: 6'-6.8' Gas Manufacturing SB-3: 6.8' Gas Manufacturing SB-4: 8'-10' Gas Manufacturing SB-4: 20'-22' Gas Manufacturing SB-5: Gas Manufacturing
Analytical results:	VOA SVOA TAL Metals

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-3 [6-8] 6-8 JM

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-06A

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 14.3 Date Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SB-3 [6-8] JH 6.5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-06A

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 14.3 Data Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	590-86-3	Butanal, 3-methyl-	1.409	3	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-3[6-6.8]

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-05A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 16 decanted: (Y/N) N Date Extracted:04/21/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3960	U
111-44-4	bis(-2-Chloroethyl)Ether	3960	U
95-57-8	2-Chlorophenol	3960	U
541-73-1	1,3-Dichlorobenzene	3960	U
106-46-7	1,4-Dichlorobenzene	3960	U
95-50-1	1,2-Dichlorobenzene	3960	U
95-48-7	2-Methylphenol	3960	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3960	U
106-44-5	4-Methylphenol	3960	U
621-64-7	N-Nitroso-di-n-propylamine	3960	U
67-72-1	Hexachloroethane	3960	U
98-95-3	Nitrobenzene	3960	U
78-59-1	Isophorone	3960	U
88-75-5	2-Nitrophenol	3960	U
105-67-9	2,4-Dimethyphenol	3960	U
120-83-2	2,4-Dichlorophenol	3960	U
120-82-1	1,2,4-Trichlorobenzene	3960	U
91-20-3	Naphthalene	3960	U
106-47-8	4-Chloroaniline	3960	U
87-68-3	Hexachlorobutadiene	3960	U
111-91-1	bis(-2-Chloroethoxy)methane	3960	U
59-50-7	4-Chloro-3-Methylphenol	3960	U
91-57-6	2-Methylnaphthalene	3960	U
77-47-4	Hexachlorocyclopentadiene	3960	U
88-06-2	2,4,6-Trichlorophenol	3960	U
95-95-4	2,4,5-Trichlorphenol	3960	U
91-58-7	2-Chloronaphthalene	9910	U
88-74-4	2-Nitroaniline	3960	U
131-11-3	Dimethylphthalate	9910	U
208-96-8	Acenaphthylene	3960	U
606-20-2	2,6-Dinitrotoluene	1580	J
99-09-2	3-Nitroaniline	3960	U
83-32-9	Acenaphthene	9910	U
		3960	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-3[6-6.8]

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-05A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 16 decanted: (Y/N) N Date Extracted:04/21/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9910	U
100-02-7	4-Nitrophenol	9910	U
132-64-9	Dibenzofuran	3960	U
121-14-2	2,4-Dinitrotoluene	3960	U
84-66-2	Diethylphthalate	3960	U
7005-72-3	4-Chlorophenyl-phenylether	3960	U
86-73-7	Fluorene	3960	U
100-01-6	4-Nitroaniline	3960	U
534-52-1	4,6-Dinitro-2-methylphenol	9910	U
86-30-6	N-nitrosodiphenylamine (1)	9910	U
101-55-3	4-Bromophenyl-phenylether	3960	U
118-74-1	Hexachlorobenzene	3960	U
87-86-5	Pentachlorophenol	3960	U
85-01-8	Phenanthrene	9910	U
120-12-7	Anthracene	8030	
86-74-8	Carbazole	1330	J
84-74-2	Di-n-butylphthalate	3960	U
206-44-0	Fluoranthene	3960	U
129-00-0	Pyrene	7710	
85-68-7	Butylbenzylphthalate	19600	
91-94-1	3,3'-Dichlorobenzidine	3960	U
56-55-3	Benzo(a)anthracene	3960	U
218-01-9	Chrysene	4960	
117-81-7	bis(2-Ethylhexyl)phthalate	5100	
117-84-0	Di-n-octylphthalate	132000	EB
205-99-2	Benzo(b)fluoranthene	3960	U
207-08-9	Benzo(k)fluoranthene	4810	
50-32-8	Benzo(a)pyrene	5570	
193-39-5	Indeno(1,2,3-cd)pyrene	5290	
53-70-3	Dibenzo(a,h)anthracene	6700	
191-24-2	Benzo(g,h,i)perylene	3960	U
		9100	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SB-3[6-6.8]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-05A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 16 decanted: (Y/N) N Date Extracted:04/21/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.368	2540	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.665	68300	NJ
3.		Unknown	4.471	5150	J
4.		Unknown	16.819	1340	J
5.	613-12-7	Anthracene, 2-methyl-	16.868	1300	NJ
6.		Unknown	17.025	1320	J
7.	779-02-2	Anthracene, 9-methyl-	17.073	1020	NJ
8.		Unknown	17.278	1070	J
9.	629-62-9	Pentadecane	17.387	1400	NJ
10.	84-65-1	9,10-Anthracenedione	17.424	2070	NJ
11.	1576-69-8	Phenanthrene, 2,7-dimethyl-	17.666	1190	NJ
12.		Unknown	17.871	1620	J
13.		Unknown	17.920	1330	J
14.		Unknown	17.993	1640	J
15.		Unknown	18.380	1100	J
16.	629-78-7	Heptadecane	18.671	941	NJ
17.	3353-12-6	Pyrene, 4-methyl-	19.035	1260	NJ
18.		Unknown	22.886	3340	J
19.		Unknown	23.192	2400	J
20.		Unknown	23.583	5060	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-3 (6-6.8')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-05

Level (low/med): LOW Date Received: 4/15/00

% Solids: 84.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3140			P
7440-36-0	Antimony	113	U		P
7440-38-2	Arsenic	9.2			P
7440-39-3	Barium	110			P
7440-41-7	Beryllium	11.3	U		P
7440-43-9	Cadmium	11.3	U		P
7440-70-2	Calcium	128000			P
7440-47-3	Chromium	9.3			P
7440-48-4	Cobalt	34	U		P
7440-50-8	Copper	12.6			P
57-12-5	Cyanide	0.13	B		AS
7439-89-6	Iron	10800			P
7439-92-1	Lead	259			P
7439-95-4	Magnesium	30900			P
7439-96-5	Manganese	574			P
7439-97-6	Mercury	0.22		N	CV
7440-02-0	Nickel	7.2			P
7440-09-7	Potassium	417	B		P
7782-49-2	Selenium	45.3	U		P
7440-22-4	Silver	0.027		N	F
7440-23-5	Sodium	375	B		P
7440-28-0	Thallium	67.9	U		P
7440-62-2	Vanadium	27.3			P
7440-66-6	Zinc	176		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-4 [20-22]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-08A

Sample wt/vol: 5.3 (g/mL) G Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 23.3 Date Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SB-4[20-22]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-08A

Sample wt/vol: 5.3 (g/mL) G Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 23.3 Data Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	71-23-8	1-Propanol	1.417	13	NJ
2.	110-54-3	Hexane	1.417	13	NJ
3.	80-56-8	.ALPHA.-PINENE, (-)-	9.883	20	NJ
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-4[8-10]

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 33 decanted: (Y/N) N Date Extracted: 04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500	U
111-44-4	bis(-2-Chloroethyl)Ether	500	U
95-57-8	2-Chlorophenol	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
95-50-1	1,2-Dichlorobenzene	500	U
95-48-7	2-Methylphenol	500	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500	U
106-44-5	4-Methylphenol	500	U
621-64-7	N-Nitroso-di-n-propylamine	500	U
67-72-1	Hexachloroethane	500	U
98-95-3	Nitrobenzene	500	U
78-59-1	Isophorone	500	U
88-75-5	2-Nitrophenol	500	U
105-67-9	2,4-Dimethyphenol	500	U
120-83-2	2,4-Dichlorophenol	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	500	U
111-91-1	bis(-2-Chloroethoxy)methane	500	U
59-50-7	4-Chloro-3-Methylphenol	500	U
91-57-6	2-Methylnaphthalene	500	U
77-47-4	Hexachlorocyclopentadiene	500	U
88-06-2	2,4,6-Trichlorophenol	500	U
95-95-4	2,4,5-Trichlorphenol	1250	U
91-58-7	2-Chloronaphthalene	500	U
88-74-4	2-Nitroaniline	1250	U
131-11-3	Dimethylphthalate	500	U
208-96-8	Acenaphthylene	500	U
606-20-2	2,6-Dinitrotoluene	500	U
99-09-2	3-Nitroaniline	1250	U
83-32-9	Acenaphthene	500	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-4[8-10]

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 33 decanted: (Y/N) N Date Extracted: 04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1250	U
100-02-7	4-Nitrophenol	1250	U
132-64-9	Dibenzofuran	500	U
121-14-2	2,4-Dinitrotoluene	500	U
84-66-2	Diethylphthalate	500	U
7005-72-3	4-Chlorophenyl-phenylether	500	U
86-73-7	Fluorene	500	U
100-01-6	4-Nitroaniline	1250	U
534-52-1	4,6-Dinitro-2-methylphenol	1250	U
86-30-6	N-nitrosodiphenylamine (1)	500	U
101-55-3	4-Bromophenyl-phenylether	500	U
118-74-1	Hexachlorobenzene	500	U
87-86-5	Pentachlorophenol	1250	U
85-01-8	Phenanthrene	348	J
120-12-7	Anthracene	500	U
86-74-8	Carbazole	500	U
84-74-2	Di-n-butylphthalate	500	U
206-44-0	Fluoranthene	920	
129-00-0	Pyrene	882	
85-68-7	Butylbenzylphthalate	500	U
91-94-1	3,3'-Dichlorobenzidine	500	U
56-55-3	Benzo(a)anthracene	347	J
218-01-9	Chrysene	457	J
117-81-7	bis(2-Ethylhexyl)phthalate	103	JB
117-84-0	Di-n-octylphthalate	500	U
205-99-2	Benzo(b)fluoranthene	328	J
207-08-9	Benzo(k)fluoranthene	365	J
50-32-8	Benzo(a)pyrene	312	J
193-39-5	Indeno(1,2,3-cd)pyrene	205	J
53-70-3	Dibenzo(a,h)anthracene	121	J
191-24-2	Benzo(g,h,i)perylene	286	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SB-4[8-10]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 33 decanted: (Y/N) N Date Extracted:04/21/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.691	1930	JB
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.881	31400	NJ
3.		Unknown	4.677	2820	JB
4.	486-25-9	9H-Fluoren-9-one	15.313	128	NJ
5.	779-02-2	Anthracene, 9-methyl-	16.845	128	NJ
6.	203-64-5	4H-Cyclopenta[def]phenanthre	17.001	203	NJ
7.	57-10-3	Hexadecanoic acid	17.073	152	NJ
8.		Unknown	17.373	156	J
9.		Unknown	17.710	125	J
10.	3674-65-5	Phenanthrene, 2,3-dimethyl-	17.842	216	NJ
11.		Unknown	18.203	186	J
12.	2381-21-7	Pyrene, 1-methyl-	19.010	348	NJ
13.		Unknown	19.698	540	J
14.	82-05-3	7H-Benz[de]anthracen-7-one	19.830	170	NJ
15.	239-35-0	Benzo[b]naphtho[2,1-d]thioph	19.987	108	NJ
16.		Unknown	20.048	128	J
17.	2498-77-3	Benz[a]anthracene, 1-methyl-	21.003	168	NJ
18.		Unknown	21.063	126	J
19.	198-55-0	Perylene	22.311	647	NJ
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.: SB-4 (8-10')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-07

Level (low/med): LOW Date Received: 4/15/00

% Solids: 66.7

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14400			P
7440-36-0	Antimony	146	U		P
7440-38-2	Arsenic	11.1			P
7440-39-3	Barium	88.9			P
7440-41-7	Beryllium	5.6			P
7440-43-9	Cadmium	14.6	U		P
7440-70-2	Calcium	3450			P
7440-47-3	Chromium	10.00			P
7440-48-4	Cobalt	32.3			P
7440-50-8	Copper	288			P
57-12-5	Cyanide	0.0785	U		AS
7439-89-6	Iron	12000			P
7439-92-1	Lead	169			P
7439-95-4	Magnesium	1440			P
7439-96-5	Manganese	719			P
7439-97-6	Mercury	1.3		N	CV
7440-02-0	Nickel	41.7			P
7440-09-7	Potassium	506	B		P
7782-49-2	Selenium	58.6	U		P
7440-22-4	Silver	0.036		N	F
7440-23-5	Sodium	1960	U		P
7440-28-0	Thallium	9.0			P
7440-62-2	Vanadium	20.6			P
7440-66-6	Zinc	224		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-10A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 26.7 Date Analyzed: 04/24/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	18	
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SB-5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-10A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 26.7 Data Analyzed: 04/24/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	13.166	11	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-5

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-10A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 19 decanted: (Y/N) N Date Extracted:04/21/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4110	U
111-44-4	bis(-2-Chloroethyl)Ether	4110	U
95-57-8	2-Chlorophenol	4110	U
541-73-1	1,3-Dichlorobenzene	4110	U
106-46-7	1,4-Dichlorobenzene	4110	U
95-50-1	1,2-Dichlorobenzene	4110	U
95-48-7	2-Methylphenol	4110	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4110	U
106-44-5	4-Methylphenol	4110	U
621-64-7	N-Nitroso-di-n-propylamine	4110	U
67-72-1	Hexachloroethane	4110	U
98-95-3	Nitrobenzene	4110	U
78-59-1	Isophorone	4110	U
88-75-5	2-Nitrophenol	4110	U
105-67-9	2,4-Dimethyphenol	4110	U
120-83-2	2,4-Dichlorophenol	4110	U
120-82-1	1,2,4-Trichlorobenzene	4110	U
91-20-3	Naphthalene	4110	U
106-47-8	4-Chloroaniline	4110	U
87-68-3	Hexachlorobutadiene	4110	U
111-91-1	bis(-2-Chloroethoxy)methane	4110	U
59-50-7	4-Chloro-3-Methylphenol	4110	U
91-57-6	2-Methylnaphthalene	4110	U
77-47-4	Hexachlorocyclopentadiene	4110	U
88-06-2	2,4,6-Trichlorophenol	4110	U
95-95-4	2,4,5-Trichlorphenol	10300	U
91-58-7	2-Chloronaphthalene	4110	U
88-74-4	2-Nitroaniline	10300	U
131-11-3	Dimethylphthalate	4110	U
208-96-8	Acenaphthylene	4110	U
606-20-2	2,6-Dinitrotoluene	4110	U
99-09-2	3-Nitroaniline	10300	U
83-32-9	Acenaphthene	943	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

SB-5

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-10A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 19 decanted: (Y/N) N Date Extracted: 04/21/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	10300	U
100-02-7	4-Nitrophenol	10300	U
132-64-9	Dibenzofuran	4110	U
121-14-2	2,4-Dinitrotoluene	4110	U
84-66-2	Diethylphthalate	4110	U
7005-72-3	4-Chlorophenyl-phenylether	4110	U
86-73-7	Fluorene	1240	J
100-01-6	4-Nitroaniline	10300	U
534-52-1	4,6-Dinitro-2-methylphenol	10300	U
86-30-6	N-nitrosodiphenylamine (1)	4110	U
101-55-3	4-Bromophenyl-phenylether	4110	U
118-74-1	Hexachlorobenzene	4110	U
87-86-5	Pentachlorophenol	10300	U
85-01-8	Phenanthrene	9350	
120-12-7	Anthracene	3350	J
86-74-8	Carbazole	1080	J
84-74-2	Di-n-butylphthalate	4110	U
206-44-0	Fluoranthene	13500	
129-00-0	Pyrene	16900	
85-68-7	Butylbenzylphthalate	4110	U
91-94-1	3,3'-Dichlorobenzidine	4110	U
56-55-3	Benzo(a)anthracene	9240	
218-01-9	Chrysene	8520	
117-81-7	bis(2-Ethylhexyl)phthalate	4110	U
117-84-0	Di-n-octylphthalate	4110	U
205-99-2	Benzo(b)fluoranthene	7610	
207-08-9	Benzo(k)fluoranthene	7790	
50-32-8	Benzo(a)pyrene	7780	
193-39-5	Indeno(1,2,3-cd)pyrene	5180	
53-70-3	Dibenzo(a,h)anthracene	2570	J
191-24-2	Benzo(g,h,i)perylene	5650	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

SB-5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-10A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 19 decanted: (Y/N) N Date Extracted: 04/21/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.380	3920	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.689	80000	NJ
3.		Unknown	4.483	6580	JB
4.	779-02-2	Anthracene, 9-methyl-	16.813	1460	NJ
5.	832-64-4	Phenanthrene, 4-methyl-	16.861	1600	NJ
6.	203-64-5	4H-Cyclopenta[def]phenanthre	17.017	2870	NJ
7.	883-20-5	Phenanthrene, 9-methyl-	17.065	986	NJ
8.	612-94-2	Naphthalene, 2-phenyl-	17.389	1220	NJ
9.	612-94-2	Naphthalene, 2-phenyl-	17.989	1100	NJ
10.	243-42-5	Benzo[b]naphtho[2,3-d]furan	18.663	1160	NJ
11.		Methyl Pyrene Isomer	18.856	1600	J
12.		Methyl Pyrene Isomer	19.025	3040	J
13.		Methyl Pyrene Isomer	19.121	9800	J
14.		Methyl Pyrene Isomer	19.181	8010	J
15.		Unknown	19.218	5990	J
16.	84-15-1	1,1':2',1''-Terphenyl	19.725	5320	NJ
17.		Unknown	20.064	8340	J
18.		Unknown	20.560	5990	J
19.	192-97-2	Benzo[e]pyrene	22.331	6170	NJ
20.					
21.					
22.					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-5

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-10

Level (low/med): LOW Date Received: 4/15/00

% Solids: 81.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3080			P
7440-36-0	Antimony	107	U		P
7440-38-2	Arsenic	10.6			P
7440-39-3	Barium	1290			P
7440-41-7	Beryllium	10.7	U		P
7440-43-9	Cadmium	1.6			P
7440-70-2	Calcium	99400			P
7440-47-3	Chromium	14.9			P
7440-48-4	Cobalt	32.2	U		P
7440-50-8	Copper	20.4			P
57-12-5	Cyanide	0.0599	U		AS
7439-89-6	Iron	12200			P
7439-92-1	Lead	467			P
7439-95-4	Magnesium	36500			P
7439-96-5	Manganese	780			P
7439-97-6	Mercury	0.091	B	N	CV
7440-02-0	Nickel	8.4			P
7440-09-7	Potassium	486	B		P
7782-49-2	Selenium	42.9	U		P
7440-22-4	Silver	0.035		N	F
7440-23-5	Sodium	275	B		P
7440-28-0	Thallium	64.3	U		P
7440-62-2	Vanadium	22.1			P
7440-66-6	Zinc	686		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

Objective 4: Tannery Site

Sample names:	TP-3 Tannery Site TP-4 Tannery Site TP-5 Tannery Site
Analytical results:	VOA SVOA Pesticides/PCB's TAL Metals

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-06B

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 20.2 Date Analyzed: 04/20/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-06B

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 20.2 Data Analyzed: 04/20/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-3

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-06C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 23 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4340	U
111-44-4	bis(-2-Chloroethyl)Ether	4340	U
95-57-8	2-Chlorophenol	4340	U
541-73-1	1,3-Dichlorobenzene	4340	U
106-46-7	1,4-Dichlorobenzene	4340	U
95-50-1	1,2-Dichlorobenzene	4340	U
95-48-7	2-Methylphenol	4340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4340	U
106-44-5	4-Methylphenol	4340	U
621-64-7	N-Nitroso-di-n-propylamine	4340	U
67-72-1	Hexachloroethane	4340	U
98-95-3	Nitrobenzene	4340	U
78-59-1	Isophorone	4340	U
88-75-5	2-Nitrophenol	4340	U
105-67-9	2,4-Dimethyphenol	4340	U
120-83-2	2,4-Dichlorophenol	4340	U
120-82-1	1,2,4-Trichlorobenzene	4340	U
91-20-3	Naphthalene	4340	U
106-47-8	4-Chloroaniline	4340	U
87-68-3	Hexachlorobutadiene	4340	U
111-91-1	bis(-2-Chloroethoxy)methane	4340	U
59-50-7	4-Chloro-3-Methylphenol	4340	U
91-57-6	2-Methylnaphthalene	4340	U
77-47-4	Hexachlorocyclopentadiene	4340	U
88-06-2	2,4,6-Trichlorophenol	4340	U
95-95-4	2,4,5-Trichlorphenol	10800	U
91-58-7	2-Chloronaphthalene	4340	U
88-74-4	2-Nitroaniline	10800	U
131-11-3	Dimethylphthalate	4340	U
208-96-8	Acenaphthylene	4340	U
606-20-2	2,6-Dinitrotoluene	4340	U
99-09-2	3-Nitroaniline	10800	U
83-32-9	Acenaphthene	4340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-3

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-06C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 23 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	10800	U
100-02-7	4-Nitrophenol	10800	U
132-64-9	Dibenzofuran	4340	U
121-14-2	2,4-Dinitrotoluene	4340	U
84-66-2	Diethylphthalate	4340	U
7005-72-3	4-Chlorophenyl-phenylether	4340	U
86-73-7	Fluorene	4340	U
100-01-6	4-Nitroaniline	10800	U
534-52-1	4,6-Dinitro-2-methylphenol	10800	U
86-30-6	N-nitrosodiphenylamine (1)	4340	U
101-55-3	4-Bromophenyl-phenylether	4340	U
118-74-1	Hexachlorobenzene	4340	U
87-86-5	Pentachlorophenol	10800	U
85-01-8	Phenanthrene	4340	U
120-12-7	Anthracene	4340	U
86-74-8	Carbazole	4340	U
84-74-2	Di-n-butylphthalate	4340	U
206-44-0	Fluoranthene	4340	U
129-00-0	Pyrene	4340	U
85-68-7	Butylbenzylphthalate	4340	U
91-94-1	3,3'-Dichlorobenzidine	4340	U
56-55-3	Benzo(a)anthracene	4340	U
218-01-9	Chrysene	4340	U
117-81-7	bis(2-Ethylhexyl)phthalate	4340	U
117-84-0	Di-n-octylphthalate	4340	U
205-99-2	Benzo(b)fluoranthene	4340	U
207-08-9	Benzo(k)fluoranthene	4340	U
50-32-8	Benzo(a)pyrene	4340	U
193-39-5	Indeno(1,2,3-cd)pyrene	4340	U
53-70-3	Dibenzo(a,h)anthracene	4340	U
191-24-2	Benzo(g,h,i)perylene	4340	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-3

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-06C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 23 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.392	4400	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.677	104000	NJ
3.		Unknown	4.482	7410	JB
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30.					

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-3

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No.: Z_UNITED SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-06C

Sample wt/vol: 30 (g/mL) G Lab File ID: 3101031.D

% Moisture: not dec. 23.8 Date Received: 4/12/00

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 4/22/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 5/3/00

Injection Volume: 1 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
72-54-8	4,4'-DDD	4.3	U
72-55-9	4,4'-DDE	4.3	U
50-29-3	4,4'-DDT	4.3	U
309-00-2	Aldrin	2.2	U
319-84-6	alpha-BHC	2.2	U
5103-71-9	alpha-Chlordane	2.2	U
12674-11-2	Aroclor 1016	43	U
11104-28-2	Aroclor 1221	88	U
11141-16-5	Aroclor 1232	43	U
53469-21-9	Aroclor 1242	43	U
12672-29-6	Aroclor 1248	43	U
11097-69-1	Aroclor 1254	43	U
11096-82-5	Aroclor 1260	43	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
60-57-1	Dieldrin	4.3	U
959-98-8	Endosulfan I	2.2	U
33213-65-9	Endosulfan II	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
72-20-8	Endrin	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
53494-70-5	Endrin ketone	4.3	U
58-89-9	gamma-BHC	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
76-44-8	Heptachlor	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
72-43-5	Methoxychlor	22	U
8001-35-2	Toxaphene	220	U

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-3

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-06

Level (low/med): LOW Date Received: 4/12/00

% Solids: 76.6

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3210			P
7440-36-0	Antimony	121	U		P
7440-38-2	Arsenic	46.0			P
7440-39-3	Barium	122			P
7440-41-7	Beryllium	12.1	U		P
7440-43-9	Cadmium	1.4			P
7440-70-2	Calcium	29200			P
7440-47-3	Chromium	521			P
7440-48-4	Cobalt	36.2	U		P
7440-50-8	Copper	65.2			P
57-12-5	Cyanide	0.0662	U		AS
7439-89-6	Iron	33700			P
7439-92-1	Lead	125			P
7439-95-4	Magnesium	2290			P
7439-96-5	Manganese	112			P
7439-97-6	Mercury	0.34		N	CV
7440-02-0	Nickel	35.6			P
7440-09-7	Potassium	751			P
7782-49-2	Selenium	48.3	U		P
7440-22-4	Silver	0.032		N	P
7440-23-5	Sodium	1620	U		P
7440-28-0	Thallium	12.2			P
7440-62-2	Vanadium	26.6			P
7440-66-6	Zinc	103		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-10B

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 30.2 Date Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	6	J
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-10B

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 30.2 Data Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-4

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-10C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 19 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000 (UL) Date Analyzed: 05/12/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4100	U
111-44-4	bis(-2-Chloroethyl)Ether	4100	U
95-57-8	2-Chlorophenol	4100	U
541-73-1	1,3-Dichlorobenzene	4100	U
106-46-7	1,4-Dichlorobenzene	4100	U
95-50-1	1,2-Dichlorobenzene	4100	U
95-48-7	2-Methylphenol	4100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4100	U
106-44-5	4-Methylphenol	4100	U
621-64-7	N-Nitroso-di-n-propylamine	4100	U
67-72-1	Hexachloroethane	4100	U
98-95-3	Nitrobenzene	4100	U
78-59-1	Isophorone	4100	U
88-75-5	2-Nitrophenol	4100	U
105-67-9	2,4-Dimethyphenol	4100	U
120-83-2	2,4-Dichlorophenol	4100	U
120-82-1	1,2,4-Trichlorobenzene	4100	U
91-20-3	Naphthalene	14500	
106-47-8	4-Chloroaniline	4100	U
87-68-3	Hexachlorobutadiene	4100	U
111-91-1	bis(-2-Chloroethoxy)methane	4100	U
59-50-7	4-Chloro-3-Methylphenol	4100	U
91-57-6	2-Methylnaphthalene	7010	
77-47-4	Hexachlorocyclopentadiene	4100	U
88-06-2	2,4,6-Trichlorophenol	4100	U
95-95-4	2,4,5-Trichlorphenol	10200	U
91-58-7	2-Chloronaphthalene	4100	U
88-74-4	2-Nitroaniline	10200	U
131-11-3	Dimethylphthalate	4100	U
208-96-8	Acenaphthylene	4100	U
606-20-2	2,6-Dinitrotoluene	4100	U
99-09-2	3-Nitroaniline	10200	U
83-32-9	Acenaphthene	18300	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-4

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-10C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 19 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	10200	U
100-02-7	4-Nitrophenol	10200	U
132-64-9	Dibenzofuran	16200	
121-14-2	2,4-Dinitrotoluene	4100	U
84-66-2	Diethylphthalate	4100	U
7005-72-3	4-Chlorophenyl-phenylether	4100	U
86-73-7	Fluorene	24400	
100-01-6	4-Nitroaniline	10200	U
534-52-1	4,6-Dinitro-2-methylphenol	10200	U
86-30-6	N-nitrosodiphenylamine (1)	4100	U
101-55-3	4-Bromophenyl-phenylether	4100	U
118-74-1	Hexachlorobenzene	4100	U
87-86-5	Pentachlorophenol	10200	U
85-01-8	Phenanthrene	120000	E
120-12-7	Anthracene	26400	
86-74-8	Carbazole	30800	
84-74-2	Di-n-butylphthalate	4100	U
206-44-0	Fluoranthene	79800	E
129-00-0	Pyrene	98400	E
85-68-7	Butylbenzylphthalate	4100	U
91-94-1	3,3'-Dichlorobenzidine	4100	U
56-55-3	Benzo(a)anthracene	61400	E
218-01-9	Chrysene	43000	E
117-81-7	bis(2-Ethylhexyl)phthalate	1730	J
117-84-0	Di-n-octylphthalate	4100	U
205-99-2	Benzo(b)fluoranthene	36500	E
207-08-9	Benzo(k)fluoranthene	39800	E
50-32-8	Benzo(a)pyrene	42500	E
193-39-5	Indeno(1,2,3-cd)pyrene	41800	E
53-70-3	Dibenzo(a,h)anthracene	20900	
191-24-2	Benzo(g,h,i)perylene	52300	E

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-10C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 19 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.677	90300	NJ
2.	7320-53-8	Dibenzofuran, 4-methyl-	14.166	7560	NJ
3.	1430-97-3	9H-Fluorene, 2-methyl-	14.898	6830	NJ
4.	132-65-0	Dibenzothiophene	15.536	13200	NJ
5.	779-02-2	Anthracene, 9-methyl-	16.848	10300	NJ
6.	832-64-4	Phenanthrene, 4-methyl-	16.909	10500	NJ
7.	883-20-5	Phenanthrene, 9-methyl-	16.981	6630	NJ
8.	203-64-5	4H-Cyclopenta[def]phenanthre	17.078	14600	NJ
9.		Unknown	17.416	7900	J
10.		Unknown	17.936	8030	J
11.	2381-21-7	Pyrene, 1-methyl-	19.086	12800	NJ
12.		Unknown	19.183	9210	J
13.	3442-78-2	Pyrene, 2-methyl-	19.244	8000	NJ
14.		Unknown	19.426	95600	JM
15.		Unknown	19.754	6930	J
16.	82-05-3	7H-Benz[de]anthracen-7-one	19.888	8340	NJ
17.	239-35-0	Benzo[b]naphtho[2,1-d]thioph	20.046	9260	NJ
18.		Unknown	20.107	11500	J
19.	198-55-0	Perylene	22.129	2290	NJ
20.	192-97-2	Benzo[e]pyrene	22.361	5150	NJ
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23.					
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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-4

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No.: Z_UNITED SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-10C

Sample wt/vol: 30 (g/mL) G Lab File ID: 3201032.D

% Moisture: not dec. 18.9 Date Received: 4/12/00

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 4/22/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 5/3/00

Injection Volume: 1 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
72-54-8	4,4'-DDD	4.1	U
72-55-9	4,4'-DDE	4.1	U
50-29-3	4,4'-DDT	4.1	U
309-00-2	Aldrin	2.1	U
319-84-6	alpha-BHC	2.1	U
5103-71-9	alpha-Chlordane	2.1	U
12674-11-2	Aroclor 1016	41	U
11104-28-2	Aroclor 1221	83	U
11141-16-5	Aroclor 1232	41	U
53469-21-9	Aroclor 1242	41	U
12672-29-6	Aroclor 1248	41	U
11097-69-1	Aroclor 1254	41	U
11096-82-5	Aroclor 1260	41	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
60-57-1	Dieldrin	4.1	U
959-98-8	Endosulfan I	2.1	U
33213-65-9	Endosulfan II	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
72-20-8	Endrin	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
53494-70-5	Endrin ketone	4.1	U
58-89-9	gamma-BHC	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
76-44-8	Heptachlor	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
72-43-5	Methoxychlor	21	U
8001-35-2	Toxaphene	210	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-4

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. E UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-10

Level (low/med): LOW Date Received: 4/12/00

% Solids: 81.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6470			P
7440-36-0	Antimony	111	U		P
7440-38-2	Arsenic	10.4			P
7440-39-3	Barium	136			P
7440-41-7	Beryllium	11.1	U		P
7440-43-9	Cadmium	2.7			P
7440-70-2	Calcium	55800			P
7440-47-3	Chromium	101			P
7440-48-4	Cobalt	27.1			P
7440-50-8	Copper	255			P
57-12-5	Cyanide	0.16	B		AS
7439-89-6	Iron	17700			P
7439-92-1	Lead	202			P
7439-95-4	Magnesium	3820			P
7439-96-5	Manganese	407			P
7439-97-6	Mercury	0.96		N	CV
7440-02-0	Nickel	70.4			P
7440-09-7	Potassium	521	B		P
7782-49-2	Selenium	44.3	U		P
7440-22-4	Silver	4.8		N	P
7440-23-5	Sodium	1480	U		F
7440-28-0	Thallium	66.5	U		P
7440-62-2	Vanadium	17.4			P
7440-66-6	Zinc	499		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-11B

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 4.2 Date Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-11B

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 4.2 Data Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-5

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-11C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0301003.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	349	U
111-44-4	bis(-2-Chloroethyl)Ether	349	U
95-57-8	2-Chlorophenol	349	U
541-73-1	1,3-Dichlorobenzene	349	U
106-46-7	1,4-Dichlorobenzene	349	U
95-50-1	1,2-Dichlorobenzene	349	U
95-48-7	2-Methylphenol	349	U
108-60-1	2,2'-oxybis(1-Chloropropane)	349	U
106-44-5	4-Methylphenol	349	U
621-64-7	N-Nitroso-di-n-propylamine	349	U
67-72-1	Hexachloroethane	349	U
98-95-3	Nitrobenzene	349	U
78-59-1	Isophorone	349	U
88-75-5	2-Nitrophenol	349	U
105-67-9	2,4-Dimethyphenol	349	U
120-83-2	2,4-Dichlorophenol	349	U
120-82-1	1,2,4-Trichlorobenzene	349	U
91-20-3	Naphthalene	349	U
106-47-8	4-Chloroaniline	349	U
87-68-3	Hexachlorobutadiene	349	U
111-91-1	bis(-2-Chloroethoxy)methane	349	U
59-50-7	4-Chloro-3-Methylphenol	349	U
91-57-6	2-Methylnaphthalene	349	U
77-47-4	Hexachlorocyclopentadiene	349	U
88-06-2	2,4,6-Trichlorophenol	349	U
95-95-4	2,4,5-Trichlorphenol	873	U
91-58-7	2-Chloronaphthalene	349	U
88-74-4	2-Nitroaniline	873	U
131-11-3	Dimethylphthalate	349	U
208-96-8	Acenaphthylene	349	U
606-20-2	2,6-Dinitrotoluene	349	U
99-09-2	3-Nitroaniline	873	U
83-32-9	Acenaphthene	349	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-5

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-11C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0301003.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 5 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	873	U
100-02-7	4-Nitrophenol	873	U
132-64-9	Dibenzofuran	349	U
121-14-2	2,4-Dinitrotoluene	349	U
84-66-2	Diethylphthalate	349	U
7005-72-3	4-Chlorophenyl-phenylether	349	U
86-73-7	Fluorene	349	U
100-01-6	4-Nitroaniline	873	U
534-52-1	4,6-Dinitro-2-methylphenol	873	U
86-30-6	N-nitrosodiphenylamine (1)	349	U
101-55-3	4-Bromophenyl-phenylether	349	U
118-74-1	Hexachlorobenzene	349	U
87-86-5	Pentachlorophenol	873	U
85-01-8	Phenanthrene	72	J
120-12-7	Anthracene	349	U
86-74-8	Carbazole	349	U
84-74-2	Di-n-butylphthalate	349	U
206-44-0	Fluoranthene	157	J
129-00-0	Pyrene	181	J
85-68-7	Butylbenzylphthalate	349	U
91-94-1	3,3'-Dichlorobenzidine	349	U
56-55-3	Benzo(a)anthracene	349	U
218-01-9	Chrysene	73	J
117-81-7	bis(2-Ethylhexyl)phthalate	228	J
117-84-0	Di-n-octylphthalate	349	U
205-99-2	Benzo(b)fluoranthene	349	U
207-08-9	Benzo(k)fluoranthene	349	U
50-32-8	Benzo(a)pyrene	349	U
193-39-5	Indeno(1,2,3-cd)pyrene	349	U
53-70-3	Dibenzo(a,h)anthracene	349	U
191-24-2	Benzo(g,h,i)perylene	349	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-5

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-11C

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0301003.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 5 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	141-79-7	3-Penten-2-one, 4-methyl-	3.155	236	NJB
2.		Unknown	3.630	5410	JB
3.		Unknown	3.713	3320	JB
4.		Unknown	4.117	171	J
5.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.567	2630	NJ
6.		Unknown	5.457	326	JB
7.		Unknown	21.861	632	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-5

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-11

Level (low/med): LOW Date Received: 4/12/00

% Solids: 95.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5880			P
7440-36-0	Antimony	96.3	U		P
7440-38-2	Arsenic	16.0			P
7440-39-3	Barium	69.5			P
7440-41-7	Beryllium	9.63	U		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	85700			P
7440-47-3	Chromium	11.8			P
7440-48-4	Cobalt	3.2	B		P
7440-50-8	Copper	36.3			P
57-12-5	Cyanide	0.0457	U		AS
7439-89-6	Iron	31100			P
7439-92-1	Lead	11.4			P
7439-95-4	Magnesium	7960			P
7439-96-5	Manganese	878			P
7439-97-6	Mercury	0.0461	U	N	CV
7440-02-0	Nickel	22.1			P
7440-09-7	Potassium	702			P
7782-49-2	Selenium	38.5	U		P
7440-22-4	Silver	0.028		N	F
7440-23-5	Sodium	327	B		P
7440-28-0	Thallium	7.6			P
7440-62-2	Vanadium	18.1			P
7440-66-6	Zinc	77.7		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-5

Lab Name: Buck Environmental Labs. Inc. Contract:

Lab Code: 10795 Case No.: Z_UNITED SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-11C

Sample wt/vol: 30 (g/mL) G Lab File ID: 3301033.D

% Moisture: not dec. 4.9 Date Received: 4/12/00

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 4/22/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 5/3/00

Injection Volume: 1 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
72-54-8	4,4'-DDD	3.5	U
72-55-9	4,4'-DDE	3.5	U
50-29-3	4,4'-DDT	3.5	U
309-00-2	Aldrin	1.8	U
319-84-6	alpha-BHC	1.8	U
5103-71-9	alpha-Chlordane	1.8	U
12674-11-2	Aroclor 1016	35	U
11104-28-2	Aroclor 1221	70	U
11141-16-5	Aroclor 1232	35	U
53469-21-9	Aroclor 1242	35	U
12672-29-6	Aroclor 1248	35	U
11097-69-1	Aroclor 1254	35	U
11096-82-5	Aroclor 1260	35	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
60-57-1	Dieldrin	3.5	U
959-98-8	Endosulfan I	1.8	U
33213-65-9	Endosulfan II	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
72-20-8	Endrin	3.5	U
7421-93-4	Endrin aldehyde	3.5	U
53494-70-5	Endrin ketone	3.5	U
58-89-9	gamma-BHC	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
76-44-8	Heptachlor	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
72-43-5	Methoxychlor	18	U
8001-35-2	Toxaphene	180	U

Objective 5: Petroleum AST's

Sample names:	TP-1 Petroleum AST's TP-2 Petroleum AST's (soil) TP-2 Petroleum AST's (water) MW-4: AST's 4'-6' MW-4: AST's 6'-8'
Analytical results:	VOA SVOA TAL Metals

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-04B

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 36.8 Date Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16	U
74-83-9	Bromomethane	16	U
75-01-4	Vinyl Chloride	16	U
75-00-3	Chloroethane	16	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	16	U
75-15-0	Carbon Disulfide	16	U
75-35-4	1,1-Dichloroethene	16	U
75-34-3	1,1-Dichloroethane	16	U
540-59-0	1,2-Dichloroethene (total)	16	U
67-66-3	Chloroform	16	U
107-06-2	1,2-Dichloroethane	16	U
78-93-3	2-Butanone	16	U
71-55-6	1,1,1-Trichloroethane	4	J
56-23-5	Carbon Tetrachloride	16	U
75-27-4	Bromodichloromethane	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
79-01-6	Trichloroethene	64	
124-48-1	Dibromochloromethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
71-43-2	Benzene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
75-25-2	Bromoform	16	U
108-10-1	4-Methyl-2-pentanone	16	U
591-78-6	2-Hexanone	16	U
127-18-4	Tetrachloroethene	56	
79-34-5	1,1,2,2-Tetrachloroethane	16	U
108-88-3	Toluene	5	J
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
100-42-5	Styrene	16	U
1330-20-7	Xylene (total)	16	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-04B

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 36.8 Data Analyzed: 04/21/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	109-99-9	Furan, tetrahydro-	2.053	44	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-1

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-04C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 34 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	5010	U
111-44-4	bis(-2-Chloroethyl)Ether	5010	U
95-57-8	2-Chlorophenol	5010	U
541-73-1	1,3-Dichlorobenzene	3110	J
106-46-7	1,4-Dichlorobenzene	1760	J
95-50-1	1,2-Dichlorobenzene	6550	
95-48-7	2-Methylphenol	5010	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5010	U
106-44-5	4-Methylphenol	5010	U
621-64-7	N-Nitroso-di-n-propylamine	5010	U
67-72-1	Hexachloroethane	5010	U
98-95-3	Nitrobenzene	5010	U
78-59-1	Isophorone	5010	U
88-75-5	2-Nitrophenol	5010	U
105-67-9	2,4-Dimethyphenol	5010	U
120-83-2	2,4-Dichlorophenol	5010	U
120-82-1	1,2,4-Trichlorobenzene	5010	U
91-20-3	Naphthalene	1090	J
106-47-8	4-Chloroaniline	5010	U
87-68-3	Hexachlorobutadiene	5010	U
111-91-1	bis(-2-Chloroethoxy)methane	5010	U
59-50-7	4-Chloro-3-Methylphenol	5010	U
91-57-6	2-Methylnaphthalene	4340	J
77-47-4	Hexachlorocyclopentadiene	5010	U
88-06-2	2,4,6-Trichlorophenol	5010	U
95-95-4	2,4,5-Trichlorphenol	12500	U
91-58-7	2-Chloronaphthalene	5010	U
88-74-4	2-Nitroaniline	12500	U
131-11-3	Dimethylphthalate	5010	U
208-96-8	Acenaphthylene	5010	U
606-20-2	2,6-Dinitrotoluene	5010	U
99-09-2	3-Nitroaniline	12500	U
83-32-9	Acenaphthene	5010	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-1

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-04C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 34 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 10000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	12500	U
100-02-7	4-Nitrophenol	12500	U
132-64-9	Dibenzofuran	5010	U
121-14-2	2,4-Dinitrotoluene	5010	U
84-66-2	Diethylphthalate	5010	U
7005-72-3	4-Chlorophenyl-phenylether	5010	U
86-73-7	Fluorene	5010	U
100-01-6	4-Nitroaniline	12500	U
534-52-1	4,6-Dinitro-2-methylphenol	12500	U
86-30-6	N-nitrosodiphenylamine (1)	5010	U
101-55-3	4-Bromophenyl-phenylether	5010	U
118-74-1	Hexachlorobenzene	5010	U
87-86-5	Pentachlorophenol	12500	U
85-01-8	Phenanthrene	5010	U
120-12-7	Anthracene	5010	U
86-74-8	Carbazole	5010	U
84-74-2	Di-n-butylphthalate	5010	U
206-44-0	Fluoranthene	5010	U
129-00-0	Pyrene	1900	J
85-68-7	Butylbenzylphthalate	5010	U
91-94-1	3,3'-Dichlorobenzidine	5010	U
56-55-3	Benzo(a)anthracene	5010	U
218-01-9	Chrysene	5010	U
117-81-7	bis(2-Ethylhexyl)phthalate	10200	
117-84-0	Di-n-octylphthalate	5010	U
205-99-2	Benzo(b)fluoranthene	5010	U
207-08-9	Benzo(k)fluoranthene	5010	U
50-32-8	Benzo(a)pyrene	5010	U
193-39-5	Indeno(1,2,3-cd)pyrene	5010	U
53-70-3	Dibenzo(a,h)anthracene	5010	U
191-24-2	Benzo(g,h,i)perylene	1560	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-1

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-04C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 34 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.393	2820	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.677	78700	NJ
3.		Unknown	4.472	5200	JB
4.		Methylnaphthalene Isomer	10.124	3090	J
5.		Dimethylnaphthalene Isomer	11.343	5680	J
6.		Dimethylnaphthalene Isomer	11.535	6530	J
7.		Dimethylnaphthalene Isomer	11.583	5500	J
8.		Dimethylnaphthalene Isomer	11.786	2230	J
9.		Trimethylnaphthalene Isomer	12.840	3210	J
10.		Trimethylnaphthalene Isomer	12.912	3080	J
11.		Trimethylnaphthalene Isomer	13.104	4800	J
12.		Trimethylnaphthalene Isomer	13.308	3780	J
13.		Unknown Aliphatic	13.524	2290	J
14.	612-75-9	1,1'-Biphenyl, 3,3'-dimethyl	13.704	1620	NJ
15.	88-19-7	Benzenesulfonamide, 2-methyl	13.992	1960	NJ
16.	70-55-3	Benzenesulfonamide, 4-methyl	14.449	1670	NJ
17.		Unknown Hydrocarbon	14.713	1650	J
18.	117-81-7	1,2-Benzenedicarboxylic acid	17.994	1940	NJ
19.		Unknown	23.047	12900	J
20.		Unknown	23.573	13100	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-1

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. E UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004131-04

Level (low/med): LOW Date Received: 4/12/00

% Solids: 66.5

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4020			P
7440-36-0	Antimony	148	U		P
7440-38-2	Arsenic	25.1			P
7440-39-3	Barium	122			P
7440-41-7	Beryllium	14.8	U		P
7440-43-9	Cadmium	3.0			P
7440-70-2	Calcium	5550			P
7440-47-3	Chromium	140			P
7440-48-4	Cobalt	6.7	B		P
7440-50-8	Copper	436			P
57-12-5	Cyanide	5.2			AS
7439-89-6	Iron	29200			P
7439-92-1	Lead	723			P
7439-95-4	Magnesium	1870			P
7439-96-5	Manganese	141			P
7439-97-6	Mercury	0.30		N	CV
7440-02-0	Nickel	335			P
7440-09-7	Potassium	580	B		P
7782-49-2	Selenium	59.2	U		P
7440-22-4	Silver	0.11		N	F
7440-23-5	Sodium	1980	U		P
7440-28-0	Thallium	10.9			P
7440-62-2	Vanadium	2700			P
7440-66-6	Zinc	1110		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-2

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-05B

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 29.3 Date Analyzed: 04/20/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	U
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-2

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-05B

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. 29.3 Data Analyzed: 04/20/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-2

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-05C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 30 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	476	U
111-44-4	bis(-2-Chloroethyl)Ether	476	U
95-57-8	2-Chlorophenol	476	U
541-73-1	1,3-Dichlorobenzene	476	U
106-46-7	1,4-Dichlorobenzene	476	U
95-50-1	1,2-Dichlorobenzene	476	U
95-48-7	2-Methylphenol	476	U
108-60-1	2,2'-oxybis(1-Chloropropane)	476	U
106-44-5	4-Methylphenol	476	U
621-64-7	N-Nitroso-di-n-propylamine	476	U
67-72-1	Hexachloroethane	476	U
98-95-3	Nitrobenzene	476	U
78-59-1	Isophorone	476	U
88-75-5	2-Nitrophenol	476	U
105-67-9	2,4-Dimethyphenol	476	U
120-83-2	2,4-Dichlorophenol	476	U
120-82-1	1,2,4-Trichlorobenzene	476	U
91-20-3	Naphthalene	476	U
106-47-8	4-Chloroaniline	476	U
87-68-3	Hexachlorobutadiene	476	U
111-91-1	bis(-2-Chloroethoxy)methane	476	U
59-50-7	4-Chloro-3-Methylphenol	476	U
91-57-6	2-Methylnaphthalene	476	U
77-47-4	Hexachlorocyclopentadiene	476	U
88-06-2	2,4,6-Trichlorophenol	476	U
95-95-4	2,4,5-Trichlorphenol	1190	U
91-58-7	2-Chloronaphthalene	476	U
88-74-4	2-Nitroaniline	1190	U
131-11-3	Dimethylphthalate	476	U
208-96-8	Acenaphthylene	476	U
606-20-2	2,6-Dinitrotoluene	476	U
99-09-2	3-Nitroaniline	1190	U
83-32-9	Acenaphthene	476	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-2

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-05C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 30 decanted: (Y/N) N Date Extracted: 04/18/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1190	U
100-02-7	4-Nitrophenol	1190	U
132-64-9	Dibenzofuran	476	U
121-14-2	2,4-Dinitrotoluene	476	U
84-66-2	Diethylphthalate	476	U
7005-72-3	4-Chlorophenyl-phenylether	476	U
86-73-7	Fluorene	476	U
100-01-6	4-Nitroaniline	1190	U
534-52-1	4,6-Dinitro-2-methylphenol	1190	U
86-30-6	N-nitrosodiphenylamine (1)	476	U
101-55-3	4-Bromophenyl-phenylether	476	U
118-74-1	Hexachlorobenzene	476	U
87-86-5	Pentachlorophenol	1190	U
85-01-8	Phenanthrene	283	J
120-12-7	Anthracene	283	J
86-74-8	Carbazole	476	U
84-74-2	Di-n-butylphthalate	476	U
206-44-0	Fluoranthene	482	
129-00-0	Pyrene	370	J
85-68-7	Butylbenzylphthalate	476	U
91-94-1	3,3'-Dichlorobenzidine	476	U
56-55-3	Benzo(a)anthracene	200	J
218-01-9	Chrysene	297	J
117-81-7	bis(2-Ethylhexyl)phthalate	476	U
117-84-0	Di-n-octylphthalate	476	U
205-99-2	Benzo(b)fluoranthene	283	J
207-08-9	Benzo(k)fluoranthene	262	J
50-32-8	Benzo(a)pyrene	201	J
193-39-5	Indeno(1,2,3-cd)pyrene	476	U
53-70-3	Dibenzo(a,h)anthracene	476	U
191-24-2	Benzo(g,h,i)perylene	476	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-2

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004131-05C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: 30 decanted: (Y/N) N Date Extracted:04/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/12/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.618	13300	JB
2.		Unknown	3.820	15600	JB
3.		Unknown	3.974	2760	J
4.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.177	5170	NJ
5.		Unknown	8.365	204	J
6.	486-25-9	9H-Fluoren-9-one	15.325	175	NJ
7.		Unknown Aliphatic	16.594	147	J
8.	610-48-0	Anthracene, 1-methyl-	16.846	148	NJ
9.	57-10-3	Hexadecanoic acid	17.074	202	NJ
10.		Unknown Aliphatic	17.363	176	J
11.	2381-21-7	Pyrene, 1-methyl-	19.012	192	NJ
12.		Unknown	19.701	165	J
13.	82-05-3	7H-Benz[de]anthracen-7-one	19.822	153	NJ
14.	112-92-5	1-Octadecanol	20.294	244	NJ
15.		Unknown	21.300	175	J
16.		Unknown	21.859	583	J
17.	13475-75-7	Pentadecane, 8-hexyl-	22.102	442	NJ
18.	198-55-0	Perylene	22.308	1140	NJ
19.		Unknown Aliphatic	22.953	285	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-2

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL

Lab Sample ID: 0004131-05

Level (low/med): LOW

Date Received: 4/12/00

% Solids: 70.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4690			P
7440-36-0	Antimony	113	U		P
7440-38-2	Arsenic	56.4	U		P
7440-39-3	Barium	96.9			P
7440-41-7	Beryllium	11.3	U		P
7440-43-9	Cadmium	11.3	U		P
7440-70-2	Calcium	109000			P
7440-47-3	Chromium	10.4			P
7440-48-4	Cobalt	5.5	B		P
7440-50-8	Copper	42.9			P
57-12-5	Cyanide	0.0708	U		AS
7439-89-6	Iron	13400			P
7439-92-1	Lead	68.1			P
7439-95-4	Magnesium	3500			P
7439-96-5	Manganese	267			P
7439-97-6	Mercury	0.26		N	CV
7440-02-0	Nickel	17.2			P
7440-09-7	Potassium	464	B		P
7782-49-2	Selenium	45.1	U		P
7440-22-4	Silver	0.055		N	F
7440-23-5	Sodium	1510	U		P
7440-28-0	Thallium	13.5			P
7440-62-2	Vanadium	14.6			P
7440-66-6	Zinc	275		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-2AQ

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-01B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. _____ Date Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-2AQ

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-01B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. _____ Data Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-2_AQ

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-01C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethyphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorphenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

TP-2_AQ

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-01C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

TP-2_AQ

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-01C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	17851-53-5	1,2-Benzenedicarboxylic acid	17.156	2	NJ
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-2

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER

Lab Sample ID: 0004132-01

Level (low/med): LOW

Date Received: 4/12/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33800			P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	103			P
7440-39-3	Barium	529			P
7440-41-7	Beryllium	3.4	B		P
7440-43-9	Cadmium	4.0	B		P
7440-70-2	Calcium	233000			P
7440-47-3	Chromium	42.8			P
7440-48-4	Cobalt	48.4	B	E	P
7440-50-8	Copper	203			P
7439-89-6	Iron	65200		E	P
7439-92-1	Lead	5.1		N	F
7439-95-4	Magnesium	33000			P
7439-96-5	Manganese	1850			P
7439-97-6	Mercury	2.1		*N	CV
7440-02-0	Nickel	69.4			P
7440-09-7	Potassium	9800			P
7782-49-2	Selenium	12.1		N	P
7440-22-4	Silver	85.8		E	P
7440-23-5	Sodium	216000		E	P
7440-28-0	Thallium	2.3		*N	F
7440-62-2	Vanadium	111			P
7440-66-6	Zinc	947		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-4 [6-8]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-12A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 24.4 Date Analyzed: 04/24/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	13	J
67-64-1	Acetone	8	J
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-4 [6-8]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-12A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: not dec. 24.4 Data Analyzed: 04/24/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-4 [4-6]

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-11A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 29 decanted: (Y/N) N Date Extracted: 04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	467	U
111-44-4	bis(-2-Chloroethyl)Ether	467	U
95-57-8	2-Chlorophenol	467	U
541-73-1	1,3-Dichlorobenzene	467	U
106-46-7	1,4-Dichlorobenzene	467	U
95-50-1	1,2-Dichlorobenzene	467	U
95-48-7	2-Methylphenol	467	U
108-60-1	2,2'-oxybis(1-Chloropropane)	467	U
106-44-5	4-Methylphenol	105	J
621-64-7	N-Nitroso-di-n-propylamine	467	U
67-72-1	Hexachloroethane	467	U
98-95-3	Nitrobenzene	467	U
78-59-1	Isophorone	467	U
88-75-5	2-Nitrophenol	467	U
105-67-9	2,4-Dimethyphenol	467	U
120-83-2	2,4-Dichlorophenol	467	U
120-82-1	1,2,4-Trichlorobenzene	467	U
91-20-3	Naphthalene	174	J
106-47-8	4-Chloroaniline	467	U
87-68-3	Hexachlorobutadiene	467	U
111-91-1	bis(-2-Chloroethoxy)methane	467	U
59-50-7	4-Chloro-3-Methylphenol	467	U
91-57-6	2-Methylnaphthalene	467	U
77-47-4	Hexachlorocyclopentadiene	467	U
88-06-2	2,4,6-Trichlorophenol	467	U
95-95-4	2,4,5-Trichlorphenol	1170	U
91-58-7	2-Chloronaphthalene	467	U
88-74-4	2-Nitroaniline	1170	U
131-11-3	Dimethylphthalate	467	U
208-96-8	Acenaphthylene	467	U
606-20-2	2,6-Dinitrotoluene	467	U
99-09-2	3-Nitroaniline	1170	U
83-32-9	Acenaphthene	101	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

MW-4[4-6]

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-11A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 29 decanted: (Y/N) N Date Extracted: 04/21/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1170	U
100-02-7	4-Nitrophenol	1170	U
132-64-9	Dibenzofuran	137	J
121-14-2	2,4-Dinitrotoluene	467	U
84-66-2	Diethylphthalate	467	U
7005-72-3	4-Chlorophenyl-phenylether	467	U
86-73-7	Fluorene	174	J
100-01-6	4-Nitroaniline	1170	U
534-52-1	4,6-Dinitro-2-methylphenol	1170	U
86-30-6	N-nitrosodiphenylamine (1)	467	U
101-55-3	4-Bromophenyl-phenylether	467	U
118-74-1	Hexachlorobenzene	467	U
87-86-5	Pentachlorophenol	1170	U
85-01-8	Phenanthrene	580	
120-12-7	Anthracene	166	J
86-74-8	Carbazole	125	J
84-74-2	Di-n-butylphthalate	467	U
206-44-0	Fluoranthene	315	J
129-00-0	Pyrene	712	
85-68-7	Butylbenzylphthalate	467	U
91-94-1	3,3'-Dichlorobenzidine	467	U
56-55-3	Benzo(a)anthracene	232	J
218-01-9	Chrysene	275	J
117-81-7	bis(2-Ethylhexyl)phthalate	106	JB
117-84-0	Di-n-octylphthalate	467	U
205-99-2	Benzo(b)fluoranthene	252	J
207-08-9	Benzo(k)fluoranthene	260	J
50-32-8	Benzo(a)pyrene	218	J
193-39-5	Indeno(1,2,3-cd)pyrene	253	J
53-70-3	Dibenzo(a,h)anthracene	467	U
191-24-2	Benzo(g,h,i)perylene	284	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

MW-4[4-6]

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) SOIL Lab Sample ID: 0004180-11A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 04/15/00

% Moisture: 29 decanted: (Y/N) N Date Extracted:04/21/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.702	29400	JB
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	3.892	3330	NJ
3.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.581	3150	NJ
4.	544-76-3	Hexadecane	13.538	338	NJ
5.	629-78-7	Heptadecane	14.668	717	NJ
6.	593-45-3	Octadecane	15.715	997	NJ
7.	629-92-5	Nonadecane	16.619	1410	NJ
8.	84-74-2	1,2-Benzenedicarboxylic acid	17.187	546	NJ
9.	112-95-8	Eicosane	17.392	1330	NJ
10.	3674-69-9	Phenanthrene, 4,5-dimethyl-	17.670	691	NJ
11.		Unknown Aliphatic	17.912	1110	J
12.	1576-67-6	Phenanthrene, 3,6-dimethyl-	17.984	806	NJ
13.		Unknown Aliphatic	18.069	1290	J
14.		Unknown Aliphatic	18.674	2050	J
15.	7396-38-5	Phenanthrene, 2,4,5,7-tetram	19.025	1060	NJ
16.		Unknown Aliphatic	19.231	1750	J
17.		Unknown Aliphatic	19.765	1480	J
18.		Unknown Aliphatic	20.262	1290	J
19.		Unknown Aliphatic	20.760	1130	J
20.		Unknown Aliphatic	21.222	1140	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4 (4-6')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-11

Level (low/med): LOW Date Received: 4/15/00

% Solids: 71.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3590			P
7440-36-0	Antimony	119	U		P
7440-38-2	Arsenic	28.5			P
7440-39-3	Barium	101			P
7440-41-7	Beryllium	11.9	U		P
7440-43-9	Cadmium	1.3			P
7440-70-2	Calcium	26700			P
7440-47-3	Chromium	12.8			P
7440-48-4	Cobalt	35.6	U		P
7440-50-8	Copper	47.9			P
57-12-5	Cyanide	0.081	B		AS
7439-89-6	Iron	29800			P
7439-92-1	Lead	86.4			P
7439-95-4	Magnesium	14200			P
7439-96-5	Manganese	315			P
7439-97-6	Mercury	0.29		N	CV
7440-02-0	Nickel	14.7			P
7440-09-7	Potassium	671			P
7782-49-2	Selenium	47.5	U		P
7440-22-4	Silver	0.035		N	F
7440-23-5	Sodium	1590	U		P
7440-28-0	Thallium	71.2	U		P
7440-62-2	Vanadium	17.4			P
7440-66-6	Zinc	75.5		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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Objective 6: Electropolishing Wastes

Sample names: SB-1: 6"-1' Electropolishing Wastes
SB-1: 4'-5.3" Electropolishing Wastes
SB-2: 6"-1' Electropolishing Wastes
SB-2: 2'-3.2' Electropolishing Wastes

Analytical results: TAL Metals

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-1 (.5-1')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-01

Level (low/med): LOW Date Received: 4/15/00

% Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5810			P
7440-36-0	Antimony	101	U		P
7440-38-2	Arsenic	15.1			P
7440-39-3	Barium	35.6			P
7440-41-7	Beryllium	10.1	U		P
7440-43-9	Cadmium	10.1	U		P
7440-70-2	Calcium	43100			P
7440-47-3	Chromium	8.8			P
7440-48-4	Cobalt	3.9	B		P
7440-50-8	Copper	20.9			P
57-12-5	Cyanide	0.0551	U		AS
7439-89-6	Iron	15800			P
7439-92-1	Lead	6.9			P
7439-95-4	Magnesium	4610			P
7439-96-5	Manganese	509			P
7439-97-6	Mercury	0.0492	U	N	CV
7440-02-0	Nickel	17.0			P
7440-09-7	Potassium	745			P
7782-49-2	Selenium	40.5	U		P
7440-22-4	Silver	0.013		N	F
7440-23-5	Sodium	1360	U		P
7440-28-0	Thallium	60.7	U		P
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	88.0		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-2 (.5-1')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-03

Level (low/med): LOW Date Received: 4/15/00

% Solids: 86.8

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6010			P
7440-36-0	Antimony	107	U		P
7440-38-2	Arsenic	21.6			P
7440-39-3	Barium	79.7			P
7440-41-7	Beryllium	10.7	U		P
7440-43-9	Cadmium	10.7	U		P
7440-70-2	Calcium	35400			P
7440-47-3	Chromium	12.3			P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	56.1			P
57-12-5	Cyanide	0.0586	U		AS
7439-89-6	Iron	16800			P
7439-92-1	Lead	90.6			P
7439-95-4	Magnesium	3690			P
7439-96-5	Manganese	424			P
7439-97-6	Mercury	0.21		N	CV
7440-02-0	Nickel	16.3			P
7440-09-7	Potassium	973			P
7782-49-2	Selenium	42.7	U		P
7440-22-4	Silver	0.043		N	F
7440-23-5	Sodium	1430	U		P
7440-28-0	Thallium	64.1	U		P
7440-62-2	Vanadium	16.7			P
7440-66-6	Zinc	174		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-1 (4-5.3')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-02

Level (low/med): LOW Date Received: 4/15/00

% Solids: 82.3

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3010			P
7440-36-0	Antimony	112	U		P
7440-38-2	Arsenic	16.3			P
7440-39-3	Barium	3180			P
7440-41-7	Beryllium	11.2	U		P
7440-43-9	Cadmium	3.6			P
7440-70-2	Calcium	44200			P
7440-47-3	Chromium	12.9			P
7440-48-4	Cobalt	33.6	U		P
7440-50-8	Copper	679			P
57-12-5	Cyanide	0.71			AS
7439-89-6	Iron	13300			P
7439-92-1	Lead	419			P
7439-95-4	Magnesium	4150			P
7439-96-5	Manganese	367			P
7439-97-6	Mercury	0.15		N	CV
7440-02-0	Nickel	11.4			P
7440-09-7	Potassium	559	B		P
7782-49-2	Selenium	44.8	U		P
7440-22-4	Silver	0.13		N	P
7440-23-5	Sodium	1500	U		P
7440-28-0	Thallium	14.9			P
7440-62-2	Vanadium	10.1			P
7440-66-6	Zinc	723		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-2 (2-3.2')

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): SOIL Lab Sample ID: 0004180-04

Level (low/med): LOW Date Received: 4/15/00

% Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2650			P
7440-36-0	Antimony	97.9	U		P
7440-38-2	Arsenic	7.6			P
7440-39-3	Barium	30.3			P
7440-41-7	Beryllium	9.79	U		P
7440-43-9	Cadmium	9.79	U		P
7440-70-2	Calcium	87400			P
7440-47-3	Chromium	5.8			P
7440-48-4	Cobalt	29.4	U		P
7440-50-8	Copper	10.5			P
57-12-5	Cyanide	0.0574	U		AS
7439-89-6	Iron	9710			P
7439-92-1	Lead	12.9			P
7439-95-4	Magnesium	10800			P
7439-96-5	Manganese	262			P
7439-97-6	Mercury	0.0507	U	N	CV
7440-02-0	Nickel	8.3			P
7440-09-7	Potassium	534			P
7782-49-2	Selenium	39.1	U		P
7440-22-4	Silver	0.046		N	F
7440-23-5	Sodium	194	B		P
7440-28-0	Thallium	10.3			P
7440-62-2	Vanadium	11.2			P
7440-66-6	Zinc	43.4		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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Objective 7: Exposure Pathways

Sample names:	Exposure Path – Creek-Downstream Exposure Path – Creek-Upstream
Analytical results:	VOA SVOA TAL Metals

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

EXPPATHWAYDO

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-02B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. _____ Date Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

EXPPATHWAYDO

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-02B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. _____ Data Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

EXP_PATH Down B411

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-02C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethyphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorphenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

EXP_PATH DOWN BLH

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-02C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

EXP_PATH DOWN 2214

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-02C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	58-08-2	Caffeine	16.285	9	NJ
2.					
3.					
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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXP. PATHWAY-DOWN

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004132-02

Level (low/med): LOW Date Received: 4/12/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	73.3	B		P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	5	U		P
7440-39-3	Barium	54.9	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	84200			P
7440-47-3	Chromium	2.6	B		P
7440-48-4	Cobalt	3	U	E	P
7440-50-8	Copper	8.5	B		P
7439-89-6	Iron	278		E	P
7439-92-1	Lead	0.73	B	N	F
7439-95-4	Magnesium	12700			P
7439-96-5	Manganese	29.0			P
7439-97-6	Mercury	0.43		*N	CV
7440-02-0	Nickel	2	U		P
7440-09-7	Potassium	6070			P
7782-49-2	Selenium	4.1	B	N	P
7440-22-4	Silver	31.8		E	P
7440-23-5	Sodium	183000		E	P
7440-28-0	Thallium	0	U	*N	F
7440-62-2	Vanadium	3	U		P
7440-66-6	Zinc	87.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXP. PATHWAY-DOWN

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004206-10

Level (low/med): LOW Date Received: 4/18/00

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
57-12-5	Cyanide	1.0	B		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

EXPPATHWAYUP

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-03B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. _____ Date Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	4	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

EXPPATHWAYUP

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-03B

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: not dec. _____ Data Analyzed: 04/19/00

GC Column:J&W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

EXP_PATHWAY VP BLH

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-03C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 04/12/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethyphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorphenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NYSDEC SAMPLE NO.

EXP_PATHWAY UP BLK

Lab Name: BUCK ENVIRONMENTAL LABS Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-03C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(UL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	3	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NYSDEC SAMPLE NO.

EXP_PATHWAY UP 3A 4

Lab Name: Buck Environmental Labs Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0006

Matrix: (soil/water) WATER Lab Sample ID: 0004132-03C

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 04/12/00

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/11/00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	18.567	3	J
2.	123-95-5	Octadecanoic acid, butyl est	19.671	3	NJ
3.					
4.					
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXP. PATHWAY-UP

Lab Name: Buck Environmental Labs, Inc. Contract:

Lab Code: 10795 Case No. Z UNITE SAS No.: SDG No.: BEL0006

Matrix (soil/water): WATER Lab Sample ID: 0004132-03

Level (low/med): LOW Date Received: 4/12/00

% Solids: 0.0

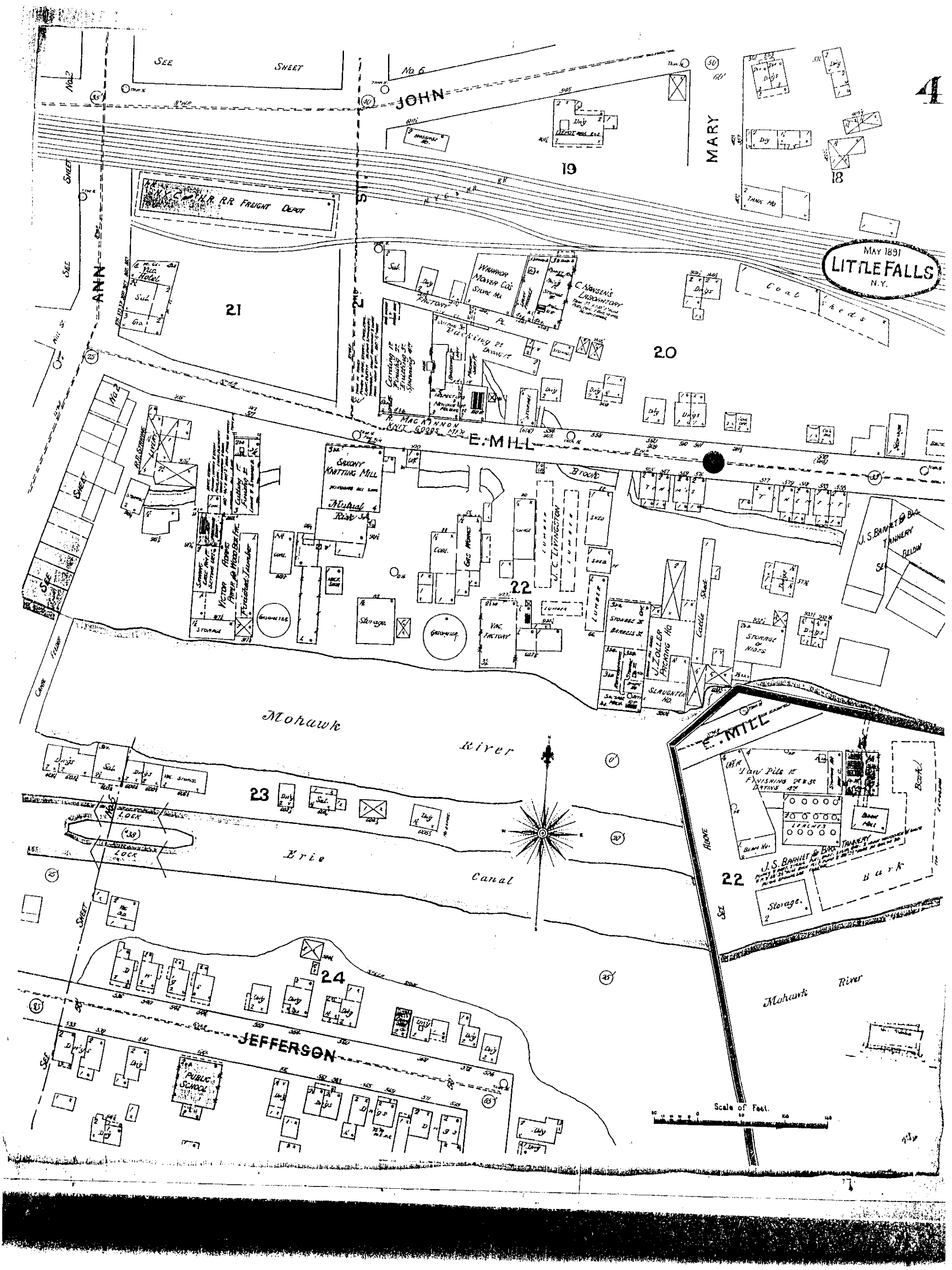
Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	280			P
7440-36-0	Antimony	10	U	N	P
7440-38-2	Arsenic	5	U		P
7440-39-3	Barium	68.2	B		P
7440-41-7	Beryllium	1	U		P
7440-43-9	Cadmium	1	U		P
7440-70-2	Calcium	100000			P
7440-47-3	Chromium	8.2	B		P
7440-48-4	Cobalt	5.3	B	E	P
7440-50-8	Copper	19.8	B		P
7439-89-6	Iron	499		E	P
7439-92-1	Lead	3.8		N	F
7439-95-4	Magnesium	16900			P
7439-96-5	Manganese	23.3			P
7439-97-6	Mercury	0.26		*N	CV
7440-02-0	Nickel	16.5	B		P
7440-09-7	Potassium	6610			P
7782-49-2	Selenium	4	U	N	P
7440-22-4	Silver	31.1		E	P
7440-23-5	Sodium	209000		E	P
7440-28-0	Thallium	0	U	*N	F
7440-62-2	Vanadium	3.9	B		P
7440-66-6	Zinc	62.8		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:



North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: MW-1

Project No.: 20003B

Date Started: 4/13/00

Date Completed: 4/13/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample: Number	Sample: SPT Blows (6")	Sample: N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Well Installation	Remarks
0					Ground Surface		
1					No Sampling		Curb Box with locking cap Bentonite Seal, 1'-1.5'
2							
3							2" dia. PVC Well Screen
4							0.020" Slots, 2.3'-12.3'
5							
6							
7							Sandpack, 1.5'-12.3'
8							
9							
10							
11							
12							
13					End of Borehole		At completion, water at 11.5'
14							augers at 12.3'
15							
16							
17							
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19							
20							
21							
22							
23							
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25							

Sampling Method: ASTM D-1586

Notes: 4 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW1

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

Project: Feldmeier VCP
Location: Little Falls, NY

SUBSURFACE LOG

Boring No.: MW-2
Project No.: 20003B
Date Started: 4/14/00
Date Completed: 4/14/00
Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1					No Sampling	
2						
3					Refusal End of Borehole	Auger refusal at 2.0'.
4						Backfilled boring and topped
5						with asphalt patch.
6						No free water encountered.
7						
8						
9						
10						
11						
12						
13						
14						
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21						
22						
23						
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW2

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: MW-2A

Project No.: 20003B

Date Started: 4/14/00

Date Completed: 4/14/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1					No Sampling	
2						
3					Refusal End of Borehole	Auger refusal at 2.5'.
4						Backfilled boring and topped
5						with an asphalt patch.
6						No free water encountered.
7						
8						
9						
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21						
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23						
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW2A

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: MW-2B

Project No.: 20003B

Date Started: 4/14/00

Date Completed: 4/14/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1					No Sampling	
2					Refusal End of Borehole	Auger refusal at 2.0'.
3						Backfilled boring and topped
4						with concrete patch.
5						No free water encountered.
6						
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25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW2B

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: MW-3
Project No.: 20003B
Date Started: 4/14/00
Date Completed: 4/14/00

Project: Feldmeier VCP
Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Well Installation	Remarks
0					Ground Surface		
1	1	3 2 6 5	8	1.2	FILL:Brown coarse-fine SAND, Some Silt, moist		Curb box with locking cap
2							
3							Bentonite Seal, 2'-4'
4					FILL:Brown GRAVEL, Some coarse-fine Sand,		
5	2	11 12 17 24	29	1.8	trace silt, moist		Sandpack, 4'-16.5'
6							
7							2" dia. PVC Well Screen
8							0.020" Slots, 6.5'-16.5'
9							
10					Brown coarse-fine SAND, Some Gravel		
11	3	5 3 3 4	6		little silt, moist		
12							
13							
14							
15					similar, wet		
16	4	3 6 4 12	10				
17					Refusal End of Borehole		Auger refusal at 16.5'
18							At completion, water at 15.1',
19							augers at 16.5'.
20							
21							
22							
23							
24							
25							

Sampling Method: ASTM D-1586

Notes: 4 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW3

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: MW-4

Project No.: 20003B

Date Started: 4/14/00

Date Completed: 4/14/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample: Number	Sample: SPT Blows (6")	Sample: N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Well Installation	Remarks
0					Ground Surface		
1					No Sampling		Curb box with locking cap
2							Bentonite Seal, 1'-2'
3							
4							Sandpack 2'-7.6'
5							
6							2" dia. PVC Well Screen
7							0.020" slots, 2.6'-7.6'
8					End of Borehole		
9							No free water encountered.
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

Sampling Method: ASTM D-1586

Notes: 4 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW4

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: MW-5

Project No.: 20003B

Date Started: 4/14/00

Date Completed: 4/14/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Well Installation	Remarks
0					Ground Surface		
1	1	2 2 5 5	7	1.8	FILL:Brown coarse-fine SAND and GRAVEL, moist		Curb box with locking cap
2							Bentonite Seal, 1.5'-3.5'
3							
4							Sandpack, 3.5'-10.5'
5	2	3 1 29 4	30	1.6	similar with cinders, moist		
6							2" dia. PVC Well Screen, 0.020" slots, 5.5'-10.5'
7							
8	3		-	0.4			
9					similar with little gravel, cinders, moist		
10	4	1 3 25-0	-	0.4			
11					End of Borehole		Sample 3 collected with a 3" dia. sampler; sampler refusal at 10.5'
12							
13							No free water encountered.
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

Sampling Method: ASTM D-1586

Notes: 4 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/MW5

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: SB-1

Project No.: 20003B

Date Started: 4/13/00

Date Completed: 4/13/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1	1	5 11 14	15	1.2	Concrete at surface - 0.5' FILL:Black Brown ASH and SLAG	
2						
3	2	8 6 4 4	10	1.1		
4						
5	3	25 4 50-.3'	-	0.5	Brown SAND and GRAVEL, moist	
6					Refusal End of Borehole	Auger refusal at 5.3' Backfilled boring and topped with concrete patch. No free water encountered.
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/SB1

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: SB-2

Project No.: 20003B

Date Started: 4/13/00

Date Completed: 4/13/00

Project: Feldmeier VCP

Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1	1	5 11 8	19	1.1	Concrete at surface - 0.5' FILL:Brown coarse-fine SAND, little to Some Silt, moist	
2		8				
3	2	12 50-.2'	-		Refusal End of Borehole	Auger refusal at 3.2' Backfilled boring and topped with concrete patch. No free water encountered.
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/SB2

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

Project: Feldmeier VCP
Location: Little Falls, NY

SUBSURFACE LOG

Boring No.: SB-3
Project No.: 20003B
Date Started: 4/13/00
Date Completed: 4/13/00
Reference Elevation:

Depth (ft)	Sample Number	Sample SPT Blows (6")	Sample N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1	1	49 29 6 9	35		Asphalt at surface - 0.3' FILL:Brown coarse-fine SAND	
2						
3	2	4 2 1 2	3		FILL:Brown BRICK, Some Sand and Gravel, moist	
4					FILL:Brown SAND	WH - Weight of Hammer
5	3	WH 4 10 16	14			
6					FILL:Brown BRICK, Some Sand	
7	4	34 50-3'	-		Refusal End of Borehole	Auger refusal at 6.8' Backfilled boring and topped with concrete patch. No free water encountered.
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/SB3

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: SB-4
Project No.: 20003B
Date Started: 4/13/00
Date Completed: 4/13/00

Project: Feldmeier VCP
Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	SPT Blows (6")	N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1	1	3 12 15 8	27	1.8	FILL: Organic SILT, Some Gravel	
3	2	3 6 6 3	12	1.6	similar	
5	3	2 3 2 2	5	0.3	similar	
7	4	1 2 1 2	3	0.3		
9	5	1 4 3 3	7	0.3	FILL:Brown Black ASH, CINDERS and WOOD	
11	6	5 7 4 5	11	0.3		
12					Brown SILT	
13	7	2 3 4 3	7	1.4	dark Grey coarse SAND	
14					dark Grey ASH, CINDERS and SAND, moist	
15	8	1 2 1 2	3	1.8		
17	9	1 1 1 1	2	0.3	similar with Brick, wet	
19	10	1 1 1 2	2	0.4	similar with Brick and Slag, wet	
21	11	2 36 29 45	65	0.4	Brown GRAVEL and SAND, wet	Backfilled boring and topped with topsoil patch.
22	12	1 50-0	-			At completion, augers at 20', water at 17.5'.
23					End of Borehole	
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/SB4

North Star Drilling

P.O. Box 67
Cortland, NY 13045
607-756-8820
607-753-9911 (fax)

SUBSURFACE LOG

Boring No.: SB-5
Project No.: 20003B
Date Started: 4/13/00
Date Completed: 4/13/00

Project: Feldmeier VCP
Location: Little Falls, NY

Reference Elevation:

Depth (ft)	Sample Number	SPT Blows (6")	N-Value	Recovery (ft.)	MATERIAL DESCRIPTION	Remarks
0					Ground Surface	
1	1	24 14 11 12	25	1.4	Asphalt at surface - 0.3' FILL:Brown GRAVEL and SAND	
2						
3	2	7 4 3 2	7	1.5	similar with brick	
4						
5	3	2 1 WH WH	1	1.3		WH - Weight of Hammer
6					FILL:Brown SILT, SAND and BRICK	
7	4	6 46 50-.1	-	0.9	End of Borehole	Backfilled boring and topped with concrete patch. No free water encountered.
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Sampling Method: ASTM D-1586

Notes: 3 1/4" I.D. Hollow Stem Augers

Visually Classified by: Buck/E. Monsen

File: F:/20003B/Tech/SB5

North Star Drilling
P O. Box 67
(rtland, New York 13045
(7) 753-8820

Project:
L ation:

KEY TO SUBSURFACE LOG

Boring No.: B-1
Project No.: 200001
Date Started: 1/31/00
Date Completed: 1/31/00
Sheet 1 of 1
Reference Elevation: 100.0

Depth (ft.)	Sample No.	Type	SPT Blows	N-Value	Recovery (ft.)	PID Reading (ppm)	MATERIAL DESCRIPTION	REMARKS
							Ground Surface	Water level at 2.0'
1	1	ss	1 2 2 1	4	2.0	32	Brown SILT, Some fine-coarse Sand, trace clay, moist-loose	with augers at 7.5'. At completion water level at 2.2'
2	2						Gray SHALE, medium hard weathered, thin bedded, some fractures	with augers at 10.0'. Run #1: 3.0'-5.0' 95% Recovery, 50% RQD

1 2 3 4 5 6 7 8 9 10

TABLE I

Identification of soil type is made on basis of an estimate of particle sizes, and in the case of fine-grained soils also on basis of plasticity.

Soil Type		Soil Particle	
Boulder		> 12"	
Cobble		12" - 3"	
Gravel	- Coarse	3" - 3/4"	Coarse Grained
	- Fine	3/4" - #4	(Granular)
Sand	- Coarse	#4 - #10	
	- Medium	#10 - #40	
	- Fine	#40 - #200	
Silt-Non Plastic (Granular)		< #200	Fine Grained
Clay-Plastic (Cohesive)			

TABLE II

The following terms are used in classifying soils consisting of mixtures of two or more soil types. The estimate is based on weight of total sample.

Term	Percent of Total Sample
"and"	35 - 50
"some"	20 - 35
"little"	10 - 20
"trace"	1 - 10

(When sampling gravelly soils with a standard split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter.)

T LE III

T relative compactness or consistency is described in accordance with the following terms.

G nular Soils		Cohesive Soils	
Term	Blows per Foot, N	Term	Blows per Foot, N
Loose	< 11	Very Soft	< 2
Fi	11 - 30	Soft	2 - 4
Compact	31 - 50	Medium	4 - 8
Very Compact	> 51	Stiff	8 - 15
		Very Stiff	15 - 30
		Hard	>30

(L le particles in the soils will often significantly influence the blows per foot recorded during the enetration Test.)

F:\templates\logkey.xls

TABLE IV

Stratified Soils	
Descriptive Term	**Thickness**
Parting	- 0" - 1/16"
Seam	- 1/16" - 1/2"
Layer	- 1/2" - 12"
Stratum	- >12"
Varved Clay	- Alternating seams or layers of sand, silt & clay
Pocket	- small, erratic deposit, usually <12"
Lens	- lenticular deposit
Occasional	- one or less per foot of thickness
Frequent	- more than one per foot of thickness

TABLE V

Rock Classification Terms			
Term		Meaning	
Hardness	Soft	Scratched by fingernail	
	Medium Hard	Scratched easily by penknife	
	Hard	Scratched with difficulty by penknife	
	Very Hard	Cannot be scratched by penknife	
Weathering	Very Weathered	Judged from the relative amounts of disintegration,	
	Weathered	iron staining, core recovery, clay seams, etc.	
	Sound		
Bedding	Laminated	Natural breaks in Rock Layers	<1"
	Thin bedded		1"-4"
	Bedded		4"-12"
	Thick bedded		12"-36"
	Massive		>36"
(Fracturing refers to natural breaks in the rock oriented at some angle to the rock layers.)			

GENERAL INFORMATION & KEY TO SUBSURFACE LOGS

The information presented in the following defines some of the procedures and terms used on the Subsurface Logs to describe the conditions encountered.

1. The figures in the Depth column defines the scale of the Subsurface Log.
2. The Sample No. is used for identification on sample containers.
3. The sample column shows, graphically, the depth range from which a sample was recovered. (ss – split spoon; core – rock core; st – shelby tube; dp – direct push).
4. Blows on Sampler - shows the results of the "Penetration Test", recording the number of blows required to drive a split spoon sampler into the soil. The number of blows required for each six inches of penetration is recorded. The first 6 inches of penetration is considered to be a seating drive. The number of blows required for the second and third 6 inches of penetration is termed the penetration resistance, N. The outside diameter of the sampler, the hammer weight and the length of drop are noted at the bottom of the Subsurface Log.
5. Recovery shows the length of the recovered soil sample for the sample device noted.
6. All recovered soil samples are reviewed in the office by an experienced technical specialist or geologist, unless noted otherwise. The visual descriptions are made on the basis of a combination of the field descriptions and observations and the sample as received in the office. The method of visual classification is based primarily on the Unified Soil Classification (ASTM D 2487-83) with regard to the particle size and plasticity. (See Table I). Additionally, the relative portion, by weight, of two or more soil types is described for granular soils in accordance with "Suggested Methods of Test for Identification of Soils" by D.M. Burmister, ASTM Special Technical Publication 479, June 1970. (See Table II) The description of the relative soil density or consistency is based upon the penetration records as defined on Table No. III. The description of the soil moisture is based upon the relative wetness of the soil as recovered and is described as damp, moist, wet and saturated. Water introduced in the boring either naturally or during drilling may have affected the moisture condition of the recovered sample. Special terms are used as required to describe materials in greater detail; several such terms are listed in Table IV. When sampling gravelly soils with a standard two-inch diameter split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter. The presence of boulders and large gravel is sometimes, but not necessarily, detected by an evaluation of the casing/hollow stem augers and samplers blows or through the "action" of the drill rig.
7. The description of the rock shown is based on the recovered rock core and the field observations. The terms frequently used in the description are included in Table V.
8. The stratification lines represent the approximate boundary between soil types, and the actual transition may be gradual.
9. Miscellaneous observations and procedures noted in the field are shown in this column, including water level observations. It is important to realize the reliability of the water level observations depends upon the soil type (water does not readily stabilize in a hole through fine grained soils), and that drill water used to advance the boring may have influenced the observations. The groundwater level typically will fluctuate seasonally. One or more perched or trapped water levels may exist in the ground seasonally. All the available readings should be evaluated. If definite conclusions cannot be made, it is often prudent to examine the conditions more thoroughly through test pit excavations or monitoring wells.
10. The length of core run is defined as the length of penetration of the core barrel. Core recovery is the length of core recovered divided by the core run. The RQD (Rock Quality Designation) is the total pieces of NX core exceeding 4 inches in length divided by the core run. The size of the core barrel used is also noted at the bottom of the subsurface log.

The Subsurface Logs attached to this report present the observations and mechanical data collected at the site, supplemented by classification of material removed from the borings as determined through visual identification. It is cautioned that the materials removed from the borings represent only a fraction of the total volume of the deposits at the site and may not necessarily be representative of the subsurface conditions between adjacent borings or between the sampled intervals. The data presented on the Subsurface Logs together with the recovered samples will provide a basis for evaluating the character of the subsurface conditions relative to the project. The evaluation must consider all the recorded details and their significance relative to each other. Often analyses of boring data indicate the need for additional testing or sampling procedures to more accurately evaluate the subsurface conditions. Any evaluation of the contents of this report and the recovered samples must be performed by knowledgeable Professionals.

BUCK ENVIRONMENTAL LABORATORIES
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

Date: 6/22/00 Tech: Joe McGrim Lab Log No: 0006302

Client: United Dominion Industries, Inc. Site: Feldmeier Equip.

Well I.D:	MW-1	MW-3	MW-4	MW-5			
Total Well Depth (ft)	11.3	16.3	6.9	10.25			
Depth to Free Product (ft)							
Product Thickness (ft)							
Depth to Groundwater (ft)	6.47	14.6	2.70	10.64			
Required Purge Volume (gal) (See calculations below)	2.4 gal	0.85 gal	2.1 gal				
Actual Purge Volume (gal)	2.4 gal	1 gal	2 gal	Purged = 250ml - well went dry - no sample			
Purge Method (see list below)	Bailer (1)	Bailer (1)	Bailer (1)				
Observations				dry - no sample			
Color	Lt Brown	Dk Brown	Brown				
Odor (Y/N)	NO	NO	NO				
Sheen (Y/N)	NO	NO	NO				
Turbidity (NTU)	60	1600	240				
pH	—	—	—				

Purge Volume Calculations: Purge volumes are directly proportional to the height of the water column and diameter of the monitoring well casing as follows:
2" Monitoring Well: Water column height (ft) / 2 = 3 well volume purge (gallons)
3" Monitoring Well: Water column height (ft) = 3 well volume purge (gallons)
4" Monitoring Well: Water column height (ft) x 2 = 3 well volume purge (gallons)

Purge Method(s): (1) Laboratory hand bailer, (2) Dedicated hand bailer, (3) Disposable hand bailer, (4) Bladder pump, (5) Peristaltic pump
(6) Other _____

Comments: _____

BUCK ENVIRONMENTAL LABORATORIES
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

Date: 4/17/01 Tech: E. Spencer Lab Log No: 0004206

Client: U.D.I. Site: Feldmeire Equipment

Well I.D:	MW-1	MW-3	MW-4	MW-5			
Total Well Depth (ft)	11.30	16.3	6.9	10.25			
Depth to Free Product (ft)	N/A	N/A	N/A	N/A			
Product Thickness (ft)	N/A	N/A	N/A	N/A			
Depth to Groundwater (ft)	9.58	14.26	2.44	Dry			
Required Purge Volume (gal) (See calculations below)	.86	1.02	2.23	—			
Actual Purge Volume (gal)	1 gal	1 gal	2 ½				
Purge Method (see list below)	1	1	1	Dry			
Observations							
Color	DK Brown	DK Brown	Black				
Odor (Y/N)	NO	NO	Yes				
Sheen (Y/N)	NO	NO	NO				
Turbidity (NTU)	-	-	-				
pH	-	-	-				

Purge Volume Calculations: Purge volumes are directly proportional to the height of the water column and diameter of the monitoring well casing as follows:
2" Monitoring Well: Water column height (ft) / 2 = 3 well volume purge (gallons)
3" Monitoring Well: Water column height (ft) = 3 well volume purge (gallons)
4" Monitoring Well: Water column height (ft) x 2 = 3 well volume purge (gallons)

Purge Method(s): (1) Laboratory hand bailer, (2) Dedicated hand bailer, (3) Disposable hand bailer, (4) Bladder pump, (5) Peristaltic pump
(6) Other _____

Comments: Sunny 40°-50° F.

BUCK ENVIRONMENTAL LABORATORIES
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

Date: 5/23/00 Tech: Eric Monsen Lab Log No: 0005307

Client: UDI Site: Feldmeier Equip., Little Falls, NY

Well I.D:	MW-1						
Total Well Depth (ft)	11.3						
Depth to Free Product (ft)	N/A						
Product Thickness (ft)	N/A						
Depth to Groundwater (ft)	7.64						
Required Purge Volume (gal) (See calculations below)	.83						
Actual Purge Volume (gal)	1						
Purge Method (see list below)	1						
Observations							
Color	Brown						
Odor (Y/N)	No						
Sheen (Y/N)	No						
Turbidity (NTU)	—						
pH	—						

Purge Volume Calculations: Purge volumes are directly proportional to the height of the water column and diameter of the monitoring well casing as follows:
2" Monitoring Well: Water column height (ft) / 2 = 3 well volume purge (gallons)
3" Monitoring Well: Water column height (ft) = 3 well volume purge (gallons)
4" Monitoring Well: Water column height (ft) x 2 = 3 well volume purge (gallons)

Purge Method(s): (1) Laboratory hand bailer, (2) Dedicated hand bailer, (3) Disposable hand bailer, (4) Bladder pump, (5) Peristaltic pump
(6) Other _____

Comments: Vials - 95-1

page 1 of [illegible]

EJCL ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. 0004131

NOTE: *The information given on this form was supplied by the client and authorizes the Laboratory to proceed with analysis according to the* ***Standard Terms and Conditions*** *of Buck Environmental Laboratories, Inc. provided on the reverse side of this chain-of-custody. The client authorization signature acknowledges that the terms are acceptable and agreed to by the client.*

CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center, 301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC: STG BEL 0006
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.:
SAMPLED BY: Eric Monsen

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3							MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
4/11/00	9:10am	HE-1 /Soil Background Hand Excavation	X		X								S	5	2	Small soil med soil	Ref
4/11/00	9:15am	HE-2/Soil Background Hand Excavation	X		X								S	6	2	"	Ref
4/11/00	9:30am	HE-3/Soil Background Hand Excavation	X		X								S	6	2	"	Ref
4/11/00	10:00am	TP-1/Petroleum ASTs Backhoe Test Pit	X	X	X								S	5	3	2 small 1 med	Ref
4/11/00	10:50am	TP-2/Petroleum ASTs Backhoe Test Pit	X	X	X								S	6	3	2 small 1 med	Ref
4/11/00	11:45am	TP-3/Tannery Site Backhoe Test Pit	X	X	X	X							S	6	3	"	Ref
4/11/00	11:45am	TP-3 MS	X	X	X	X							S	6	3	"	Ref
4/11/00	11:45am	TP-3 MSD	X	X	X	X							S	6	3	"	Ref
4/11/00	11:45am	TP-3 Field Duplicate	X	X	X	X							S	6	3	"	Ref

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
4/12/00	9:30am	1 [signature]	1 [signature]	Cat B + DUSR
		2	2	
		3	3	
		4	4	

page 2 of 2

BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. 0004131

NOTE: *The information given on this form was supplied by the client and authorizes the Laboratory to proceed with analysis according to the* ***Standard Terms and Conditions*** *of Buck Environmental Laboratories, Inc. provided on the reverse side of this chain-of-custody. The client authorization signature acknowledges that the terms are acceptable and agreed to by the client.*

CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC:
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.:
SAMPLED BY: Eric Monsen

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
4/11/00	12:15 pm	TP-4/Tannery Site Backhoe Test Pit	X	X	X	X	S	G	3	2 small 1 med	Ref
4/11/00	1:15 pm	TP-5/Tannery Site Backhoe Test Pit	X	X	X	X	S	G	3	"	Ref

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
4/12/00	9:30 am	1	1 Kristen Hale
		2	2
		3	3
		4	4

ADDITIONAL COMMENTS: Cut B + DUSR

3845 Route 11 S. • PO Box 5150 • Cortland, NY 13045 • (607) 753-3403 FAX: 753-3415
BRANCH OFFICE - 14 Smith Ave. • Binghamton, NY 13904 • (607) 771-0366

BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. 0004132

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CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC: SDG BE 0006
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.:
SAMPLED BY: Eric Monsen

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
4/11/00	10:50am	TP-2/Petroleum Ast's Backhoe Test pit	X	X	X		W	G	5	VAR	Ref/HCl/HNO_3
4/11/00	1:40pm	Exposure Pathways/Creek Tunnel - Downstream	X	X	X		W	G	5	VAR	" " "
4/11/00	2:15pm	Exposure pathways/Creek Tunnel - Upstream	X	X	X		W	G	5	VAR	" " "
4/11/00	—	Trip Blank		X			W	G	2	VIAL	Ref HCL

DATE	TIME	~~RELINQUISHED BY~~	ACCEPTED BY
4/12/00	9:30am	1	1
		2	2
		3	3
		4	4

ADDITIONAL COMMENTS:
Cat B + DUSR
No CN samples taken BLH

3845 Route 11 S. • PO Box 5150 • Cortland, NY 13045 • (607) 753-3403 FAX: 753-2445
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BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. C004186

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CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC: CLP-Cat B SDG# ABEL0006
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.:
SAMPLED BY: Eric Monsen

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED	
4/13/00	11:30AM	SB-1/6"-1'/Electropolishing wastes	X				S		1	Soil Jar	Ref	OK
4/13/00	11:30AM	SB-1/4'-5.3'/ "	X				S		1	Soil Jar	Ref	OK
4/13/00	2:00pm	SB-2/6"-1'/ "	X				S		1	Soil Jar	Ref	OK
4/13/00	2:00pm	SB-2/2'-3.2'/ "	X				S		1	Soil Jar	Ref	OK
4/13/00	3:15pm	SB-3/6'-6.8'/GAS Manufacturing	X		X		S	G	1	Soil JAR	Ref	OK
4/13/00	3:15pm	SB-3/6.8'/ "		X			S	G	1	Soil JAR	Ref	OK
4/13/00	5:00pm	SB-4/8'-10'/ "	X		X		S	G	1	Soil JAR	Ref	OK
4/13/00	5:00pm	SB-4/20-22'/ "		X			S	G	1	Soil JAR	Ref	OK
4/13/00	—	Trip Blank		X			W	G	2	40ml	HCL	OK

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
4/14/00	6:52pm	1	1 To Storage
4/15/00	0810	2 Storage	2 Kathleen Slater
		3	3
		4	4

ADDITIONAL COMMENTS:
(1) Cooler, Seals intact w/bagged ice @ 2.9°C

BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. 000480

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CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC: CLP-Cat B SDG#BEL0006
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.:
SAMPLED BY: Eric Monson

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED	
4/14/00	8AM	SB-5 GAS Manufacturing	X	X	X		S	G	1	Soil Jar	Ref	OK
4/14/00	9:30AM	MW-4/ASTs/4'-6'	X		X		S		1	Soil Jar	Ref	OK
4/14/00	9:30AM	MW-4/ASTs/6'-8'		X			S		1	Soil Jar	Ref	OK

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
4/14/00	6:52PM	1	1 To Storage.
04/15/00	0810	2 Storage	2 Kathleen Galvin
		3	3
		4	4

ADDITIONAL COMMENTS:
(1) Cooler, Seals intact w/ bagged ice @ 2.4°C

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Pg. 1 of 2

BJC ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. 0004-0206

NOTE: *The information given on this form was supplied by the client and authorizes the Laboratory to proceed with analysis according to the* ***Standard Terms and Conditions*** *of Buck Environmental Laboratories, Inc. provided on the reverse side of this chain-of-custody. The client authorization signature acknowledges that the terms are acceptable and agreed to by the client.*

CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center, 301 South College Street
PHONE NO. Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC
PREMIUM QA/QC
NORMAL TURNAROUND
EXPEDITE AT PREMIUM
CLIENT AUTHORIZ. SIGN.

PROJECT NAME: VCD Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.
SAMPLED BY: Erwie Spencer

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3	CN	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
4/17/00	12:30pm	Equipment Blank (MW4)	X	X	X		X	W	G	7	VAR	HNO3/NAOH HCL/Ref
"	1:30pm	MW-1	X	X	X		X	W	G	7	VAR	"
"	2:00pm	MW-3	X					W	G	1	500	HNO3 Ref
"	12:40pm	MW-4	X	X	X		X	W	G	7	VAR	HNO3/NAOH HCL/Ref
"	12:45pm	MW-4 MS	X	X	X		X	W	G	7	VAR	"
"	12:50pm	MW-4 MSD	X	X	X		X	W	G	7	VAR	"
"	12:55pm	MW-4 FD	X	X	X		X	W	G	7	VAR	"
"	2:30pm	MW-5	X					W	G	1	250	HNO3 Ref
"	–	Trip Blank		X				W	G	2	vials	HCL Ref

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
4/17/00	5:00pm	1 [illegible signature]	1 To Storage	Temp Blank @ 4.0°C
4/18/00	3 PM	2 [illegible signature]	2	
		3	3	
		4	4	

BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

P. 2 of 2

LABORATORY LOG NO. 0004206

CHAIN OF CUSTODY RECORD

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CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC:
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc. 575 E. Mill Street, Little Falls, NY
PO NO.:
SAMPLED BY: Ernie Spencer

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TAL Metals	TCL VOA ASP 95-1	TCL SVOA ASP-95-2	TCL Pesticides ASP-95-3	CN	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
4/17/00	2:45 pm	Exposure Pathways / Creek Tunnel - Downstream					X	W	G	1	500	Ref No 011

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
4/17/00	5:00 pm	1	1 To Storage
4/18/00	3:00 pm	2 Finley Express	2
		3	3
		4	4

ADDITIONAL COMMENTS:

3845 Route 11 S. • PO Box 5150 • Cortland, NY 13045 • (607) 753-3403 FAX: 753-3445
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BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

CHAIN OF CUSTODY RECORD

LABORATORY LOG NO. 0005307

NOTE: *The information given on this form was supplied by the client and authorizes the Laboratory to proceed with analysis according to the* ***Standard Terms and Conditions*** *of Buck Environmental Laboratories, Inc. provided on the reverse side of this chain-of-custody. The client authorization signature acknowledges that the terms are acceptable and agreed to by the client.*

CLIENT: United Dominion Industries, Inc
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC:
PREMIUM QA/QC: SDG BEL 0008
NORMAL TURNAROUND:
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: VCP Investigation - Feldmeier Equipment, Inc 575 E. Mill Street, Littlefalls, NY
PO NO.:
SAMPLED BY: Eric Monsen

ANALYSIS REQUESTED

DATE	TIME	LOCATION	TCL VOA NSP-95-1	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
5/23/00	1pm	MW-1	X	W	G	3	VIAL	Ref HCL
5/23/00	—	Trip Blank	X	W	G	1	VIAL	Ref HCL

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
5/23/00	4:30pm	1	1
		2	2
		3	3
		4	4

ADDITIONAL COMMENTS

3845 Route 11 S. • PO Box 5150 • Cortland, NY 13045 • (607) 753-3403
BRANCH OFFICE - 14 Smith Ave • Binghamton, NY 13904 • (607) 771-0366

BUCK ENVIRONMENTAL LABORATORIES INC.
ACCREDITED ENVIRONMENTAL ANALYSIS

LABORATORY LOG NO. 000630Z

CHAIN OF CUSTODY RECORD

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CLIENT: United Dominion Industries, Inc.
ADDRESS: 2300 One First Union Center
301 South College Street
PHONE NO.: Charlotte, NC 28202-6039
REPORT TO ATTN:

NORMAL QA/QC
PREMIUM QA/QC: SDG BEL0013
NORMAL TURNAROUND
EXPEDITE AT PREMIUM
CLIENT AUTHORIZ. SIGN.

PROJECT NAME: Little Falls
PO NO.
SAMPLED BY: J. Meldrim

ANALYSIS REQUESTED

DATE	TIME	LOCATION	NP-250M Metals (Tot & Diss)	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
6/22/00	13:35	MW-1	X	W	G	1	500 mL	NP
6/22/00	13:45	MW-3	X	W	G	1	500 mL	NP
6/22/00	13:25	MW-4	X	W	G	1	500 mL	NP
6/22/00		MW-5	Not Collected	W	G	1	500 mL	NP
6/22/00	11:45	Rinse Blank	X	W	G	1	500 mL	NP

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
6/22/00	16:10	1 [signature]	1 [signature]
		2	2
		3	3
		4	4

ADDITIONAL COMMENTS
travel → 4 hrs
on-site → 2.25 hrs

PROPOSED WORK PLAN
VOLUNTARY CLEANUP PROGRAM INVESTIGATION

575 EAST MILL STREET
CITY OF LITTLE FALLS
HERKIMER COUNTY, NEW YORK
Site No. V00223-6

June 1999
Revised: August 1999

PREPARED FOR:

THE NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
REGION 6
ATTN: DARREL SWEREDOSKI, P.E.
REGIONAL HAZARDOUS WASTE REMEDIATION ENGINEER

PREPARED BY:

BUCK ENGINEERING
3821 BUCK DRIVE
CORTLAND, NEW YORK 13045-5150

TABLE OF CONTENTS

1.0 INTRODUCTION AND BACKGROUND

Note: The original proposed work plan was submitted on June 17, 1999. A review letter was received from Philip G. Waite dated July 19, 1999. This revised work plan addresses Mr. Waite's comments and suggestions.

1.1 General

United Dominion Industries, Inc. (UDI) is the owner of record of the subject property. The site is approximately 6.5 acres of land located at 575 E. Mill St. in the city of Little Falls, NY. UDI contracted to sell its facility, known previously as Cherry-Burrell, to Feldmeier Equipment, Inc. (FEI). FEI purchased the business and selected non-real estate assets, and began to operate the facility in 1998. Transfer of real estate was contingent upon clarification of various environmental questions raised during environmental site assessments by consultants for both parties. Both parties agreed to contract with NYSDEC as volunteers under a "Voluntary Cleanup Program Investigation" agreement.

Buck Engineering has contracted with the volunteers to present the initial application, prepare a work plan, and execute the investigation on their behalf. The site was approved for participation in the Voluntary Cleanup Program (VCP) on 4-2-99 by correspondence from NYSDEC Chief of State Superfund and Voluntary Cleanup Bureau, Dale Desnoyers, Esq. addressed to UDI's legal counsel, Thomas West, Esq. of LeBoeuf, Lamb, Greene & MacRae, LLP.

A preliminary meeting was held at the site on 4-22-99 between the volunteers, the consultant, and Philip Waite, P.E., the NYSDEC Project Engineer. Mr. Waite reviewed existing information at the site and clarified NYSDEC's work plan requirements in correspondence to the consultant of 5-19-99. This proposed work plan is submitted on behalf of UDI and FEI, the volunteers, and is intended to become a part of the final VCP Agreement between the parties upon acceptance by the Division of Environmental Remediation.

1.2 Prior Site Activities

The 575 E. Mill St. site in Little Falls has been used for a variety of industrial purposes since at least the middle 1800's. A tannery and a manufactured gas facility are apparent on maps from the late 1800's. A metal tank manufacturing operation has been conducted at 575 E. Mill St. since at least 1948. The operation was known as the Cherry-Burrell site which eventually came under UDI ownership in the 1970's. UDI manufactured large stainless steel vessels for process equipment using shearing, presswork, rolling mill, welding, electro-polishing, and similar processes. In 1998 UDI sold its Little Falls inventory and equipment to Feldmeier Equipment of Syracuse, NY. Feldmeier Equipment is engaged in similar process equipment manufacturing at other sites in the United States. The Little Falls location structure(s) comprise 125,000 ft^2 of manufacturing and office space on a site of approximately 6.5 acres.

1.3 Surrounding Land Uses

The surrounding land use is generally industrial with some commercial activities. A listing of adjoining property owners and uses follows. The names of the owners are also shown on the site map in Section 9.0 of this work plan.

Current Owner	*Current Use*
R & G Machine and Tool Corp. *375 S. Ann St., Little Falls, NY 13365*	*Machine Shop (milling, grinding, welding, etc.)*
George Lumber and Building Materials, Inc. *40 McKinley Ave., Dolgeville, NY 13329*	*Commercial*
Burrows Paper Corp. *545 W. Main St., Little Falls, NY 13365*	*Pulp and Paper Mill*
Cale-Glens Falls Inc. *P.O. Box 29, Herkimer, NY 13350*	*Castle Trucking-Warehouse*
Consolidated Rail Corp. *P.O. Box 8499, Philadelphia, PA 19101*	*Railway*
Vincent Manufacturing Co. *560 E. Mill St., Little Falls, NY 13365*	*Manufacturer of Foam Products*
Charles III and Anita Musgrave *4200 Rock Canyon Rd., Edmund, OK 73007*	*Sunbelt Industries (retail distributor of abrasives)*

1.4 Prior Site Investigations

Environmental site assessments have been performed at this site for various parties. Copies of the following site assessment reports were provided to NYSDEC with the initial VCP application:

Buck Engineering, Phase I Environmental Site Assessment: Waukesha Cherry-Burrell Property, 3/98

Delta Environmental Consultants, Inc., Phase I Environmental Assessment: Former Cherry-Burrell Facility, 11/97

Delta Environmental Consultants, Inc., Phase II Environmental Assessment: Former Cherry-Burrell Facility, 6/98

2.0 PROJECT OBJECTIVE

The overall objective of this proposed work plan is to provide sufficient information for NYSDEC to determine the nature and extent of any contamination at the site, the potential for exposure pathways, and the potential for off-site migration.

In order to achieve the overall objective, the following specific objectives have been identified:

1. Characterize the level of metals and PAH's in ambient soils in the area.
2. Characterize the groundwater quality underlying the site.
3. Determine if soil and/or groundwater quality has been impacted by the previous manufactured gas operations at the western portion of the site.
4. Determine if soil and/or groundwater quality has been impacted by the previous tannery operations at the eastern portion of the site.
5. Determine if soil and/or groundwater quality has been impacted by the previous petroleum bulk storage facility north of the manufacturing facility.
6. Determine if soil and/or groundwater quality has been impacted by the previous electroplating operations within the older tank fabrication portion of the manufacturing facility.
7. Identify exposure routes and transport mechanisms for any contaminants identified in the investigation.

Note: The Investigative Strategy/Sampling and Analytical Plan refer to the specific objectives outlined above.

3.0 INVESTIGATION ORGANIZATION

3.1 General

The current owner of the property, UDI, has retained Buck Engineering (BE) to prepare the work plan and to conduct the site investigation. Correspondence relating to the work plan should be directed to the Project Manager:

John H. Buck, P.E.
Buck Engineering
3821 Buck Drive
Cortland, NY 13045-5150

Telephone: 607-753-3403
FAX: 607-753-3415
E-Mail: Bucklab@clarityconnect.com

3.2 Investigation Team

The investigation team is comprised of the following people. The attached Statement of Qualifications includes resumes for these individuals.

Project Manager	John H. Buck, P.E.
Field Engineer	Wayne C. Matteson, P.E.
Industrial Hygienist	Eric H. Monsen
Quality Assurance/Control (QA/QC) Officer	Barbara L. Houskamp
Health and Safety Officer (HASO)	Eric H. Monsen

4.0 INVESTIGATIVE STRATEGY/SAMPLING AND ANALYTICAL PLAN

Each of the proposed sampling positions described below is indicated on the site map along with shaded areas which depict the locations of the prior tannery and manufactured gas facilities. Sample numbers (#1-7) are keyed to the objective numbers below.

4.1 Soil Background Levels (Objective 1)

The Delta Phase 2 investigation identified PAH's and metals at some locations on the site. To determine if these levels are significantly different from ambient levels in the area, it is proposed that ***three*** control samples be obtained. ***Each sample would be taken from a shallow hand excavation (0-6"). The proposed sampling locations are; 1) east of the boiler building along the central portion of the east property line, 2) on adjoining property west of the site; and, 3) north of the old tannery site on the south side of East Mill Street. All*** samples would be analyzed for TAL metals and ***TCL SVOA's*** as indicated on the Analytical Summary Table (Table 1) in Section 8.0 of this work plan.

4.2 Groundwater Quality (Objective 2)

The Delta Phase 2 investigation included some groundwater sampling, but the data were very limited due in part to limitations of the sampling method (temporary Geoprobe points) and the absence of water bearing formations. It is proposed that ***five*** 2" PVC monitoring wells be installed to allow sampling and assessment of the site groundwater. ***One*** of the wells ***is*** proposed to assess upgradient water quality, three wells are along the southern perimeter of the manufacturing facility to assess downgradient water quality ***and one well is downgradient of the AST location. In the event that water quality information upgradient of the old tannery site is needed, the well south of the AST's may provide that information. Groundwater monitoring wells will be advanced to a depth of up to 5 feet below the apparent groundwater depth encountered at each location; however, there are no plans to drill into rock at any location. Depending upon conditions encountered at each well location, screens will be placed to account for variations in the groundwater level. In no case will well screens longer than 10 feet or shorter than 3 feet be used in the construction of the any groundwater monitoring well.*** The placements are shown on the attached site map and are intended to also aid in objectives ***3-6***. The ***five*** groundwater samples would be analyzed for TAL metals, TCL VOA's, and TCL SVOA's.

4.3 Gas Manufacturing Site (Objective 3)

A coal gasification facility was indicated at the western portion of the site on Sanborn maps dated 1884, 1891, 1897, 1900, 1906 and 1911. Facilities that manufactured methane and other low-molecular weight gases from coal for lighting and heating purposes typically produced tar-like wastes that were often disposed of on or near the point of manufacture. These wastes included abundant amounts of polynuclear aromatic hydrocarbons (PAH's) and volatile aromatic compounds. The Delta Phase 2 investigation identified various levels of PAH's in soil from the general vicinity where this plant was located at the turn of the century. It is proposed that three borings be obtained to confirm the Delta findings. The borings would be advanced to bedrock. Continuous split spoons would be obtained for visual classification and PID screening. ***The split spoon soil samples with the greatest odor and visual appearance of contamination would be obtained and analyzed for TCL SVOA's and TAL metals.***

If there is no ***field*** indication of contamination, ***a sample from the first 0-2' would be selected.*** A VOA sample would be obtained from the bedrock interface or at the water table (if available).

4.4 Tannery Site (Objective 4)

A slaughterhouse and tannery operation was located at the eastern area of the site in the 19th century. The tannery structures appear to have been aligned with a surface stream (see para. 4.7), possibly for waste disposal purposes. None of the original structures from the original tannery operations remain; however, the existing unused 7-story structure was constructed near the end of tannery operations at the site. Much of the original tannery operations' footprint has been covered by construction of the ***easternmost*** portion of the current manufacturing building. Tannery operations typically included a "beam room", boiling vats, caustic solutions, and sometimes used chromium salt solutions for the actual tanning process. Some tanneries also used pesticides to prevent infestation of the stored hides. Although there have not been tannery operations at this site for approximately 100 years, ***three*** backhoe test pits are proposed in the general area of the tannery. ***Backhoe test pits will be excavated to bedrock, groundwater, or to a depth of ten feet, whichever is encountered first. A sidewall grab sample of soil would be obtained from visually contaminated portion(s) of each pit, if any, for laboratory analysis. If there are no apparent contaminated portions of the test pit, a grab sample of soil will be obtained from the bottom of the pit using the backhoe. If additional sources of contamination are identified in any test pit, additional grab samples will be obtained for laboratory analysis from those sources of contamination. The backhoe bucket will be decontaminated between each test pit in accordance with the decontamination procedure outlined in Appendix B.*** The testpit soils would be visually characterized and ***the*** sample obtained ***would*** be analyzed for TCL VOA's, TCL SVOA's, TAL metals, and TCL pesticides. ***There is no intent to sample groundwater (if encountered) from the two western test pits due to the monitoring well location near the tannery site. If groundwater is encountered in the eastern test pit, an additional sample would be obtained to be analyzed for the same parameters as the test pit soils.***

4.5 Petroleum AST's (Objective 5)

Two existing above ground storage tanks (AST's) containing #2 fuel oil are located on the site. These AST's previously contained #4 or #6 fuel oil. A NYSDEC spill event was registered and closed in 1989 after completion of a soil remediation project. The Delta Phase 2 site assessment identified PAH's in the soil. It is not clear whether the PAH's originated from fuel oil or possibly from coal-gasification residue from the previous manufacturing facility. It is proposed that two backhoe test pits be excavated at locations downgradient from the AST's. The test pits ***will be excavated to bedrock, groundwater, or to a depth of ten feet, whichever is encountered first. A sidewall grab sample of soil would be obtained from visually contaminated portion(s) of each pit, if any, for laboratory analysis. If there are no apparent contaminated portions of the test pit, a grab sample of soil will be obtained from the bottom of the pit using the backhoe. If additional sources of contamination are identified in any test pit, additional grab samples will be obtained for laboratory analysis from those sources of contamination.*** The soils would be visually characterized and one ***grab*** sample from each testpit would be obtained for TCL VOA, TCL SVOA and ***TAL metals*** analysis.

4.6 Electropolishing Wastes (Objective 6)

Electropolishing operations are a form of reverse electroplating which remove metal from the object rather than adding metal. The process fluid, therefore, includes relatively high levels of the metal that was electropolished. Since the products have typically been stainless steel, the process waste fluids would be expected to include chromium and nickel as constituents. Although it seems clear that these waste fluids are handled properly in the current operations, prior investigators have raised questions about prior disposal methods. The Delta Phase 2 site assessment report included language referring to the "...existing fuel oil underground collection pit associated with the electropolishing process." In recent weeks the current operator, Feldmeier Equipment, has provided information that is accurate to the best of their knowledge. Feldmeier believes that the process was initiated in the 1970's on the second floor of the facility. All of this waste was shipped off-site as hazardous due to the high pH characteristic. In approximately 1990 the process was re-located to its current location at which time the sub-floor collection vessels were installed. The liquids are pumped from these collection vessels to a nearby treatment system that precipitates the metals by raising the pH (sludge is shipped as hazardous waste) and the wastewater is then neutralized and discharged to the municipal sewer under an industrial pre-treatment permit. No one from Buck Engineering, Feldmeier Equipment, or United Dominion knows the origin of the term "fuel oil" used in the Delta report. **Mr. Stephen Zbur, Senior Consultant at Delta, indicated that the term "fuel oil" should have been moved up in the sentence and placed between "existing" and "ASTs"; therefore, the sentence should have read:**

> **"....(i.e., former gasometer pits, existing fuel oil ASTs or existing underground collection pit associated with the electropolishing process)."**

It is proposed that a hole be bored through the concrete floor south of the electropolishing operation and south of the treatment system (two boring locations). A soil sample would be obtained from the top 6" of soil and the auger advanced to refusal. If water or moist soil is encountered, a second sample from each location would be obtained. The samples would be analyzed for TAL metals. If water samples are encountered, they would be analyzed from a 24-hour settled and decanted sample container to remove transient turbidity. ***If elevated PID readings are encountered, the samples will be analyzed for the presence of TCL SVOA's as well as TAL Metals.***

4.7 Exposure Pathways (Objective 7)

Exposure pathways will be further investigated and identified in the investigation. Separation distances to municipal water supplies, schools, residences, and parks will be mapped and identified. Municipal storm, water, and sewer lines will be identified and estimated positions shown on a site plan. A prominent feature on the site is a surface stream/storm drain that passed beneath the plant in a stone-walled conduit (tunnel) to the Mohawk River on the south border of the site. Although the major municipal storm flows have been diverted at the east end of the site, the tunnel under the plant appears to be connected to some municipal street drains and minor flow continues to be evident. The tunnel will be visually examined for presence of discharge pipes that could emanate from the facility. If suspicious outfalls are observed, smoke or dye testing will be used in an attempt to locate origins within the plant. Assuming that the tunnel can be traversed to the north end of the manufacturing building, ***and that there is sufficient flow***, two water samples will be obtained and analyzed for TAL metals, TCL VOA's, and TCL SVOA's. ***If little or no flow is discovered in the tunnel, sediment samples will be taken and analyzed for the same parameters. One sample would be obtained at the outfall to the Mohawk River. The second sample would be taken from within the tunnel (or a catch basin if the tunnel is inaccessible) near East Mill Street.*** The estimated position of the tunnel ***along with an estimate of the proposed sampling locations*** is shown on the site map.

5.0 QUALITY CONTROL/QUALITY ASSURANCE PROVISIONS

5.1 Data Objective and Usage

The overall data objective is to provide data of sufficient quality and defensibility to meet the objectives as defined in para. 2.3.

5.2 Analytical Laboratory and Data Quality Level

Analytical data can be generally categorized in four levels as follows:

Field screening methods (level 1) - These methods are used to aid field personnel in making rapid decisions on the site and include pH, conductivity, portable photoionization detector, and similar methods. QA/QC is limited to notebook documentation of field calibration.

Field analytical methods (level 2) - This level of analysis can only be achieved by use of a portable laboratory facility approved by NYSDOH under the ELAP program. Full regulatory analytical methods are used on-site by qualified and accredited laboratory personnel.

ELAP Laboratory methods (level 3) - This level of analysis is achieved by transporting samples from the investigation site to a NYSDOH ELAP approved laboratory. The laboratory uses EPA and ELAP approved methods,but QA/QC is limited to the laboratory's internal protocols and requirements of the ELAP program. The final submittal is typically Form 1's only or a minimal QA/QC submittal.

ELAP ASP/CLP Laboratory methods (level 4) - This level of analysis is achieved by transporting samples from the investigation site to a NYSDOH ELAP laboratory that has specific approval to analyze samples and prepare data packages under the NYSDEC ASP/CLP program. While the analytical methods are similar to normal EPA/ELAP methods, a full ***ASP Category B deliverable*** package is prepared which allows the analytical data to be validated by an outside party or assessed for usability by a Data Usability Summary Report (DUSR) assessment. This level of analysis is normally applied in cases where data may be used for litigation purposes or will be used in conjunction with an agreement with NYSDEC.

While field monitoring of excavation and boring activities is proposed using an H-Nu PID meter (Level 1), all formal analysis under this work plan is proposed to be at Level 4 (ASP/CLP) ***ASP Category B deliverables*** in conformance with the VCP guidelines established by NYSDEC.

The primary laboratory for this investigation would be Buck Environmental Laboratories, Inc. of Cortland, NY. This laboratory is accredited as NYSDOH ELAP Lab no. 10795 and holds approvals for ASP/CLP analysis. ***All samples will be delivered to the laboratory within 48 hours of sample collection.***

5.3 Quality Assurance Objectives

The quality assurance objective is to assure that defensible sampling, sample custody, laboratory analyses, instrument control, data reduction, and final reporting strategies are used in the project in order to present data that are complete, representative, and comparable. In order to adequately assess project data quality, the project would include various quality control samples including:

- A ***Trip Blank*** would be analyzed for each sampling day to assure that samples for volatiles analysis have not been contaminated during transport to the laboratory.
- A ***Rinsate Blank*** would be used to assure that samples have not been contaminated by field sampling equipment such as bailers, Geoprobe tubing, split spoons, and augers.
- ***Laboratory Method Blanks*** would be used to assure that the samples have not been contaminated by laboratory fugitive contaminants, equipment, or reagents.
- A ***Matrix Spike*** would be analyzed to assess the degree to which the contaminant measurement was influenced by the particular sample matrix.
- A ***Matrix Spike Duplicate or Sample Duplicate*** would be analyzed to assess the precision of the measurements.

5.4 Sampling Protocols

Sampling protocols have been adopted from a variety of references including NYSDEC TAGM 4007, EPA/640/P-87/001 OSWER Directive 9355 0-14 and EPA SW-846. In general, dedicated equipment would be used for each water sampling location. Soil sampling equipment, drilling tools and groundwater elevation equipment would be carefully decontaminated in the field between uses by a water/detergent wash, water rinse, and methanol rinse. Acetone would not be used for field decontamination purposes due to its presence on the TCL analyte list. Dedicated sampling equipment would be used to obtain groundwater samples from both the Geoprobe holes and monitoring wells, and to obtain soil samples. SOP's for the various sampling techniques are included in the appendix.

5.5 Sample Custody

Sample custody would be initiated in the field when the sample is taken by the field technician. The sampler would make permanent field notes which describe climatic conditions, personnel present, date, time, precise sample location, sample container and preservative used (if any). Field notes may be augmented by photographs under some circumstances. The sampler would relinquish custody of samples only to an authorized courier or to the destination laboratory. All sample custodians would record receipt and release of the sample by dated signature on the Chain-of Custody.

The laboratory would use in-house procedures for sample custody which assure that all sample containers are directly marked with a unique identifier and that sample custody at any point in time can be readily determined.

5.6 Documentation, Data Reduction and Reporting

Field activities would be summarized as they occur in a master project file at Buck Engineering. All field notes would be maintained for a period of at least three years for future reference. The project file would include all analytical results, correspondence, and reports generated during the project.

Analytical data reduction would be verified by laboratory supervisors and an internal data validation performed. The final report would be reviewed by the Project Manager and the Project QA/QC Officer for completeness and accuracy.

5.7 Data Validation - Data Usability Assessment

External data validation by a third party is not proposed for this work plan. All data would be validated by the analytical laboratory and a summary narrative outlining validation results would accompany the report.

The usability of the data would be assessed by the QA/QC officer and the project manager in general conformance with the NYSDEC Division of Environmental Remediation (DER) Data Usability Summary Report (DUSR) guidelines according to Guidance for the Development of Data Usability Summary Reports.

6.0 REPORTING

A final project report would be prepared for submission to NYSDEC at the conclusion of the activities described herein. The report would include, at a minimum, the following:

- methodologies for technical tasks completed
- laboratory analytical reports
- QA/QC documentation
- DUSR
- site plan showing actual sampling locations
- an isopotentiometric groundwater surface map
- a discussion of analytical results
- findings and conclusions
- if appropriate, recommendations for additional site work.

7.0 REFERENCES

Buck Engineering, Phase I Environmental Site Assessment: Waukesha Cherry-Burrell Property, 3/98

Buck Engineering, Voluntary Cleanup Program Application, 3/16/99

Delta Environmental Consultants, Inc., Phase I Environmental Assessment: Former Cherry-Burrell Facility, 11/97

Delta Environmental Consultants, Inc., Phase II Environmental Assessment: Former Cherry-Burrell Facility, 6/98

NYSDEC Correspondence, Philip G. Waite to Buck Environmental Services, 5/19/99

NYSDEC Correspondence, Philip G. Waite to Buck Environmental Services, 7/19/99

NYSDEC Division of Environmental Remediation (DER), Guidance for the Development of Data Usability Summary Reports, 9/97

United Nations Environment Programme/Industry and Environment Office, Tanneries and the Environment: A Technical Guide, UNEP 1991

8.0 TABLES

The following tables, referenced in the previous section of this work plan are provided on the following pages.

1 Sampling and Analytical Summary

2 Project Tasks and Schedule

3 Sampling Containers, Preservation and Holding Times

SAMPLING AND ANALYTICAL SUMMARY
SUPPLEMENTAL INVESTIGATION
575 East Mill Street
Site No. V00223-6

OBJECTIVE*	ACTIVITY	SAMPLING METHOD	LOCATION	MATRIX	LEVEL**	ANALYSIS	NUMBER
1	Soil Background Levels	Hand Excavation	North of Site West of Site North of Tannery	Soil Soil Soil	4	TAL Metals TCL SVOA	3
2	Groundwater Quality	2" Monitoring Wells	Upgradient Southern Perimeter Downgradient of AST's	Water Water Water	4	TAL Metals TCL SVOA/VOA	1 3 1
3	Gas Manufacturing Site	Soil Borings w/ Split Spoon Samples	West End of Site	Soil	1 4	Visual/PID TAL Metals TCL SVOA/VOA	3
4	Tannery Site	Backhoe Test Pits	East End of Site	Soil	4	TAL Metals TCL SVOA/VOA TCL Pesticides	3
5	Petroleum AST's	Backhoe Test Pits	Downgradient of AST's	Soil	4	TAL Metals TCL SVOA/VOA	2
6	Electropolishing Wastes	Floor Borings	Electropolishing/ Treatment System	Soil (Water)	4	TAL Metals TCL SVOA	1 1 (2)
7	Exposure Pathways	Smoke/Dye Test (Hand Excavation)	In Plant (Along Creek Tunnel)	Water (Water/Soil)	1 (4)	Discharge (TCL SVOA/VOA) (TAL Metals)	1-2 (2)

* The Objective numbers above correspond with the Investigative Strategy/Sampling and Analytical Plan as shown in para. 4.1-4.7.
** The Levels shown above refer to the ones described in para. 5.2.

TAL Metals -- 23 Target Analyte List Inorganics and Cyanide by ASP CLP-M

TCL VOA's -- Target Compound List Volatiles by ASP 95-1

TCL SVOA's -- Target Compound List Semi-Volatiles by ASP 95-2

TCL Pesticides -- Target Compound List Pesticides/PCB's by ASP 95-3

For lists of the above compounds, refer to Appendix C

The locations listed in the above table are intended to be general references. For a more detailed description of the location of the sampling points, refer to the site map in Section 9.0 of this work plan.

TABLE 2 LITTLE FALLS PROJECT TASKS AND SCHEDULE

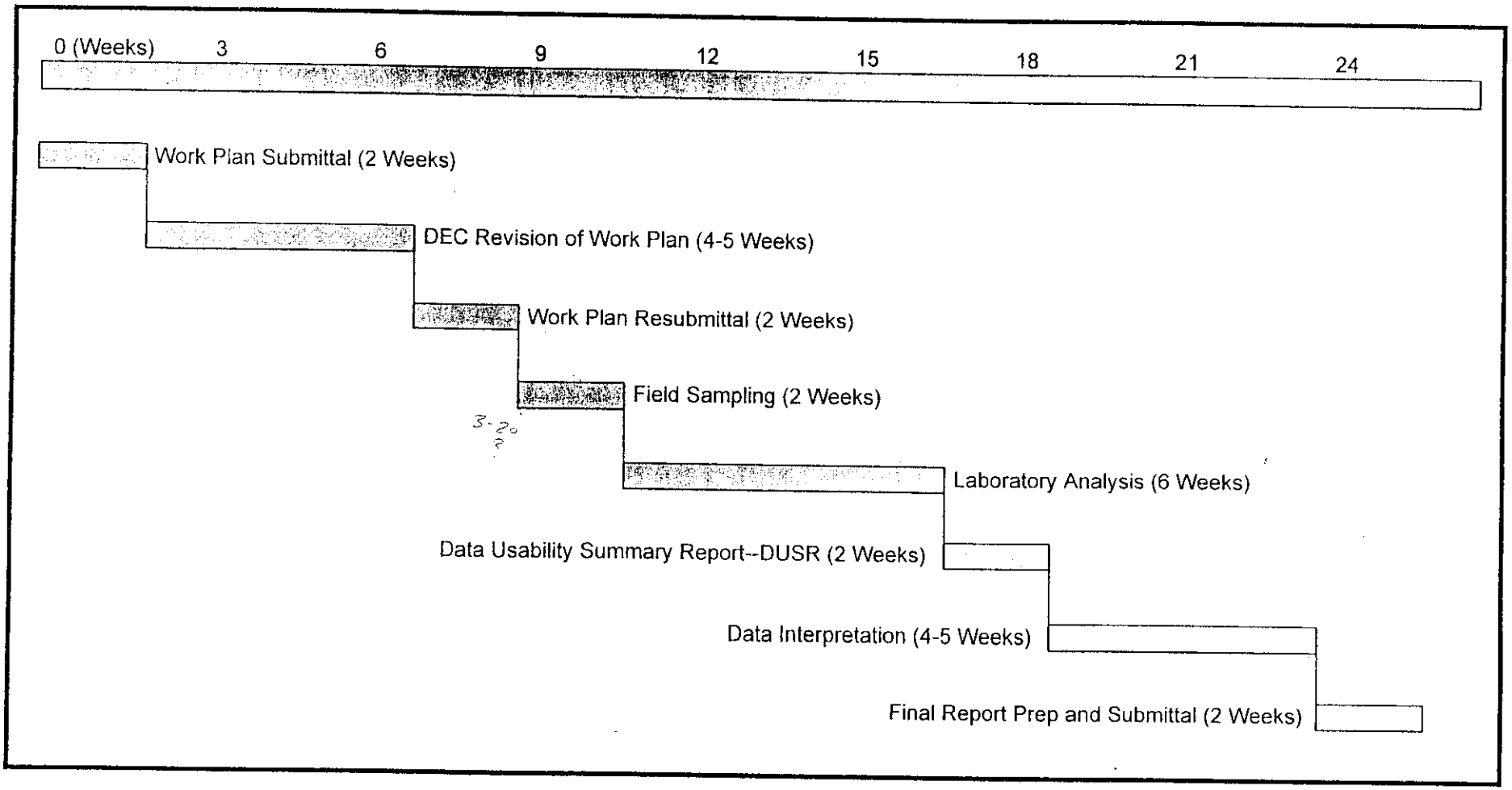

TABLE 3
SAMPLING CONTAINERS, PRESERVATION, AND HOLDING TIMES

PARAMETER	CONTAINER	SAMPLE SIZE	PRESERVATION	MAXIMUM HOLDING TIME
Water				
Volatile	Glass, Teflon® lined cap	3 x 44 ml.	Cool, 4°C .008% HCl to pH <2 (Optional)	Unpreserved - 7 day Preserved - 10 days
Semivolatile	amber glass with Teflon® lined cap	2 x 1 Liter	Cool, 4°C Store in dark	5 days after VTSR to extraction. 40 days for analysis.
PCB's/Pesticides	amber glass with Teflon® lined cap	2 x 1 Liter	Cool, 4°C Store in dark	5 days after VTSR to extraction. 40 days for analysis.
Metals excluding chromium^{+6} & mercury	Plastic or Glass	250 ml.	HNO_3 to pH < 2	6 Months
Chromium^{+6}	Plastic or Glass	250 ml.	Cool, 4°C	24 hours
Mercury	Plastic or Glass	250 ml.	HNO_3 to pH < 2	26 days
Cyanide	Plastic or Glass	500 ml.	Cool, 4°C NaOH to pH > 12	12 days
Soil				
Volatile	Glass wide mouth jar, Teflon® lined cap	4 oz.	Cool, 4°C	7 days
Semivolatile	Glass wide mouth with Teflon® lined cap	16 oz.	Cool, 4°C Store in dark	5 days after VTSR to extraction. 40 days for analysis.
PCB's/Pesticides	Glass wide mouth with Teflon® lined cap	16 oz.	Cool, 4°C Store in dark	5 days after VTSR to extraction. 40 days for analysis.
Metals excluding chromium^{+6} & mercury	Plastic or Glass	4 oz.	None	6 Months
Chromium^{+6}	Plastic or Glass	4 oz.	Cool, 4°C	24 hours
Mercury	Plastic or Glass	4 oz.	None	26 days
Cyanide	Plastic or Glass	4 oz.	Cool, 4°C	12 days

9.0 SITE MAP

A Site Map is enclosed which indicates the general extent of the property, building locations, and proposed sampling locations. The old sampling locations are also shown on the following Site Map.