FLUOR DANIEL GTI

FINAL
REMEDIAL INVESTIGATION REPORT
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
NYSDEC SITE #152139

August 19, 1996

Prepared for:
Bulova Corporation
One Bulova Avenue
Woodside, New York 11377-7874

Prepared by:
Fluor Daniel GTI, Inc.
101-1 Colin Drive
Holbrook, New York 11741

Fluor Daniel GTI, Inc
Written/Submitted by
Albert Tonn for C.B.
Chris Bona
Staff Geologist

Fluor Daniel GTI, Inc.
Reviewed/Approved by
Albert Tonn for N.H.
Nicholas Hastings
Project Director

Albert Tonn
Albert Tonn
Project Manager

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1.0 INTRODUCTION

Groundwater Technology, now known as Fluor Daniel GTI, Inc., was retained by Bulova Corporation (Bulova) to implement the Remedial Investigation/Feasibility Study (RI/FS) Work Plan for the Watch Case Factory Site (New York State Inactive Hazardous Waste Site #152139) located in Sag Harbor, New York. The RI/FS Work Plan (Work Plan), dated May 31, 1995, was submitted to the New York State Department of Environmental Conservation (NYSDEC) and approved for implementation in a September 5, 1995 letter to Groundwater Technology (Appendix A, Work Plan approval letter). The RI/FS was undertaken pursuant to NYSDEC Order on Consent Index #W1-0674-94-01, voluntarily entered into by Bulova on September 11, 1995.

1.1 Purpose and Organization of the Report

The purpose of this report is to document the Remedial Investigation field activities including preparatory work scopes (subcontractor procurement, permitting), sampling and documentation procedures, and project management tasks which were implemented to complete the investigation. The report also presents sampling and analytical results, a risk assessment, and conclusions and recommendations as appropriate.

This report format was developed using the United States Environmental Protection Agency (USEPA) guidance document entitled Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA - Interim final (October 1988). Specifically, Section 3.7.3 (Draft RI Report) and Table 3-13 (Suggested RI Report Format) were used in preparing this report. Site-specific information and project work scopes were also considered.

Section 1.0 presents general project background information; Section 2.0 details the field investigation, Section 3.0 documents the results of the investigation, Section 4.0 presents the results of the risk assessment, and Section 5.0 presents the conclusions and recommendations.

1.2 Purpose and Objectives of the Remedial Investigation

The purpose of this RI/FS, pursuant to the terms of the Order on Consent, are to quantify soil and groundwater quality, to investigate possible off-site impacts, and to determine the need for and evaluate appropriate on and off-site remedial measures.

The overall objectives of the RI/FS are to:

- Complete a field program for collecting data to evaluate the type, extent, and concentration of contaminants in soil, groundwater, and air at the site.

- Determine the present and future risks to human health and the environment from residual

contaminants.

- Develop and evaluate remedial action alternatives where unacceptable risks to human health and the environment are identified.

1.3 Work Scope

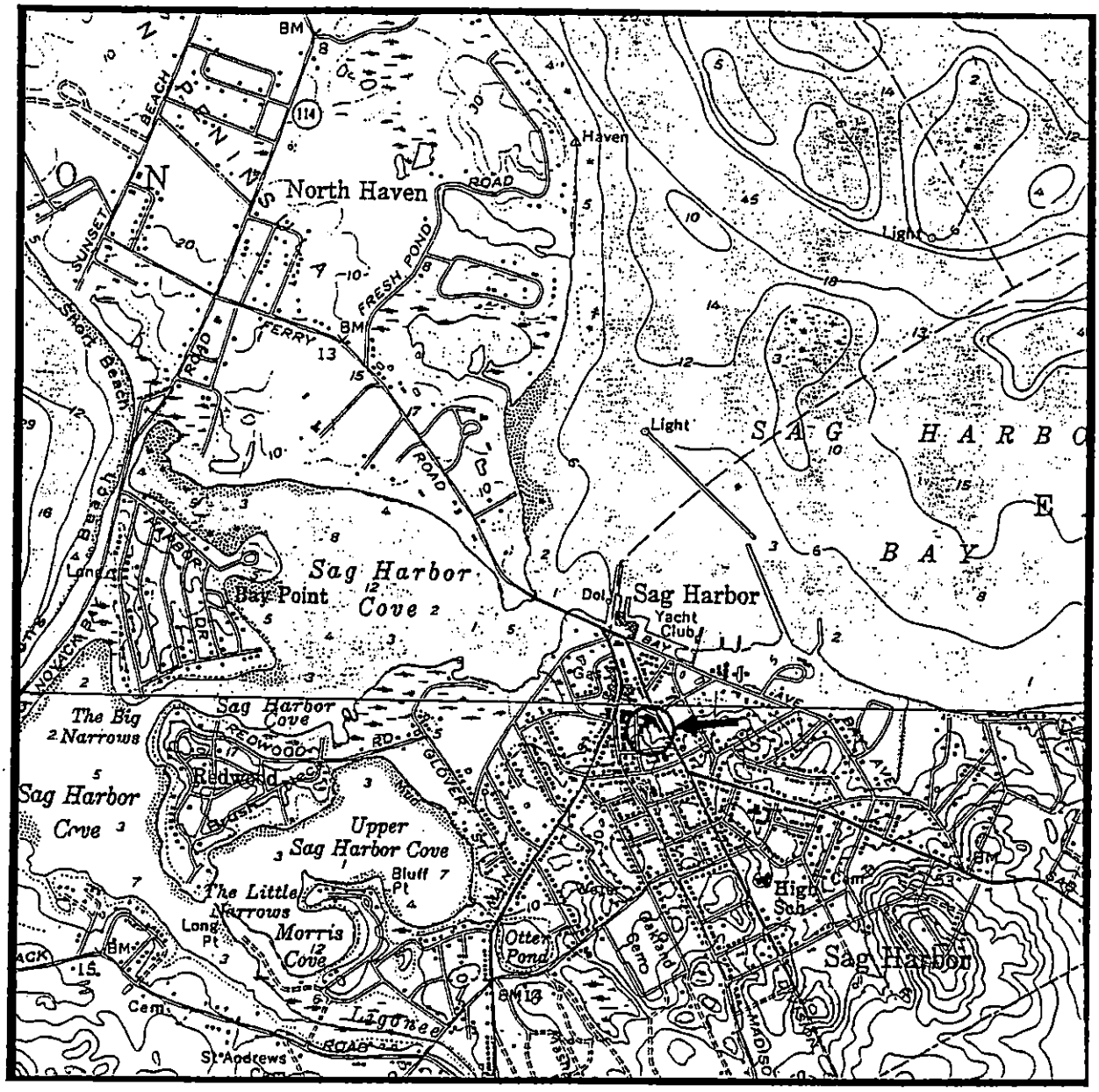
The Remedial Investigation consisted of implementing a site assessment program using both non-invasive and invasive assessment techniques. The following programs were completed:

- Collection of surficial soil samples to determine surficial soil quality at areas both on and off-site.
- Collection of air samples at areas throughout the building to determine air quality within the confines of the building.
- Collection of groundwater samples from existing monitoring wells.
- Collection of groundwater samples from temporary well points to determine downgradient groundwater quality.
- Preparation of a risk assessment to address the potential impact to future residents resulting from the presence of contaminants in soils and groundwater at the site.

1.4 Site Background

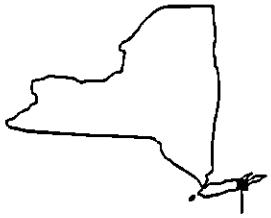
The Site is located in the Village of Sag Harbor in the Town of Southampton, Suffolk County, New York. The Village of Sag Harbor is located on the north shore of the south fork of Long Island. The Site is bordered by Division Street to the east, Washington Street to the north, Church Street to the west and Sage Street to the south. Division Street forms the boundary between the Village of Sag Harbor/Town of Southampton and the Town of East Hampton. A site location map and a site plan base map are presented as Figures 1 and 2, respectively.

The Site encompasses approximately 2.3 acres and at present contains one building. The building consists of an abandoned one to four story brick and timber structure located on the north end of the site. The building is irregular in shape and contains a number of courtyards referred to in this report as the interior courtyard, located in the central portion of the building; the SU-7 courtyard, which is located between the southwest side of the building and the western wing; the south courtyard, which is located directly south of the building; the northeastern courtyard, which fronts Division Street and Washington Street; the



SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE
SAG HARBOR, NEW YORK
7.5 MINUTE SERIES
1969/ REVISED 1979

N



QUADRANGLE LOCATION

SCALE 1:24,000

0 2,000 4,000

SCALE FEET

FLUOR DANIEL GTI

101-1 COLIN DRIVE
HOLBROOK, NEW YORK
(516) 472-4000

DESIGNED: CB	**SITE LOCATION**		
DETAILED: TRS	NAME: WATCH CASE FACTORY SITE		DRAWING DATE: 11/7/94
CHECKED: ST	LOCATION: 15 CHURCH STREET SAG HARBOR, NEW YORK		FIGURE: 1

northwestern courtyard, which fronts Church Street and Washington Street; and the western courtyard, which fronts Church Street. A brick furnace is located approximately 50 feet south of the building. Previous structures which existed on Site include:

- A water tower was previously located approximately 20 feet from the south side of the main building. Site photographs and the footing of the water tower document the tower's existence.
- Several buildings were previously located in the southwest corner of the Site including two residential houses located on the southern property boundary, an incinerator, and a coal bin.
- At least 2 additions to the building have been constructed in the past. These additions were subsequently demolished. The presence of pre-existing structures and extensions to the building are based on information gathered from former Bulova employees who worked at the site.

Figure 2 of the RI/FS Work Plan illustrates the locations of these former structures.

The majority of the open space on the property is either paved with bituminous asphalt or concrete. Approximately 25% of the Site is unpaved. Site access is restricted by chain link or iron fencing that completely surrounds the property.

The Site has been divided into twelve "geographic areas" to allow for a systematic presentation of the Site data. These twelve areas are referred to as the:

- Interior courtyard,
- Furnace area,
- Tunnel,
- Former water tank area,
- SU-7 courtyard,
- Southern parking lot,
- South courtyard,
- Building,
- Northeastern courtyard,
- Northwestern courtyard,
- Western courtyard,
- Groundwater.

These geographic areas are described in detail in Section 2.1 of the RI/FS Work Plan.

1.5 Site Operational History

The Site operational history provided herein is based in part upon information obtained through the Freedom of Information Law in the Suffolk County Department of Health Services (SCDHS) files and New York State Department of Environmental Conservation (NYSDEC) files. Additional information was obtained through environmental site assessments conducted by Chesner Engineering, P.C., review of Bulova files, review of historical air photos, review of Dorothy Ingersoll Zaykowski's book entitled, Sag Harbor, The Story of an American Beauty, and interviews with Bulova employees and personnel.

1.5.1 Site Ownership History

In 1850, a steam cotton mill was constructed on the property and subsequently destroyed by fire in 1879. In 1881, the property was sold to Fahy's Corporation and Alvin Silver Works and a portion of the present structure was erected and was operated as a watch making facility. In 1911, Alvin Silver Works moved out of the structure. In 1936, Bulova purchased the Site and operated it as a watch case factory until 1981. During World War II, portions of the facility were converted to a munitions plant. Highland Resources Corporation purchased the property on March 12, 1981 and in turn, Watch Case Factory Associates purchased the property on July 22, 1981. Watch Case Factory Associates currently retains ownership.

1.5.2 Physical Site Development

The Site was first developed in the late 1700's and early 1800's when the entire property was cut and filled. A stream which originally ran through the back of the Site and down Division Street was filled in with excavated material from the surrounding hills. Until 1850, a variety of residential structures were present on the Site. In 1850, a steam cotton mill was constructed on the property and occupied the entire block bound by Division Street, Sage Street, and Church Street. The mill was destroyed by fire in 1879 and the resultant rubble was spread over portions of the Site up to Madison Street.

The existing building currently on Site was built in 1881 to house the Fahy's Watch Case and Alvin Silver Works Factory. The building originally contained a blacksmith shop, boiler and engine rooms, and rooms for annealing and melting silver. Permanent extensions were added to the building between 1911 and 1920.

Prior to 1955, three structures were located in the area of the southern parking lot. These structures included two residential houses located along the southern property boundary and the "acid house". It is not known when these structures were built and demolished.

Based on a review of historical air photos, a building was under construction in the southwest corner of the southern parking lot in 1955. Prior to the construction of the building, this entire area was excavated to the present grade. The structure was completed by 1963 and torn down by 1969.

An additional building which extended from the southeast wing of the main building was located in the northeastern corner of the southern parking lot. The building was subsequently used to store Village of Sag Harbor vehicles. It is not known when this building was demolished.

Based on interviews with former employees of Bulova Corporation, a building was previously constructed off the southern side of the main building within the vicinity of the former water tank. The building was two stories high and abutted the existing building. The building was demolished after WWII.

The water tower formerly located approximately 20 feet off the south side of the main plant building was constructed between 1963 and 1969 and was torn down between 1978 and 1984.

A review of the 1955 aerial photo indicated that three transformers were located in the western courtyard. Between 1963 and 1969 the transformers were removed from their 1955 location and installed approximately 30 feet to the east, where they are presently located.

A total of two underground storage tanks (USTs) presently exist on Site. One tank is located in the interior courtyard and the other is located approximately 15 feet south of the building in the south courtyard. The tanks were used for the storage of fuel oil. Two USTs have been excavated and removed from the Site in February 1990. Those USTs were located in the western courtyard.

Based on a comparison of the 1955 aerial photo with the present day configuration of the Site, the footprint of the main plant building has not been altered since that date.

1.5.3 Site Activity History

Operational history prior to 1936, when the Site was operated as a textile mill and by Fahy's, is not available. However, typical textile operations (cotton processing) consists of scouring, bleaching, mercerizing, dyeing and printing operations. After 1936, the primary operations were those associated with the production of watch cases by Bulova.

Watch case manufacturing at Bulova consisted of several procedures. The procedures are subdivided into five main operations and six main support activities.

The five main operations consist of the following: press & form, machine cutting, soldering, polishing, and plating. In the initial operation the raw materials, which consisted of coils of metal alloy (and in some cases precious metals), were pressed and formed in molds. The second operation consisted of the cutting and machining of the pressed material to produce the specific design, engraving, etc. The third operation consisted of soldering the individual parts. The fourth operation consisted of polishing the individual parts, and the fifth operation consisted of plating the watch case.

A total of six main activities were necessary to support these operations. These support activities consisted of tooling (manufacture of tools, some of which were exported); cleaning (in almost all of the main process operations, intermediate cleaning steps, using various solvents, were required); wastewater treatment (used to precipitate solids and plating wastes); scrap recycling and disposal (dusts, sweepings and sludges were reportedly collected and dried in a furnace, which is still located approximately 50 feet to the south of the existing building); chemical storage (solvents, acids, bases, lubricants, etc., were all stored at the facility); and oil storage (to support heating and drying operations).

Solvents, acids, bases, and lubricants were stored at several locations. Based on a review of SCDHS

inspection reports, chemical storage was primarily located in the interior courtyard and a room adjoining the courtyard. All drummed wastes were removed from the site prior to 1981.

Manufacturing operations at the site ceased in April, 1977. No further industrial effluents were discharged after this date.

1.6 Previous Investigations

There have been several investigations and data gathering events at the site in the past. The following is a chronological summary of each investigation and data gathering event:

- September 1987 Chesner Engineering performed an environmental survey. Soil samples collected are labeled as B-1, B-2, B-3, B-4, B-5, S-1, S-2, S-3, and soil vapor points SVP-1 through SVP-11.
- May 8-9, 1989 Chesner Engineering performed additional soil vapor survey. These points are labeled as SVP-12 through SVP-26.
- June 28-29, July 14, 1989 Chesner Engineering installed and sampled four monitoring wells. These wells are presently labeled as MW-6 through MW-9.
- February 1991 Asbestos survey of building interior.
- June 24-28, 1991 Groundwater Technology installed five monitoring wells. These wells are presently labeled as MW-1 through MW-5.
- June 24-28, 1991 Groundwater Technology collected soil samples during installation of monitoring wells MW-1 through MW-5.
- July 18, July 23, 1991 Groundwater Technology sampled the five newly installed wells.
- November 25, 1991 Groundwater Technology sampled wells MW-2 through MW-9.
- March 20, 1992 Groundwater Technology sampled wells MW-2 through MW-9.
- May 19-20, 1993 Groundwater Technology installed SP-VP-1, VMP's-1 and 2, soil borings SB-1, SB-2, and SB-3, and surface soil sampling SS-1 through SS-6.
- June 16, 1993 Groundwater Technology sampled wells MW-2, MW-3 and MW-5 through MW-9.
- June 25, 1993 Groundwater Technology collected polychlorinated biphenyl (PCB) wipe samples at former transformer pad. These samples are labeled as PCB-1 and PCB-2.
- September 13-14, 1993 Groundwater Technology collected preliminary samples from drywells, storm water catch basins, sumps, and floor drains. These are presently labeled as IW-1 through IW-10, SU-1 through SU-9, and FD-1 through FD-5.

- October 7, 1993 Groundwater Technology collected building and interior courtyard soil samples. These samples are labeled as PIT-1, HL-1 through HL-5, CR-1, CR-2 and PWV.
- October 25 through November 4, 1993 Groundwater Technology performed initial cleanout of drywells, catch basins, sumps, and floor drains; collected endpoint samples.
- November 11-19, 1993 Groundwater Technology installed SP-VP-2 through SP-VP-6, MW-10, MW-11, and MW-12.
- November 29, 1993 Groundwater Technology sampled wells MW-4 and MW-10 through MW-12.
- April 11-13, 1994 Groundwater Technology performed second cleanout of select drywells, catch basins, sumps, and floor drains; collected endpoint samples.
- April 12, 1994 Groundwater Technology collected soil sample from base of tunnel located approximately 6 feet inside entrance to tunnel. Sample labeled as Tunnel.
- November 14-17, 1994 Groundwater Technology performed a soil gas survey. Soil gas points SG-1 through SG-25 were installed.
- November 14-17, 30, 1994 Groundwater Technology collected four shallow soil samples around the furnace, samples labeled as SB-2A through SB-2D; eight soil samples (8-10 ft. below grade (b.g.)), samples labeled as SG-3, SG-5, SG-10, SG-14, SG-18, SG-21, SG-22, and SG-24:8-10'; six groundwater samples labeled as SG-3, SG-10, SG-14, SG-18, SG-21 and SG-22:H2O; two background soil samples (5-7 ft. b.g.), samples labeled as BKGND-1 and BKGND-2; two samples adjacent to SU-5 (10-12 and 12-14 ft. b.g.), samples labeled as SU-5:10-12 and SU-5:12-14'; and two samples adjacent to IW-7 (10-12, 12-14 ft. b.g.), samples labeled as IW-7:10-12' and IW-7:12-14'.
- November 30, 1994 Groundwater Technology collected two samples from base of tunnel, samples labeled as Tunnel-1 and Tunnel-2; and two samples in eastern wing of building near SU-5 (3 ft. b.g.), samples labeled as Sample-1 and Sample-2.
- December 2-8, 1994 Groundwater Technology installed monitoring wells MW-13 through MW-20.
- December 20-22, 1994 Groundwater Technology sampled wells MW-13 and MW-15 through MW-20.
- January 12-13, 1995 Groundwater Technology performed third cleanout of select drywells, catch basins, sumps, and floor drains, collected endpoint samples.
- Monthly, quarterly, semi-annual, and annual sampling of select monitoring wells as per IRM Work Plan.

Complete descriptions of the above mentioned investigations are detailed in Section 2.3 of the RI/FS Work Plan. Upon completion of the RI/FS Work Plan, and prior to the implementation of the RI/FS field effort, additional field work was performed. This additional field work consisted of the installation of one monitoring well, labeled as MW-21. The well was installed to determine groundwater quality at the area of injection well IW-3. On January 12, 1995, the injection well was excavated and upon excavation, discolored soils were observed at the

water table surface. In order to determine if the injection well had impacted groundwater, the well was installed. The well was sampled on May 5, 1995, and the results are discussed in Section 3.3.

1.7 Remedial Investigation Field Work Preparation

In order to implement the remedial investigation, Groundwater Technology performed several preparatory tasks. These tasks included the procurement of subcontractors (geoprobe services, data validation, laboratory) and the authorization and receipt of permits from the Village of Sag Harbor.

Based on relevant experience, commercial considerations (contracts and pricing), and general contractor qualifications, Groundwater Technology selected subcontractors for each of the listed functions as summarized in the following table.

Subcontractor Selection	
Work Scope	Contractor
Geoprobe® Program	Zebra Environmental Corp. Inwood, New York
Data Validation	Data Validation Services North Creek, New York
Laboratory Services - Air	Quanterra Environmental Services Knoxville, Tennessee
Laboratory Services - Soil and Groundwater	Laboratory Resources, Inc. Teterboro, New Jersey

Due to the off-site locations of Geoprobe borings, Groundwater Technology contacted the Village of Sag Harbor to obtain the necessary permits. These permits included a total of five road opening permits and one sidewalk encumbrance permit. Copies of the permits are on file in Groundwater Technology's office in Holbrook, New York.

2.0 REMEDIAL INVESTIGATION FIELD METHODS

This section describes the field procedures implemented as part of the Remedial Investigation scope of work presented in Section 3.0 of the NYSDEC approved Draft Remedial Investigation Feasibility Study Workplan dated May 31, 1995. The results of the field investigation are presented in Section 3.0 of this report. The following field procedures were performed as part of the remedial investigation:

- surficial soil sampling and analysis;
- air sampling and analysis;
- groundwater sampling and analysis of monitoring wells;
- groundwater sampling and analysis of geoprobe points;
- health and safety monitoring; and
- quality assurance and quality control (QA/QC) inspections.

2.1 Surficial Soil Sampling and Analysis

Fifteen surficial soil samples were collected from October 23-24, 1995 as part of the remedial investigation. Twelve of the samples were collected at areas throughout the site, and three samples were collected at off-site locations. The soil samples were collected to assess surficial soil quality at areas on and off site, and the results were utilized and incorporated as part of a risk assessment. The locations of the soil samples, (RA-1 through RA-15) are illustrated on Figure 3. The soil collection depth, sample analytical methods employed, and purpose of each soil sample is outlined in Table 1. All laboratory and analytical procedures followed EPA methodologies with New York State Analytical Services Protocol (NYSASP), Category B reporting requirements.

2.1.1 Soil Sample Collection

Soil samples were collected at depths ranging from either 0-3" or 3-6" below grade. The determination of the start of the 0 foot interval occurred after the top layer of debris (asphalt, concrete, gravel, grass, root zone, etc.) was removed. Stainless steel trowels and mixing bowls were utilized as part of the sample collection process. Upon removal of the overlying layer and collection of the soil with the stainless steel trowel, the soil was placed in a stainless steel mixing bowl. The sample bottle utilized for volatile organic analysis was filled and an additional bottle was filled for headspace analysis. Headspace analysis was performed utilizing a photo-ionization detector (PID). The remaining soil was homogenized and placed in the sample bottles utilized for the remaining analyses. The soil samples were stored in an ice-filled insulated cooler until shipment to Laboratory Resources, Inc. for analysis.

2.1.2 Equipment Decontamination

New stainless steel trowels and mixing bowls were purchased prior to mobilization to the field. Immediately prior to sample collection, the equipment used in procuring a sample was scrubbed with an alconox and water solution followed by a clean potable water rinse. The equipment was then rinsed thoroughly with distilled water and allowed to air dry. All water generated from the decontamination process was disposed of on site as per NYSDEC Division of Water Technical and Operational Guidance Series #1.6.1, dated April 1, 1988.

2.2 Air Sampling and Analysis

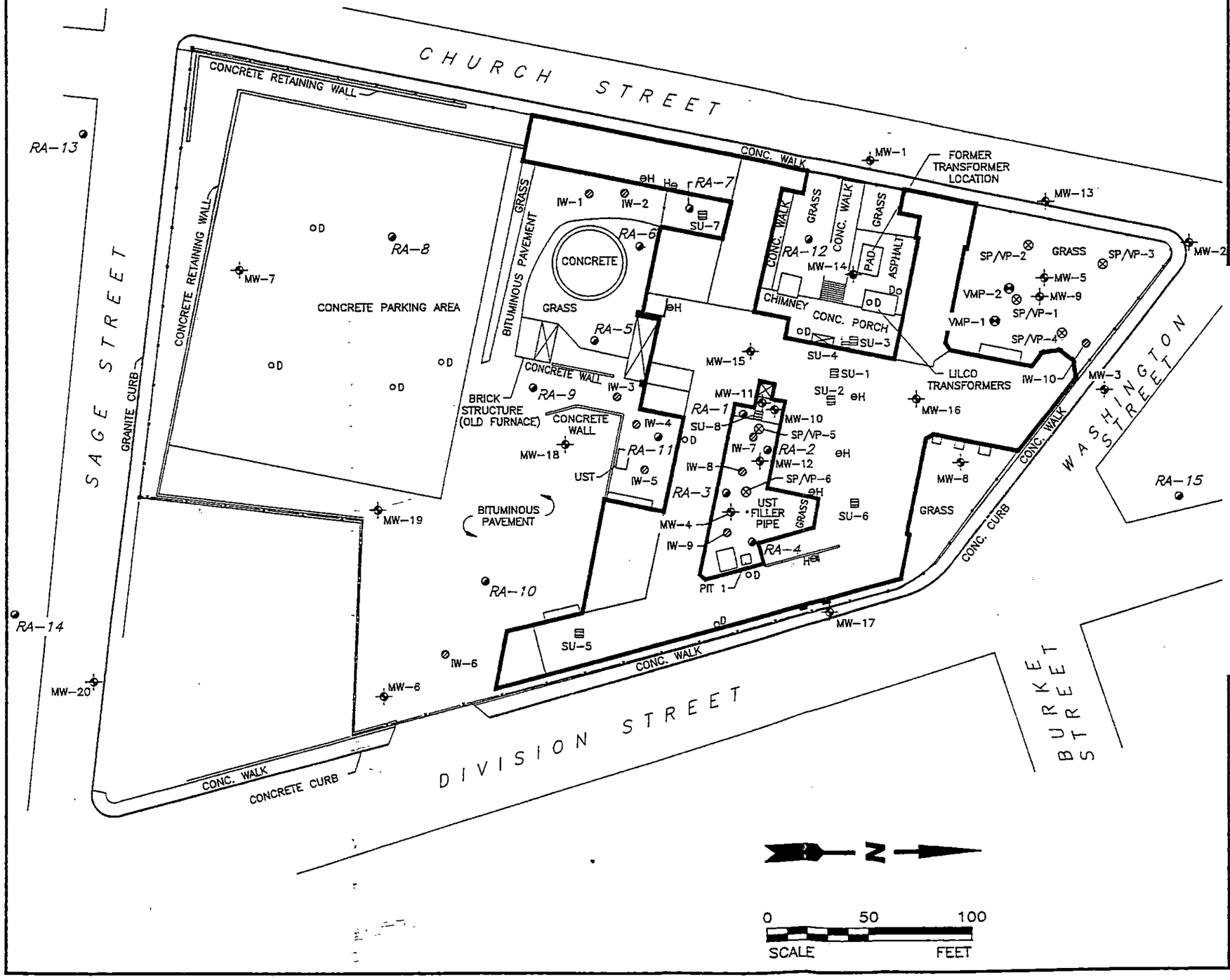
In order to establish the air quality within the building interior, an air sampling program was designed. The program consisted of the collection of time composite air samples using SUMMA canisters for analysis of VOCs by EPA Method TO-14. The SUMMA canisters are 6-liter, 9-inch diameter stainless steel spheres which are passivated and pre-evacuated by the laboratory to a negative pressure of 30 p.s.i. The SUMMA canisters, coupled with air flow regulators, allowed a pre-determined volume of air to be drawn into the canister at a pre-set flow rate over a 24-hour time period.

Approximately five days prior to collecting the air samples, all floor drains, (FD-1 through FD-5) and sump SU-5 were backfilled with clean sand and capped with concrete. Sumps SU-1, SU-2, SU-3, SU-4, and SU-6, were backfilled and capped in 1994. In addition, any passages which would allow outside air to migrate into the building were sealed. This included covering the doorway which connects the interior courtyard with the building interior with plastic sheeting, covering all broken windows along the eastern wing of the building with plastic sheeting, and ensuring all doors were closed and secured. In addition, the IRM sparge/vent remedial system was shut off one week prior to collection of the air samples.

A total of four air samples were collected from October 23-24, 1995, from the following rooms:

- The boiler room,
- The eastern wing of the building, -SU-5
- The main hallway located west of the interior courtyard, and -SU-1
- The southern parking lot.

Upon collection of the air samples, the canisters were shipped to Quanterra Environmental Services for analysis of volatile organic compounds by EPA TO-14. It should be noted that the outside temperature during the sampling event was 68 degrees as recorded in the Quality Assurance Field Audit (Appendix C). This is important to note to confirm that the temperature was sufficiently high enough to simulate atmospheric conditions during residential occupation.



LEGEND

- MONITORING WELL
- COMBINED SVE/AIR SPARGING POINT
- SURFICIAL SOIL SAMPLE
- INJECTION WELL
- CHAIN LINK FENCE
- IRON FENCE
- SUMP
- DRAIN
- HOLE IN FLOOR
- UST UNDERGROUND STORAGE TANK

SAMPLING CRITERIA

SAMPLE ID	VOC's	SVOC's	PEST/PCB's	METALS
RA-1	X	X	X	X
RA-2	X	X	X	X
RA-3	X	X	X	X
RA-4	X	X	X	X
RA-5	X	X		X
RA-6	X	X	X	X
RA-7	X	X	X	X
RA-8	X	X	X	X
RA-9	X	X	X	X
RA-10	X	X	X	X
RA-11	X	X	X	X
RA-12	X	X		X
RA-13	X	X	X	X
RA-14	X	X	X	X
RA-15	X	X	X	X

FLUOR DANIEL GTI
101-1 COLIN DRIVE
HOLBROOK, N.Y. 11741
(516) 472-4000

REV. NO.:	DRAWING DATE:	ACAD FILE:
2	1/18/96	7013SSSL

SURFICIAL SOIL SAMPLE LOCATIONS

CLIENT: WATCH CASE FACTORY SITE		PM: AT
LOCATION: 15 CHURCH STREET SAG HARBOR, NEW YORK		PE/RG:
DESIGNED: CB	DETAILED: TS	PROJECT NO.: 01113-7013
		FIGURE: 3

2.3 Groundwater Sampling and Analysis of Monitoring Wells

In order to obtain a better understanding of groundwater quality at the site, monitoring wells MW-13 and MW-14 were sampled and analyzed for VOCs, SVOCs, and RCRA metals by EPA Methods 8260, 8270, and 6010/7000, respectively. Sampling of the wells occurred on October 25, 1995. In addition, monitoring well MW-21 was previously sampled prior to implementation of the RI/FS and analyzed for VOCs and SVOCs by EPA Methods 8260 and 8270, respectively.

2.3.1 Monitoring Well Purging

Before groundwater sample collection, approximately five standing water well volumes were evacuated utilizing a submersible pump and new polyethylene tubing. The purged water was routinely measured for pH, conductivity, and turbidity. Upon stabilization of the above parameters, and when the turbidity was less than 50 NTU's, the groundwater sample was collected.

2.3.2 Groundwater Sample Collection

After purging the proper amount of water from each well, water samples were collected for laboratory analysis using disposable polyethylene bailers and monofilament bailing line. Latex rubber gloves were worn during all sample collection procedures. Water samples were transferred directly from the bailer into properly prepared quality sample containers and placed on ice until delivery to Laboratory Resources, Inc. for analysis. Chain-of-custody procedures were employed during sample collection, transport, and analysis.

2.3.3 Equipment Decontamination

The submersible pump was scrubbed with an alconox and water solution followed by a clean potable water rinse. The equipment was then rinsed thoroughly with distilled water and allowed to air dry. All water generated as a result of the decontamination process was disposed of on site as per NYSDEC Division of Water Technical and Operational Guidance Series #1.6.1, dated April 1, 1988.

New polyethylene tubing was utilized during purging procedures of each well. New disposable polyethylene bailers were utilized during sample collection.

2.4 Groundwater Sampling and Analysis of Geoprobe Points

In order to obtain a better understanding of the groundwater quality downgradient of the site, a total of six geoprobe points were installed. Soil samples were collected from each point and field screened using a PID for the presence of VOCs. Groundwater samples were collected from each point and submitted for laboratory analysis of VOCs by EPA Method 8260. The locations of the geoprobe points are illustrated on Figure 4. The laboratory results of the groundwater samples, coupled with existing data, were utilized to model the fate and transport of the downgradient plume and in the preparation of a risk assessment.

2.4.1 Sampling Equipment

All samples, soil and groundwater, were collected using a truck-mounted Geoprobe Systems® subsurface sampling unit which hydraulically drove steel sampling rods to the desired depth. Soil samples were collected in 48-inch long, 2-inch diameter clean acetate sample liners placed inside a stainless steel macro-core sampler. Groundwater samples were collected from either a stainless steel screen point sampler or a mill slot stainless steel well point.

2.4.2 Sampling Procedures

The Geoprobe Systems® macro-core sampler was hydraulically driven in the subsurface until groundwater was encountered, a depth which ranged from 2-12 feet below grade. A clean acetate sample liner was placed inside the macro-core sampler prior to driving the core. Upon driving the core to the desired depth, the macro-core was extracted from the borehole, the liner removed, and the core sample of soil from that depth was obtained. Soil samples collected from each boring were field screened for total VOCs using a PID.

Following the collection of the soil samples for a given boring, a groundwater sample was collected. All groundwater samples were collected at or near the water table surface. In order to determine groundwater quality within a deeper portion of the aquifer, two of the borings were installed deeper and two additional groundwater samples were collected. These samples were collected from a depth of 25-27 feet below grade and are labeled as GP-2D and GP-3D.

All groundwater samples were collected using either a mill slot stainless steel well point or a stainless steel screen point sampler. Groundwater was brought to the surface through 3/8-inch diameter polyethylene tubing and a peristaltic pump. Approximately two to four well volumes were purged prior to sample collection. The samples were placed on ice until delivery to Laboratory Resources, Inc. for analysis of VOCs by EPA Method 8260. Chain-of-Custody procedures were employed during sample collection, transport, and analysis. Upon collection of the sample and extraction of the sampling rods, each borehole was grouted to grade with a bentonite-cement mixture and capped with asphalt or concrete.

2.4.3 Equipment Decontamination

All sampling rods, stainless steel screen point samplers, and mill slot stainless steel well points were scrubbed with an alconox and water solution followed by a clean potable water rinse. The equipment was then rinsed thoroughly with distilled water and allowed to air dry. All water generated as a result of the decontamination process was disposed of on site as per NYSDEC Division of Water Technical and Operational Guidance Series #1.6.1, dated April 1, 1988.

A new acetate sample liner was placed in the macro-core samplers prior to collecting the soil samples. New polyethylene tubing was utilized between each groundwater sampling location.

2.5 Health and Safety Monitoring

Air quality monitoring was conducted for health and safety purposes during on and off site activities. Air monitoring consisted of real time VOC monitoring during geoprobe point installation and sampling as well as surficial soil sampling. VOCs were not detected in the ambient air during geoprobe and surficial soil activities. A community air monitoring plan detailing air monitoring procedures is included in Appendix E of the Work Plan.

2.6 Quality Assurance/Quality Control Inspections

2.6.1 Field Activities QA/QC Inspections

Groundwater Technology personnel conducted several QA/QC field inspections during implementation of the remedial investigation as required by the QAPP. Surficial soil sampling and geoprobe boring installations were being performed on the days of the inspection. The purpose of the inspections were to verify that the sampling activities were being conducted in accordance with the requirements of the approved Work Plan. Specific issues investigated included instrument calibration, proper sampling techniques, verification that the correct number of QA/QC equipment rinsate, replicate, field, and trip blank samples were collected, and conformance with chain-of-custody procedures. Copies of the field audit reports are provided in Appendix C.

2.6.2 Field QA/QC Sampling

Field sampling for QA/QC was conducted in accordance with the QAPP. Duplicate soil and groundwater samples, field blanks, rinsate blanks, and trip blanks were collected at the minimum frequencies as outlined in the QAPP. Together these samples determined the precision, accuracy, and completeness of laboratory data, sampling techniques, and decontamination procedures employed during the completion of the program.

3.0 REMEDIAL INVESTIGATION RESULTS

3.1 Surficial Soil Sampling Results

This section details the surficial soil sampling results in each geographic area as outlined in the Work Plan.

3.1.1 Interior Courtyard

A total of four surficial soil samples (RA-1 through RA-4) were collected in the interior courtyard. Each sample was analyzed for the parameters specified in Table 1. As per a mutual agreement between the New York State Department of Health (NYSDOH) and the NYSDEC, the samples were collected from the following intervals: RA-1 was collected from a depth of 0-3" below grade and RA-2 through RA-4 were collected from 3-6" below grade. Each sample was field screened with a PID. PID results ranged from 1 part per million (ppm) in RA-1, RA-2, and RA-3, to 9 ppm in RA-4.

The following summarizes the results of the laboratory analyses:

- VOCs were detected in RA-1 through RA-4 at concentrations of 22 parts per billion (ppb), 12 ppb, not detected (ND), and 4 ppb, respectively. Trichloroethene was the primary compound detected;
- Semi-volatile organic compounds (SVOCs) were detected in RA-1 through RA-4 at concentrations of 3,640 ppb, 33,020 ppb, 26,808 ppb, and 3,970 ppb, respectively;
- Concentrations of RCRA Metals (excluding arsenic) exceeded the background concentrations in all four samples. The background concentrations were collected upgradient of the site and are labeled as RA-13 and RA-14;
- PCBs (Aroclor-1254) were detected in RA-1 through RA-4 at concentrations of 530 ppb, 450 ppb, 660 ppb, and 960 ppb, respectively. All other PCBs were below the laboratory detection limit; and
- One pesticide, toxaphene, was detected in RA-2 at a concentration of 12 ppb.

VOCs were below the recommended soil cleanup objectives (RSCOs) as stated in the NYSDEC Division Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels dated January 24, 1994. Several SVOCs, including benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene exceeded the RSCOs as stated in the TAGM in one or more samples. Pesticides and PCBs were below the RSCOs as stated in the TAGM. A summary of the soil analytical results is presented in Table 2.

3.1.2 Furnace Area

One surficial soil sample (RA-5) was collected in the furnace area and analyzed for the parameters specified in Table 1. The sample was collected from a depth of 0-3" below grade. A PID result of 5 ppm was obtained during field screening procedures.

The following summarizes the results of the laboratory analyses:

- VOCs were below the laboratory detection limit for those compounds analyzed;
- SVOCs were detected at a concentration of 2,872 ppb;
- Cadmium exceeded the background concentrations obtained at RA-13 and RA-14; and
- The sample was not analyzed for pesticides/PCBs due to previously collected samples analyzed for these parameters.

VOCs were below the RSCOs as stated in the TAGM. Three SVOCs, phenol, benzo(a)pyrene, and dibenz(a,h)anthracene were above the RSCOs as stated in the TAGM. Previous samples collected for analysis of PCBs ranged from ND to 4,300 ppb (Aroclor-1254). The soils that contained PCBs above the RSCOs were previously excavated. A summary of the soil analytical results is presented in Table 2.

3.1.3 Former Water Tank Area

One surficial soil sample (RA-6) was collected in the former water tank area and analyzed for the parameters specified in Table 1. The sample was collected from a depth of 0-3" below grade. A PID result of 4 ppm was obtained during field screening procedures.

The following summarizes the results of the laboratory analyses:

- VOCs were detected at a concentration of 4 ppb. Meta and para-xylenes and naphthalene were the primary compounds detected;
- SVOCs were detected at a concentration of 1,669 ppb;
- Cadmium exceeded the background concentrations obtained in RA-13 and RA-14; and
- Pesticides/PCBs were below the laboratory detection limit.

VOCs, SVOCs, and Pesticides/PCBs were below the RSCOs as stated in the TAGM with the exception of the SVOC benzo(a)pyrene. A summary of the soil analytical results is presented in Table 2.

3.1.4 SU-7 Courtyard

One surficial soil sample (RA-7) was collected in the SU-7 courtyard and analyzed for the parameters specified in Table 1. The sample was collected from a depth of 0-3" below grade. A PID result of 1 ppm was obtained during field screening procedures.

The following summarizes the results of the laboratory analyses:

- VOCs were detected at a concentration of 165 ppb, with Trichloroethene and toluene as the primary compounds detected;
- SVOCs were detected at a concentration of 28,380 ppb;
- Arsenic, barium, cadmium, silver, and selenium exceeded the background concentrations obtained in RA-13 and RA-14; and
- Pesticides/PCBs were below the laboratory detection limit.

VOCs were below the RSCOs as stated in the TAGM. Five SVOCs, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene were above the RSCOs as stated in the TAGM. Pesticides/PCBs were below the RSCOs as stated in the TAGM. A summary of the soil analytical results is presented in Table 2.

3.1.5 Southern Parking Lot

A total of three surficial soil samples (RA-8 through RA-10) were collected in the southern parking lot. Each sample was analyzed for the parameters specified in Table 1. RA-9 was collected from a depth of 0-3" below grade; RA-8 and RA-10 were collected from 3-6" below grade. Each sample was field screened with a PID. PID results ranged from 0 ppm in RA-9 and RA-10 to 4 ppm in RA-8.

The following summarizes the results of the laboratory analyses:

- VOCs were detected in RA-8 through RA-10 at concentrations of 70 ppb, ND, and 3 ppb, respectively. Trichloroethene, benzene, toluene, and naphthalene were the primary compounds detected;
- SVOCs were detected in RA-8 through RA-10 at concentrations of ND, 422 ppb, and 49 ppb, respectively;
- Concentrations of arsenic, barium, cadmium, and selenium in RA-9 exceeded the background concentrations collected at RA-13 and RA-14; RA-8 and RA-10 were within the background concentrations; and
- Pesticides/PCBs were below the laboratory detection limit.

VOCs, SVOCs and Pesticides/PCBs were below the RSCOs as stated in the TAGM. A summary of the soil analytical results is presented in Table 2.

3.1.6 South Courtyard

One surficial soil sample (RA-11) was collected in the south courtyard and analyzed for the parameters specified in Table 1. The sample was collected from a depth of 0-3" below grade. A PID result of 0 ppm was obtained during field screening procedures.

The following summarizes the results of the laboratory analyses:

- VOCs were detected at a concentration of 2 ppb, with Naphthalene as the only compound detected;
- SVOCs were detected at a concentration of 4,739 ppb;
- Cadmium and silver exceeded the background concentrations obtained in RA-13 and RA-14; and
- PCBs (Aroclor-1254) were detected at a concentration of 130 ppb. Pesticides were below the laboratory detection limit.

VOCs were below the RSCOs as stated in the TAGM. Three SVOCs, benzo(a)anthracene, chrysene, and benzo(a)pyrene were above the RSCOs as stated in the TAGM. Pesticides/PCBs were below the RSCOs as stated in the TAGM. A summary of the soil analytical results is presented in Table 2.

3.1.7 Western Courtyard

One surficial soil sample (RA-12) was collected in the western courtyard and analyzed for the parameters specified in Table 1. The sample was collected from a depth of 0-3" below grade. A PID result of 0 ppm was obtained during field screening procedures.

The following summarizes the results of the laboratory analyses:

- VOCs were below the laboratory detection limit for those compounds analyzed;
- SVOCs were below the laboratory detection limit for those compounds analyzed;
- RCRA Metals were below the background concentrations obtained in RA-13 and RA-14; and
- The sample was not analyzed for Pesticides/PCBs due to previously collected samples analyzed for these parameters.

VOCs and SVOCs were below the RSCOs as stated in the TAGM. PCBs were detected in previously collected samples at concentrations of 76 ppb (Aroclor-1254) and 54 ppb and 75 ppb (Aroclor-1260). Several Pesticides were detected in these samples at concentrations ranging from 2 ppb to 27 ppb. These concentrations of Pesticides/PCBs are below the RSCOs as stated in the TAGM. A summary of the soil analytical results is presented in Table 2.

3.1.8 Off-Site Soil Quality

A total of three surficial soil samples (RA-13, RA-14, and RA-15) were collected at locations off-site. The samples were analyzed for the parameters specified in Table 1. The samples were collected from a depth of 0-3" below grade. Each sample was field screened with a PID. PID results ranged from 0 ppm in RA-13 and RA-14, to 8 ppm in RA-15.

These samples were collected to determine background surficial soil quality at areas off-site. The samples were used as background results and served as a baseline for comparison with samples RA-1 through RA-12.

The following summarizes the results of the laboratory analyses:

- VOCs were detected in samples RA-13, RA-14, and RA-15 at concentrations of ND, 3 ppb, and ND, respectively, with Naphthalene as the only compound detected in RA-14;
- SVOCs were detected at concentrations of 1,340 ppb, 1,583 ppb, and 752 ppb, respectively;
- With the exception of arsenic and chromium in RA-14, and mercury in RA-15, all metals were below the RSCOs as stated in the TAGM; and
- Several pesticides were detected in the samples collected at RA-13, RA-14, and RA-15; PCBs were below the laboratory detection limit.

VOCs, SVOCs, and Pesticides/PCBs were below the RSCOs as stated in the TAGM with the exception of the SVOC benzo(a)pyrene in RA-13 and RA-14, and the Pesticide dieldrin in RA-14. A summary of the soil analytical results is presented in Table 2.

3.2 Air Sampling Results

All air samples were below the laboratory detection limit with the exception of the sample collected in the eastern wing of the building adjacent to SU-5. This sample contained a concentration of 2.4 ppb (0.0024 ppm) of trichloroethene (TCE). The American Conference of Government Industrial Hygienists (ACGIH) recommends a 10 hour time-weighted average of 25 ppm for occupational exposure (NIOSH Pocket Guide to Chemical Hazardous, September 1985). The Occupational Safety Health Administration (OSHA) permissible exposure limit (PEL) for trichloroethene is 50 ppm (270mg/m^3) which is well above concentration detected in indoor air (0.0024 ppm). However, OSHA PELs are not protective of residents in a building and are based on a healthy worker population. As another comparison, a background concentration of trichloroethene in indoor air was taken from an analysis of the National Ambient Volatile Organic Compounds Data Base (Shah, 1988). This data base was chosen due to the large number of samples (~2,000 per chemical). The background indoor air concentration for TCE ranges between 0.005 to 0.007 ppm, which represents the average and upper quartile 75% values, respectively, for indoor air. This shows that the TCE concentration detected in indoor air is below both background and the NIOSH/OSHA limits. (Shah, J.J. and H.B. Singh, 1988.

Distribution of Volatile Organic Chemicals in Outdoor and Indoor Air; A National VOCs Data Base. Environ. Sci Technol., Vol. 22, No. 12 1988). A summary of the analytical results is presented in Table 3. Since no indoor air standards currently exist, the presence of trichloroethene in indoor air was evaluated as part of the risk assessment. See Appendix E.

3.3 Groundwater Sampling Results From Monitoring Wells

Groundwater analytical results from monitoring wells MW-13 and MW-14 exhibited total VOC concentrations of 89 and 2,360 ppb, respectively. Compounds detected consisted mainly of benzene, toluene, ethylbenzene, and xylenes (BTEX), and several other petroleum hydrocarbons. SVOCs were detected at concentrations of 18.3 and 353.7 ppb, respectively. Naphthalene was the primary compound detected in MW-14. RCRA Metals were all below the laboratory detection limit with the exception of barium. This compound was detected at concentrations of 7.2 and 19 ppb, respectively. The Class GA groundwater drinking standard for barium is 1000 ppb. Silver was detected in MW-13 at a concentration of 33,000 ppb, however this data appears to be erroneously reported. One replicate sample was collected from this well during this sampling event and concentrations of silver were below the laboratory detection limit. Historical concentrations of silver throughout the site range from ND to 924 ppb.

Groundwater analytical results from monitoring well MW-21 exhibited a total VOC concentration of 15 ppb. SVOCs were detected at a concentration of 2 ppb. The boring log for MW-21 is provided in Appendix B.

A summary of the groundwater analytical results is presented in Table 4. This table additionally contains the historical groundwater sampling data from all monitoring wells located on and off-site. Comparisons to the water quality standards are presented in the risk assessment report located in Appendix

3.4 Groundwater Sampling Results from Geoprobe Points

A total of six geoprobe borings were installed from October 25-26, 1995. Boring logs including soil lithology and PID results obtained during field screening are included in Appendix B. PID results ranged from 0 to 42 ppm.

Groundwater samples were analyzed for VOCs by EPA Method 8260. Groundwater analytical results ranged from non-detect in GP-4 and GP-5 to 29 ppb in GP-2D. Trichloroethene was the sole compound detected in this sample. BTEX and naphthalene were the primary compounds detected in the remaining samples. All results were below the Class GA groundwater drinking standards or guidance values as stated in the NYSDEC Division of Water Technical and Operational Guidance Series: Ambient Water Quality Standards and Guidance Values dated October 1993 with the following exceptions. Methylene chloride was detected above the groundwater drinking standard in the samples collected from GP-1, GP-5, and GP-6, trichloroethene was detected above the groundwater drinking standard in the sample collected from GP-2D, and benzene was detected above the groundwater drinking standard in the sample collected from GP-3. However, the groundwater at and downgradient of the site is not used for potable purposes. In addition, it should be noted

that methylene chloride was detected in the laboratory method blanks and therefore is the likely result of laboratory instrument contamination. A summary of the analytical data is presented in Table 5.

3.5 Analytical Data Validation

Data validation was performed for organic and inorganic analytical results on all surficial soil samples collected to define data quality with respect to stated project goals and requirements. All data validation was performed with guidance from the most current editions of the USEPA National Guidelines for Data Review and Region II Validation SOPs HW-2 and HW-6. Ms. Judy Harry of Data Validation Services performed the data validation.

The analytical data obtained for the surficial soil samples were found to be valid and usable with the exception of several VOCs in RA-9. During the analyses of this sample, low responses of all four internal standards were produced. Thus, the last thirty compounds on the VOC sample report, with the exception of benzene and toluene, were flagged as unusable.

All items showing deficiencies are discussed in the data validation report. The data validation report is included in Appendix D.

As discussed in section 3.3, Silver was detected in MW-13, but this data appears to be erroneously reported. One replicate sample was collected from this well during this sampling event and concentrations of silver were below the laboratory detection limit. Historical concentrations of silver throughout the site range from ND to 924 ppb.

Methylene chloride was detected in the groundwater samples from GP-1, GP-2, GP-2D, GP-3, GP-3D, GP-5 and GP-6. However, Methylene chloride was detected in the laboratory method blanks and therefore is likely a result of laboratory contamination.

4.0 RISK ASSESSMENT

The risk assessment evaluates potential human health and environmental risks associated with chemicals of concern present in the soil, groundwater and indoor air. This risk assessment was conducted according to the U.S. Environmental Protection Agency's (USEPA) *Risk Assessment Guidance for Superfund: Volume 1 - Human Health Evaluation Manual (Part A)* (1989) and the New York State Department of Environmental Conservation's (NYSDEC) *Fish and Wildlife Impact Analysis for Inactive Hazardous Wastes Sites* (NYSDEC, 1991). The methodologies in this risk assessment are consistent with those presented in the Work Plan (Groundwater Technology, 1995) which was approved by NYSDEC, and also follows recommendations provided by Vimal Minocha, Site Manager with NYSDEC.

4.1 Objective

The purpose of the risk assessment was to determine if concentrations present in the soil, groundwater or indoor air present a risk of harm to human health or the fish and wildlife resources in the surrounding area.

4.2 Regulatory Overview

This risk assessment considers NYSDEC's default cleanup objectives for soil present in the *Technical and Administrative Guidance Memorandum [TAGM]: Determination of Soil Cleanup Objectives and Cleanup Levels* (NYSDEC, 1994), and NYSDEC's default groundwater standards presented in *Water Quality Regulations, Surface Water and Groundwater Classification and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X, Parts 700-705* (NYSDEC, 1992). The bases of these standards are provided below:

Soil

- Human health based soil concentrations correspond to excess lifetime cancer risks of one in one million for Class A and B carcinogens or one in one hundred thousand for Class C carcinogens, and/or human health based levels for systemic toxicants that correspond to a hazard index of 1.0. Exposure scenarios were based on children ages one to six, weighing 16-kg, ingesting 0.2 grams of soil per day for a five year period.
- Environmental soil concentrations are protective of *soil leaching into a groundwater source used for drinking.*

The lower of these values is the NYSDEC recommended soil cleanup standard.

Groundwater

- Human health based levels that correspond to excess lifetime cancer risks of one in one million for Class A and B carcinogens or one in one hundred thousand for Class C carcinogens, and/or human health based levels for systemic toxicants that correspond to a hazard index of 1.0. An average scenario of exposure in which children ages one to six assumed. An intake rate of 2 l/day for a 70 year period for a 70-kg adult is assumed.
- The control of taste-, color-, and odor-producing, toxic and other deleterious substances

The lower of these two values is considered the groundwater standard.

Impact to the natural resources in the area were also considered as outlined in *Fish and Wildlife Impact Analysis for Inactive Hazardous Wastes Sites* (NYSDEC, 1991).

There are no NYSDEC standards for air. Therefore, a quantitative human health evaluation was conducted for indoor air concentrations.

4.3 Methodology

This risk assessment was based on data from previous environmental investigations as summarized by Groundwater Technology in *Summary of Existing Data to Facilitate the Scoping of a Remedial Investigation* (1995), and the analytical results of additional soil, groundwater and air sampling performed in 1995. Chemical concentrations detected during these investigations are compared to NYSDEC's soil and groundwater standards (NYSDEC, 1994 and 1992). If chemical concentrations exceeded these standards or if chemicals had no standard, then these chemicals were selected as chemicals of potential concern. Using site specific information, a fate and transport model is used for chemicals which exceed NYSDEC soil leaching standards, and a human health risk evaluation is conducted for chemicals which exceed the NYSDEC health-based soil standards. A quantitative human health evaluation is also conducted for indoor air concentrations. Following a conversation with Vimal Minocha, NYSDEC project manager, on February 5, 1996, the groundwater at this site is discussed only qualitatively as there is a groundwater remediation system currently in operation at the site. In addition, groundwater at and downgradient of the site is not used for potable purposes, therefore there is no potential exposure to the groundwater. Finally, a Fish and Wild Impact analysis was conducted for the site, which included a fate and transport model to predict the potential migration of chemicals of potential concern in groundwater to Sag Harbor cove, located approximately 1200 feet downgradient of the site.

The results of the risk assessment report are based on the assumption that the building will remain in place and that the site will be used for residential purposes. The risk assessment report is located in Appendix E and conclusions are stated in section 5.0.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following is a summary of the results of the remedial investigation and the risk assessment performed:

- A screening procedure utilizing data from the previous site investigations, as well as additional data gathered during 1995 was used to select chemicals of potential concern. Chemicals present at the site at concentrations below background or NYSDEC criteria were eliminated as chemicals of potential concern. The rest of the chemicals, including chemicals with no standards were included on the list of chemicals of potential concern.

- SESOIL was run on the 8 chemicals that exceeded NYSDEC soil leaching levels. Conservative input parameters were utilized when no site specific data was available. No significant leachate concentrations were predicted.

- An exposure assessment was conducted on the 5 chemicals that exceeded direct contact values and the one chemical identified in indoor air. The results of the analysis indicate that on-site identified receptors do not have a potential cancer risk and a cumulative hazard index above NYSDEC's risk limit of 1 X 10^{-5} (Class C carcinogens) and 1 x 10^{-6} (Class A & B carcinogens) and the hazard indices are below 1.0.

- Groundwater at and downgradient of the site is not used as a drinking water source and chemicals in groundwater are not expected to migrate off site in significant concentrations due to the remedial system currently in place. The off-site geoprobe water samples in fact showed only trace concentrations of volatile organic compounds. In addition, the groundwater model showed no impact to downgradient receptors.

- The site is located in the middle of a town, thus the amount of fish and wildlife resources in the vicinity is limited. There is no observed environmental stress due to contamination at the site. Groundwater modeling indicated the plume would not reach Sag Harbor Cove and therefore would not impact marine life. No exposure pathways to environmental receptors were identified.

- The use of current and past concentrations to calculate future risks associated with the site is very conservative as a remediation system is currently operating. In addition, some data that was utilized was collected prior to additional injection well cleanouts. Thus future risks will be significantly less than the risks calculated in the risk assessment report.

- Based upon the available data, a condition of "no significant risk" exists at the site.

Although the current site conditions indicate that no significant risk exists at the site, the remedial system will be operated until groundwater standards are achieved or asymptotic levels are reached and it is not practical or feasible to go any further. The existing system was upgraded during March 1996 and will be the final remedy for remediating the site. Based upon these results and conversations with the NYSDEC, no feasibility study is necessary for this site.

TABLE 1

SURFACE SOIL SAMPLING INFORMATION

SAMPLE ID	SOIL COLLECTION DEPTH IN FEET	ANALYTICAL PARAMETERS	PURPOSE
RA-1	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the interior courtyard
RA-2	3-6"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the interior courtyard
RA-3	3-6"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the interior courtyard
RA-4	3-6"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the interior courtyard
RA-5	0-3"	SVOCs: EPA Method 8270 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality around the furnace area
RA-6	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality around the former water tank area
RA-7	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the SU-7 courtyard
RA-8	3-6"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the southern parking lot
RA-9	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the southern parking lot
RA-10	3-6"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the southern parking lot

SAMPLE ID	SOIL COLLECTION DEPTH IN FEET	ANALYTICAL PARAMETERS	PURPOSE
RA-11	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the south courtyard
RA-12	0-3"	SVOCs: EPA Method 8270 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality in the western courtyard
RA-13	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality upgradient of the site
RA-14	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality upgradient of the site
RA-15	0-3"	SVOCs: EPA Method 8270 Pests/PCBs: EPA Method 8080 RCRA Metals: EPA Method 6010/7000 VOCs: EPA Method 8260	To determine the surface soil quality downgradient of the site

TABLE 2
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF SURFICIAL SOIL SAMPLING RESULTS
VOLATILE ORGANIC COMPOUNDS

COMPOUND	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	RA-11	RA-12	RA-13 BACK-GROUND	RA-14 BACK-GROUND	RA-15 BACK-GROUND
DICHLORODIFLUOROMETHANE	NA	<16 J	<14 J	<12 J	<12 J	<11	<12 J	<11	<11	<13 J	<11	<11	<10 J	<12 J	<13 J	<12
CHLOROMETHANE	NA	<16 J	<14 J	<12 J	<12 J	<11	<12 J	<11	<11	<13 J	<11	<11	<10	<12 J	<13 J	<12
BROMOMETHANE	NA	<16 J	<14 J	<12 J	<12 J	<11	<12 J	<11	<11	<13 J	<11	<11	<10	<12 J	<13 J	<12
VINYL CHLORIDE	200	<16 J	<14 J	<12 J	<12 J	<11	<12 J	<11	<11	<13 J	<11	<11	<10	<12 J	<13 J	<12
CHLOROETHANE	1,900	<16 J	<14 J	<12 J	<12 J	<11	<12 J	<11	<11	<13 J	<11	<11	<10	<12 J	<13 J	<12
TRICHLOROFLUOROMETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
METHYLENE CHLORIDE	100	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<9 J	<12 J	<10 J	<6	<6	<6 J	<6 J	<6 J	<8 J
1,1-DICHLOROETHENE	400	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,1-DICHLOROETHANE	200	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
2,2-DICHLOROPROPANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5 J	<6 J	<6 J	<6
TRANS-1,2-DICHLOROETHENE	300	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5 J	<6 J	<6 J	<6
CIS-1,2-DICHLOROETHENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
CHLOROFORM	300	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,2-DICHLOROETHANE	100	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,1-DICHLOROPROPENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
DIBROMOMETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
BROMOCHLOROMETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,1,1-TRICHLOROETHANE	800	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
CARBON TETRACHLORIDE	600	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,2-DIBROMOETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
BROMODICHLOROMETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,2-DICHLOROPROPANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 J	<6	<6	<5	<6 J	<6 J	<6
1,3-DICHLOROPROPANE	300	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
TRICHLOROETHENE	700	**22 J**	**12 J**	<6 J	**4 J**	<6	<6 J	**150 J**	**35 J**	9 R	<6	<6 J	<5	<6 J	<6 J	<6
DIBROMOCHLOROMETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
1,1,2-TRICHLOROETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
BENZENE	60	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	**8 J**	<6 J	<6	<6	<5	<6 J	<6 J	<6
BROMOFORM	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
TETRACHLOROETHENE	1,400	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
1,1,2,2-TETRACHLOROETHANE	600	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
1,1,1,2-TETRACHLOROETHANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5 J	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
TOLUENE	1,500	<8 J	<7 J	<6 J	<6 J	<6	<6 J	**15 J**	**25 J**	<6 J	<6	<6	<5	<6 J	<6 J	<6
CHLOROBENZENE	1,700	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
ETHYLBENZENE	5,500	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
STYRENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6

TABLE 2
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF SURFICIAL SOIL SAMPLING RESULTS
VOLATILE ORGANIC COMPOUNDS (CONT'D)

COMPOUND	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	RA-11	RA-12	RA-13 BACK-GROUND	RA-14 BACK-GROUND	RA-15 BACK-GROUND
META + PARA-XYLENES	1,200	<8 J	<7 J	<6 J	<6 J	<6	2 J	<6	<5	18 R	<6	<6 J	<5	<6 J	<6 J	<6
ORTHO-XYLENE	1,200	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6	<5	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
ISOPROPYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
BROMOBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
1,2,3-TRICHLOROPROPANE	400	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
N-PROPYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6 J	<6 J	<6 J	<5 J	<6 R	<6 J	<6 J	<5 J	<6 J	<6 J	<6 J
2-CHLOROTOLUENE	NA	<8 J	<7 J	<6 J	<6 J	<6 J	<6 J	<6 J	<5 J	<6 R	<6 J	<6 J	<5 J	<6 J	<6 J	<6 J
4-CHLOROTOLUENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
1,3,5-TRIMETHYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6 J	<6 J	<6 J	<5 J	<6 R	<6 J	<6 J	<5 J	<6 J	<6 J	<6 J
TERT-BUTYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	18 R	<6	<6 J	<5	<6 J	<6 J	<6
1,2,4-TRIMETHYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6 J	<6 J	<6 J	<5 J	<6 R	<6 J	<6 J	<5 J	<6 J	<6 J	<6 J
SEC-BUTYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
1,3-DICHLOROBENZENE	1,600	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
1,4-DICHLOROBENZENE	8,500	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
1,2-DICHLOROBENZENE	7,900	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
P-ISOPROPYLTOLUENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
N-BUTYLBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
1,2-DIBROMO3CHLOROPROPANE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5 J	<6 J	<6 J	<6
1,2,4-TRICHLOROBENZENE	3,400	<8 J	<7 J	<6 J	<6 J	<6 J	<6 J	<6 J	<5 J	<6 R	<6 J	<6 J	<5 J	<6 J	<6 J	<6 J
NAPHTHALENE	NA	<8 J	<7 J	<6 J	<6 J	<6	2 J	<6 J	2 J	24 R	3 J	2 J	<5 J	<6 J	3 J	<6
HEXACHLOROBUTADIENE	NA	<8 J	<7 J	<6 J	<6 J	<6	<6 J	<6 J	<5 J	<6 R	<6	<6 J	<5	<6 J	<6 J	<6
1,2,3-TRICHLOROBENZENE	NA	<8 J	<7 J	<6 J	<6 J	<6 J	<6 J	<6 J	<5 J	<6 R	<6 J	<6 J	<5 J	<6 J	<6 J	<6 J
TOTAL VOCs	*	22	12	0	4	0	4	165	70	0	3	2	0	0	3	0

* AS PER TAGM #4046 DATED JANUARY 24, 1994, TOTAL VOCs <10,000 PPB

SAMPLES COLLECTED ON 10/23/95 AND 10/24/95

RESULTS RECORDED IN UG/KG (PPB)

J - ESTIMATED VALUE, BELOW METHOD QUANTITATION LIMIT, ABOVE INSTRUMENT DETECTION LIMIT

R-RESULTS UNUSABLE DUE TO LOW RESPONSE ON LABORATORY INTERNAL STANDARDS.

BULOVADISK4/SURFVOL

TABLE 2
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF SURFICIAL SOIL SAMPLING RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS

COMPOUND	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	RA-11	RA-12	RA-13 BACK-GROUND	RA-14 BACK-GROUND	RA-15 BACK-GROUND
bis (2-CHLOROETHYL) ETHER	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
PHENOL	30	<520	<460	<390	<400	**340 J**	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2-CHLOROPHENOL	800	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
1,3-DICHLOROBENZENE	1,600	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
1,4-DICHLOROBENZENE	8,500	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
1,2-DICHLOROBENZENE	7,900	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2,2-OXYBIS(1-CHLOROPROPANE)	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
BENZYL ALCOHOL	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2-METHYLPHENOL	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
HEXACHLOROETHANE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
N-NITROSO-DI-N-PROPYLAMINE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
3&4 METHYLPHENOL	900	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
NITROBENZENE	200	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
ISOPHORONE	4,400	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2-NITROPHENOL	330	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2,4 DIMETHYLPHENOL	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
BENZOIC ACID	NA	<520	<460	<390	<400	<940	<400	<380	<350	<430	<920	<370	<340	<390	<420	<400
bis(2-CHOROETHOXY)METHANE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2,4-DICHLOROPHENOL	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
1,2,4-TRICHLOROBENZENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
NAPHTHALENE	13,000	<520	**140 J**	**98 J**	<400	<370	<400	**280 J**	<350	<430	<370	<370	<340	<390	<420	<400
4-CHLOROANILINE	220	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
HEXACHLOROBUTADIENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
4-CHLORO-3-METHYLPHENOL	240	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2-METHYLNAPHTHALENE	36,400	<520	**170 J**	**100 J**	<400	<370	<400	**180 J**	<350	<430	<370	<370	<340	<390	<420	<400
HEXACHLOROCYCLOPENTADIENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2,4,6-TRICHLOROPHENOL	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2,4,5-TRICHLOROPHENOL	100	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
2-CHLORONAPHTHALENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2-NITROANILINE	430	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
ACENAPHTHYLENE	41,000	**370 J**	**180 J**	**650**	**230 J**	**260 J**	<400	**890**	<350	<430	**49 J**	**110 J**	<340	<390	**56 J**	<400
DIMETHYLPHTHALATE	2,000	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
2,6-DINITROTOLUENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
ACENAPHTHENE	50,000	<520	**820**	**320 J**	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
3-NITROANILINE	500	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
2,4-DINITROPHENOL	200	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990

TABLE 2
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF SURFICIAL SOIL SAMPLING RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS (CONT'D)

COMPOUND	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	RA-11	RA-12	RA-13 BACK-GROUND	RA-14 BACK-GROUND	RA-15 BACK-GROUND
DIBENZOFURAN	6,200	<520	430 J	210 J	<400	<370	<400	320 J	<350	<430	<370	<370	<340	<390	<420	<400
2,4-DINITROTOLUENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
4-NITROPHENOL	100	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
FLUORENE	50,000	<520	550	230 J	<400	<370	<400	320 J	<350	<430	<370	43 J	<340	<390	<420	<400
4-CHLOROPHENYL-PHENYLETHER	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
DIETHYLPHTHALATE	7,100	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
4-NITROANILINE	NA	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
4,6-DINITRO-2-METHYLPHENOL	NA	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
N-NITROSODIPHENYLAMINE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
AZOBENZENE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
4-BROMOPHENYL-PHENYLETHER	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
HEXACHLOROBENZENE	410	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
PENTACHLOROPHENOL	1,000	<1300	<1200	<980	<1000	<940	<990	<950	<880	<1100	<920	<920	<850	<970	<1000	<990
PHENANTHRENE	50,000	420 J	5900	2500	460	310 J	130 J	4700	<350	70 J	<370	750	<340	85 J	140 J	90 J
ANTHRACENE	50,000	270 J	1000	950	200 J	130 J	52 J	880	<350	<430	<370	180 J	<340	<390	43 J	<400
DI-N-BUTYLPHTHALATE	8,100	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
FLUORANTHENE	50,000	480 J	5400	1200	530	310 J	250 J	4800	<350	72 J	<370	1000	<340	170 J	220 J	140 J
PYRENE	50,000	640	5300	5200	570	350 J	250 J	4800	<350	94 J	<370	890	<340	160 J	230 J	130 J
BUTYLBENZYLPHTHALATE	50,000	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
3,3-DICHLOROBENZIDINE	NA	<520	<460	<390	<400	<370	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
BENZO(A)ANTHRACENE	224	<520	2800	2800	240 J	190 J	170 J	1700	<350	<430	<370	300 J	<340	100 J	87 J	58 J
CHRYSENE	400	360 J	3100	3000	360 J	240 J	190 J	2800	<350	78 J	<370	450	<340	120 J	140 J	82 J
bis(2-ETHYLHEXYL)PHTHALATE *	50,000	1100	930	290 J	280 J	100 J	75 J	<380	<350	55 J	<370	<370	<340	40 J	270 J	82 J
DI-N-OCTYLPHTHALATE *	50,000	<520 J	<460	<390 J	<400	<370	<400	<380	<350	53 J	<370	<370	<340	390 J	<420	<400
BENZO(B)FLUORANTHENE	1,100	<520 J	2100	3400 J	360 J	140 J	160 J	2600	<350	<430	<370	300 J	<340	100 J	130 J	57 J
BENZO(K)FLUORANTHENE	1,100	<520 J	1500	2400 J	370 J	190 J	170 J	1800	<350	<430	<370	300 J	<340	90 J	110 J	61 J
BENZO(A)PYRENE	61	<520 J	1700	2500 J	260 J	150 J	140 J	1800	<350	<430	<370	240 J	<340	85 J	110 J	52 J
INDENO(1,2,3-CD)PYRENE	3,200	<520 J	520	520 J	110 J	62 J	82 J	510	<350	<430	<370	86 J	<340	<390	47 J	<400
DIBENZ(A,H)ANTHRACENE	14	<520 J	<460	<390 J	<400	43 J	<400	<380	<350	<430	<370	<370	<340	<390	<420	<400
BENZO(G,H,I)PERYLENE	50,000	<520 J	480	440 J	<400	57 J	<400	<380	<350	<430	<370	90 J	<340	<390	<420	<400
TOTAL SVOC'S	*	3,640	33,020	26,808	3,970	2,872	1,669	28,380	0	422	49	4,739	0	1,340	1,583	752

* AS PER TAGM #4046, DATED JANUARY 24, 1994, TOTAL SVOCs <500,000 PPB, INDIVIDUAL SVOCs <50,000 PPB

SAMPLES COLLECTED ON 10/23/95 AND 10/24/95

RESULTS RECORDED IN UG/KG (PPB)

J - ESTIMATED VALUE, BELOW METHOD QUANTITATION LIMIT, ABOVE INSTRUMENT DETECTION LIMIT

* COMMON LABORATORY CONTAMINANT

BULOVADISK4/SURFSEMI

TABLE 2
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF SURFICIAL SOIL SAMPLING RESULTS
PESTICIDES/PCB'S

COMPOUND	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	RA-1	RA-2	RA-3	RA-4	RA-6	RA-7	RA-8	RA-9	RA-10	RA-11	RA-13 BACK-GROUND	RA-14 BACK-GROUND	RA-15 BACK-GROUND
GAMMA-BHC (LINDANE)	60	<4.2	<1.9	<3.1	<3.2	<1.6	<1.5	<1.4	<1.7	<1.5	<1.5	<3.1	<83	<1.6
HEPTACHLOR	100	<3.1	<1.4	<2.4	<2.4	<1.2	<1.1	<1.1	<1.3	<1.1	<1.1	<2.3	<63	<1.2
ALDRIN	41	<4.2	<1.9	<3.1	<3.2	<1.6	<1.5	<1.4	<1.7	<1.5	<1.5	<3.1	<83	<1.6
HEPTACHLOR EPOXIDE	20	<10.0 J	<4.6	<7.8	<8.0	<4.0	<3.8	<3.5	<4.3	<3.7	<3.7	<7.8	<210	<4.0
ENDOSULFAN I	900	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	<3.9	<100	<2.0
DIELDRIN	44	<2.1	<0.9	<1.6	<1.6 J	<0.8	<0.8	<0.7	<0.9	<0.7	<0.7	5.3 N	91	<0.8
ENDOSULFAN II	900	<4.2	<1.9 J	<3.1	<3.2 J	<1.6	<1.5	<1.4	<1.7	<1.5	<1.5	<3.1	<83	<1.6
4,4'-DDT	2,100	<1.0 J	<0.5 J	<0.8 J	<0.8 J	<0.4 J	<0.4 J	<0.4 J	<0.4 J	<0.4 J	<0.4 J	<7.8 J	390	3.6 J
ENDRIN ALDEHYDE	NA	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	<3.9	<100	<2.0
METHOXYCHLOR	NA	<42 J	<19 J	<31 J	<32 J	<16 J	<15 J	<14 J	<17 J	<15 J	<15 J	<31	<830	<16 J
ALPHA-BHC	110	<2.6	<1.2	<2.0	<2.0	<1.0	<0.9	<0.9	<1.1	<0.9	<0.9	<1.9	<52	<1.0
BETA-BHC	200	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	<3.9	<100	<2.0
DELTA-BHC	300	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	<3.9	<100	<2.0
4,4'-DDE	2,100	<5.2	<2.3 J	<3.9	<4.0 J	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	33	1600	3.8
ENDRIN	100	<5.2 J	<2.3	<3.9	<4.0 J	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	<3.9	<100	<2.0
4,4'-DDD	2,900	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	74	210	<2.0
ENDOSULFAN SULFATE	1,000	<10	<4.6 J	<7.8	<8.0	<4.0	<3.8	<3.5	<4.3	<3.7	<3.7	15 J	<210	<4.0
ENDRIN KETONE	NA	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	<3.9	<100	<2.0
CHLORDANE	540	<5.2	<2.3	<3.9	<4.0	<2.0	<1.9	<1.8	<2.1	<1.8	<1.8	220	<100	<2.0
TOXAPHENE	NA	<26	12	<20	<20	<9.9	<9.5	<8.8	<11	<9.2	<9.2	<19	<520	<9.9
AROCLOR 1016	1,000	<52	<23	<39	<40	<20	<19	<18	<21	<18	<18	<39	<1000	<20
AROCLOR 1221	1,000	<52	<23	<39	<40	<20	<19	<18	<21	<18	<18	<39	<1000	<20
AROCLOR 1232	1,000	<52	<23	<39	<40	<20	<19	<18	<21	<18	<18	<39	<1000	<20
AROCLOR 1242	1,000	<52	<23	<39	<40	<20	<19	<18	<21	<18	<18	<39	<1000	<20
AROCLOR 1248	1,000	<52	<23	<39	<40	<20	<19	<18	<21	<18	<18	<39	<1000	<20
AROCLOR 1254	1,000	530	450	660	960	<20	<19	<18	<21	<18	130	<39	<1000	<20
AROCLOR 1260	1,000	<52	<23	<39	<40	<20	<19	<18	<21	<18	<18	<39	<1000	<20

* AS PER TAGM #4046 DATED JANUARY 24, 1994, TOTAL PESTICIDES <10,000 PPB

SAMPLES COLLECTED ON 10/23/95 AND 10/24/95

RESULTS RECORDED IN UG/KG (PPB)

J: REPORTED VALUES/DETECTION LIMITS ARE ESTIMATED

N: TENTATIVE IN IDENTIFICATION AND ESTIMATED IN VALUE

BULOVADISK4/SURFPEST

TABLE 2
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF SURFICIAL SOIL SAMPLING RESULTS
METALS

COMPOUND	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	RA-11	RA-12	RA-13 BACK-GROUND	RA-14 BACK-GROUND	RA-15 BACK-GROUND
ARSENIC	7,500 OR SB	3,800 J	2,900 J	<590	1,800 J	1,900 J	2,200 J	19,000 J	2,500 J	33,000 J	2,400 J	1,300 J	<510	4,800 J	9,700 J	2,700 J
MERCURY	100	950 J	2,700 J	1,600 J	1,700 J	<280	<300	<280	<260	<320	<270	<270	<260	<290	<310	540 J
BARIUM	300,000 OR SB	130,000 J	68,000 J	58,000 J	110,000 J	25,000 J	29,000 J	98,000 J	7,400 J	110,000 J	23,000 J	25,000 J	2,300 J	38,000 J	63,000 J	25,000 J
CADMIUM	1,000 OR SB	8,000 J	1,500 J	<290	2,500 J	530 J	2,100 J	420 J	<260	370 J	<270	690 J	<260	<290	<310	300 J
CHROMIUM	10,000 OR SB	160,000	2,600,000	23,000	27,000	15,000	14,000	3,500	2,400	4,700	9,200	6,000	1,300	8,700	14,000	5,900
LEAD	SB	770,000	900,000	280,000	550,000	130,000	130,000	270,000	58,000	41,000	20,000	170,000	5,300	39,000	260,000	75,000
SILVER	SB	42,000	62,000	74,000	47,000	4,300	2,100	9,500	1,700	2,800	<270	65,000	<260	<290	5,100	330
SELENIUM	2,000 OR SB	870 J	550 J	400 J	390 J	<280	<300	2,700 J	<260	700 J	<270	<270	<260	<290	360 J	<300

RECOMMENDED SOIL CLEANUP OBJECTIVES OBTAINED FROM TAGM #4046 DATED JANUARY 24, 1994.
SAMPLES COLLECTED ON 10/23/95 AND 10/24/95
RESULTS RECORDED IN UG/KG (PPB)
J: ESTIMATED VALUE
BULOVADISK4/SURFMETS

TABLE 3
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF AIR SAMPLING RESULTS
VOLATILE ORGANIC COMPOUNDS

COMPOUND	SOUTHERN PARKING LOT	SU-5 WING	BOILER ROOM	SU-1 WING
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND
1,2-DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
1,1,2-TRICHLOROTRIFLUOROETHANE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND
CIS-1,2-DICHLOROETHENE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND
TRICHLOROETHENE	ND	2.4	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND
TETRACHLOROETHENE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
META + PARA-XYLENES	ND	ND	ND	ND
ORTHO-XYLENE	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZENE	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND
BENZYL CHLORIDE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND

SAMPLES COLLECTED ON 10/23/95 AND 10/24/95

RESULTS RECORDED IN PPB

NOTE: NO INDOOR AIR STANDARD EXISTS. SEE THE RISK ASSESSMENT REPORT (APPENDIX E) FOR A DISCUSSION ON INDOOR AI

BULOVADISK#4/AIRSAMPL

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-1	MW-2												
	7/18/91	7/23/91	11/25/91	3/20/92	6/16/93	9/10/94	10/10/94	11/08/94	12/06/94	1/5/95	2/2/95	3/2/95	4/7/95	5/5/95
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	<25	<25	NA	<250	<50	<100	<50	<10	<25
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	NA	<5	<5	NA	<50	<10	<20	<10	<2	<5
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	NA	<5	<5	<200	<50	<10	<20	<10	<2	<5
CHLOROMETHANE	<100	<10	<10	<10	<10	<10	<10	<200	<100	<20	<40	<20	<4	<10
BROMOMETHANE	<100	<10	<10	<10	<10	<10	<10	<200	<100	<20	<40	<20	<4	<10
VINYL CHLORIDE	<100	<10	<10	<10	<10	<5	<5	<200	<50	<10	<20	<10	<2	<5
CHLOROETHANE	<100	<10	<10	<10	<10	<5	<5	<200	<50	<10	<20	<10	<2	<5
METHYLENE CHLORIDE	<50	<5	<5	<5	<10	<5	6	<100	<50	<5	<20	<10	<2	<5
ACETONE	NA	NA	<10	<10	<10	NA	NA	<400	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	<5	12	<10	NA	NA	<100	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<50	7	16	4J	<10	<5	14	<100	<50	18	<20	<10	<2	<5
1,1-DICHLOROETHANE	<50	6	10	6	<10	8.7	14	<100	<50	26	33	21	3.2	<5
1,2-DICHLOROETHENE	<50	5	19	8	<10	19	50	<100	67	74	45	28	7.4	<5
CHLOROFORM	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
1,2-DICHLOROETHANE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
2-BUTANONE	NA	NA	<10	<10	<10	NA	NA	<400	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	<50	310	760	110	16	150	270	900	840	490	380	220	72	53
CARBON TETRACHLORIDE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
VINYL ACETATE	NA	NA	<10	<10	NA	NA	NA	<400	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
1,2-DICHLOROPROPANE	<50	<5	<5	<5	<10	<5	<5	<100	<50	12	<20	<10	<2	<5
cis - 1,3-DICHLOROPROPENE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
TRICHLOROETHENE	<50	780	1700	190	38	110	390	1500	1600	1000	780	440	120	100
DIBROMOCHLOROMETHANE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
1,1,2-TRICHLOROETHANE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
BENZENE	<50	<5	<5	<5	<10	NA	NA	<100	NA	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
BROMOFORM	<50	<5	<5	<5	<10	<10	<10	<100	<100	<20	<40	<20	<4	<10
4-METHYL-2-PENTANONE	NA	NA	<10	<10	<10	NA	NA	<400	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	<10	<10	<10	NA	NA	<400	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	<50	2.7 J	9	<5	<10	<5	<5	<100	<50	<10	<20	<10	3.7	<5
1,1,2,2-TETRACHLOROETHANE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
TOLUENE	220	<5	<5	<5	<10	NA	NA	<100	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	<50	<5	<5	<5	<10	<5	<5	<100	<50	<10	<20	<10	<2	<5
ETHYLBENZENE	37J	<5	<5	<5	<10	NA	NA	<100	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	<5	<5	<10	NA	NA	<100	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	130	<5	<5	<5	<10	NA	NA	<100	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<200	<50	<10	<20	<10	<2	<5
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<200	<50	<10	<20	<10	<2	<5
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<200	<50	<10	<20	<10	<2	<5
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	387	1,111	2,514	330	54	287.7	744	2,400	2,507	1,620	1,238	709	206.3	153
TOTAL TICs				0	0									
TOTAL VOCs & TOTAL TICs	387	1,111	2,514	330	54	287.7	744	2,400	2,507	1,620	1,238	709	206.3	153

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-2 Continued											
	6/14/95	7/18/95	8/8/95	9/12/95	10/9/95	11/13/95	12/15/96	1/22/96	2/15/96	3/12/96	4/15/96	5/14/96
DICHLORODIFLUOROMETHANE	<5	<5	<5	<5	<250	<1000	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	<2	<2	<2	<2	<100	<400	NA	NA	NA	NA	NA	NA
BROMOMETHANE	<2	<2	<2	<2	<100	<400	NA	NA	NA	NA	NA	NA
VINYL CHLORIDE	<1	<1	<1	<1	<50	<200	<500	<50	<5.0	<5.0	<1.0	<1.0
CHLOROETHANE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	<1	<1	<1	<1	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<1	<1	<1	<1	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1	<1	<1	3.3	<50	<200	<250	<50	6.6	<5.0	<1.0	<1.0
1,2-DICHLOROETHENE	1.9	1.9	<1	7.3	99	<200	<250	62	13	7.0	<1.0	<1.0
CHLOROFORM	<1	<1	<1	1.2	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
1,2-DICHLOROETHANE	<1	<1	<1	2.1	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
2-BUTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	22	4.7	3.9	11	540	3500	1,400	770	120	110	7.2	4.4
CARBON TETRACHLORIDE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
1,2-DICHLOROPROPANE	<1	<1	<1	<1	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
cis - 1,3-DICHLOROPROPENE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE	55	12.	5.5	49	1700	7300	3,700	2,300	310	240	15	14
DIBROMOCHLOROMETHANE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	<1	<1	<1	4.2	<50	<200	<250	<50	<5.0	<25	<1.0	<1.0
BENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
BROMOFORM	<2	<2	<2	<2	<100	<400	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	2.2	<1	<1	<1	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1	<1	<1	<1	<50	<200	<250	<50	<5.0	<5.0	<1.0	<1.0
TOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	<1	<1	<1	<1	<50	<200	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	81.1	16.7	9.4	78.1	2,339	10,800	5,100	3,132	454.6	357	22.2	18.4
TOTAL TICs												
TOTAL VOCs & TOTAL TICs	81.1	16.7	9.4	78.1	2,339	10,800	5,100	3,132	454.6	357	22.2	18.4

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUND

COMPOUND	MW-2 Con't		MW-3							
	6/10/96	7/8/96	7/23/91	11/25/91	3/20/92	6/16/93	9/10/94	12/06/94	3/2/95	6/14/95
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	NA	<5	<5	<5	<5
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	NA	NA	<1	<1	<1	<1
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	NA	NA	<1	<1	<1	<1
CHLOROMETHANE	NA	NA	<10	<10	<10	<10	<2	<2	<2	<2
BROMOMETHANE	NA	NA	<10	<10	<10	<10	<2	<2	<2	<2
VINYL CHLORIDE	<1.0	<1.0	<10	<10	<10	<10	<1	<1	<1	<1
CHLOROETHANE	NA	NA	<10	<10	<10	<10	<1	<1	<1	<1
METHYLENE CHLORIDE	<1.0	<1.0	1.2J	<5	<5	<10	<1	<1	<1	<1
ACETONE	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	<5	<5	<10	NA	NA	NA	NA
1,1-DICHLOROETHENE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
1,1-DICHLOROETHANE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
1,2-DICHLOROETHENE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
CHLOROFORM	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
1,2-DICHLOROETHANE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
2-BUTANONE	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	3.7	3.2	<5	<5	<5	<10	<1	<1	<1	<1
CARBON TETRACHLORIDE	NA	NA	<5	<5	<5	<10	<1	<1	<1	<1
VINYL ACETATE	NA	NA	NA	<10	<10	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	NA	NA	<5	<5	<5	<10	<1	<1	<1	<1
1,2-DICHLOROPROPANE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
cis - 1,3-DICHLOROPROPENE	NA	NA	<5	<5	<5	<10	<1	<1	<1	<1
TRICHLOROETHENE	9.1	6.3	<5	<5	<5	<10	<1	<1	<1	<1
DIBROMOCHLOROMETHANE	NA	NA	<5	<5	<5	<10	<1	<1	<1	<1
1,1,2-TRICHLOROETHANE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
BENZENE	NA	NA	<5	<5	<5	<10	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	NA	NA	<5	<5	<5	<10	<1	<1	<1	<1
BROMOFORM	NA	NA	<5	<5	<5	<10	<2	<2	<2	<2
4-METHYL-2-PENTANONE	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA
TETRACHLOROETHENE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0	<5	<5	<5	<10	<1	<1	<1	<1
TOLUENE	NA	NA	<5	<5	<5	<10	NA	NA	NA	NA
CHLOROBENZENE	NA	NA	<5	<5	<5	<10	<1	<1	<1	<1
ETHYLBENZENE	NA	NA	<5	<5	<5	<10	NA	NA	NA	NA
STYRENE	NA	NA	NA	<5	<5	<10	NA	NA	NA	NA
XYLENES (TOTAL)	NA	NA	<5	<5	<5	<10	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	<1	<1	<1	<1
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	<1	<1	<1	<1
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	<1	<1	<1	<1
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	12.8	9.5	1.2	0	0	0	0	0	0	0
TOTAL TICs						0				
TOTAL VOCs & TOTAL TICs	12.8	9.5	1.2	0	0	0	0	0	0	0

ALL RESULTS IN PARTS PER BILLION (UG/l)
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B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-4									
	7/23/91	11/25/91	3/20/92	11/29/93	9/10/94	12/06/94	3/6/95	6/14/95	9/11/95	03/11/96
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	<5	<5	<5	<5	<5	NA
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	<1	<1	<1	<1	<1	NA
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	<1	<1	<1	<1	<1	NA
CHLOROMETHANE	<10	<10	<10	<10	<2	<2	<2	<2	<2	NA
BROMOMETHANE	<10	<10	<10	<10	<2	<2	<2	<2	<2	NA
VINYL CHLORIDE	<10	<10	<10	<10	<1	<1	<1	<1	<1	<1.0
CHLOROETHANE	<10	<10	<10	<10	<1	<1	<1	<1	<1	NA
METHYLENE CHLORIDE	<5	<5	<5	<10	<1	<1	<1	<1	<1	<1.0
ACETONE	NA	<10	<10	<10	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	<5	<5	<10	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<5	<5	<5	<10	<1	<1	<1	<1	<1	<1.0
1,1-DICHLOROETHANE	4.9J	2.7	3 J	<10	1.3	<1	<1	<1	<1	<1.0
1,2-DICHLOROETHENE	<5	13	11	10 J	5.9	<1	1.1	<1	<1	1.0
CHLOROFORM	<5	<5	<5	<10	<1	<1	<1	<1	<1	<1.0
1,2-DICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1	<1.0
2-BUTANONE	NA	<10	<10	<10	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	45	46	39	44	27	2.1	6.2	<1	<1	<1.0
CARBON TETRACHLORIDE	<5	<5	<5	<10	<1	<1	<1	<1	<1	NA
VINYL ACETATE	NA	<10	<10	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1	NA
1,2-DICHLOROPROPANE	<5	<5	<5	<10	<1	<1	<1	<1	<1	<1.0
cis - 1,3-DICHLOROPROPENE	<5	<5	<5	<10	<1	<1	<1	<1	<1	NA
TRICHLOROETHENE	150	160	140	140	87	7.7	16	2.5	1.1	1.5
DIBROMOCHLOROMETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1	NA
1,1,2-TRICHLOROETHANE	1.5J	<5	<5	1 J	<1	<1	<1	<1	<1	<5.0
BENZENE	<5	<5	<5	<10	NA	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<5	<5	<5	<10	<1	<1	<1	<1	<1	NA
BROMOFORM	<5	<5	<5	<10	<2	<2	<2	<2	<2	NA
4-METHYL-2-PENTANONE	NA	<10	<10	<10	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	<10	<10	<10	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	2.4J	<5	<5	2 J	3.5	<1	<1	<1	<1	<1.0
1,1,2,2-TETRACHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1	<1.0
TOLUENE	<5	<5	<5	<10	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	<5	<5	<5	<10	<1	<1	<1	<1	<1	NA
ETHYLBENZENE	<5	<5	<5	<10	NA	NA	NA	NA	NA	NA
STYRENE	NA	<5	<5	<10	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	<5	<5	<5	<10	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	<1	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	<1	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	<1	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	204	222	193	197	124.7	9.8	23.3	2.5	1.1	2.5
TOTAL TICs			0	5						
TOTAL VOCs & TOTAL TICs	204	222	193	202	124.7	9.8	23.3	2.5	1.1	2.5

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-5								
	7/23/91	11/25/91	3/20/92	6/16/93	9/10/94	12/06/94	3/2/95	6/15/95	9/12/95
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	<5	<5	<5	<5	<5
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	<1	<1	<1	<1	<1
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	<1	<1	<1	<1	<1
CHLOROMETHANE	<10	<10	<10	<10	<2	<2	<2	<2	<2
BROMOMETHANE	<10	<10	<10	<10	<2	<2	<2	<2	<2
VINYL CHLORIDE	<10	<10	<10	<10	<1	<1	<1	<1	<1
CHLOROETHANE	<10	<10	<10	<10	<1	<1	<1	<1	<1
METHYLENE CHLORIDE	1.2J	<5	<5	<10	<1	<1	<1	<1	<1
ACETONE	NA	<10	<10	5J	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	<5	<5	<10	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<5	<5	<5	<10	<1	<1	<1	<1	<1
1,1-DICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	1.6
1,2-DICHLOROETHENE	<5	<5	<5	<10	<1	<1	<1	<1	4.4
CHLOROFORM	<5	<5	<5	<10	<1	<1	<1	<1	1.1
1,2-DICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1
2-BUTANONE	NA	<10	<10	<10	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	38
CARBON TETRACHLORIDE	<5	<5	<5	<10	<1	<1	<1	<1	<1
VINYL ACETATE	NA	<10	<10	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1
1,2-DICHLOROPROPANE	<5	<5	<5	<10	<1	<1	<1	<1	<1
cis - 1,3-DICHLOROPROPENE	<5	<5	<5	<10	<1	<1	<1	<1	<1
TRICHLOROETHENE	<5	<5	<5	<10	<1	<1	<1	<1	93
DIBROMOCHLOROMETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1
1,1,2-TRICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1
BENZENE	<5	<5	<5	<10	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<5	<5	<5	<10	<1	<1	<1	<1	<1
BROMOFORM	<5	<5	<5	<10	<2	<2	<2	<2	<2
4-METHYL-2-PENTANONE	NA	<10	<10	<10	NA	NA	NA	NA	NA
2-HEXANONE	NA	<10	<10	<10	NA	NA	NA	NA	NA
TETRACHLOROETHENE	<5	<5	<5	<10	<1	<1	<1	<1	1.4
1,1,2,2-TETRACHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<1
TOLUENE	<5	<5	<5	<10	NA	NA	NA	NA	NA
CHLOROBENZENE	<5	<5	<5	<10	<1	<1	<1	<1	<1
ETHYLBENZENE	<5	<5	<5	<10	NA	NA	NA	NA	NA
STYRENE	NA	<5	<5	<10	NA	NA	NA	NA	NA
XYLENES (TOTAL)	<5	<5	<5	<10	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	<1
1,4-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	<1
1,2-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	<1
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	1.2	0	0	5	0	0	0	0	139.5
TOTAL TICs			0	0					
TOTAL VOCs & TOTAL TICs	1.2	0	0	5	0	0	0	0	139.5

ALL RESULTS IN PARTS PER BILLION (UG/l)

LIMI J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT.

B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK

NA - NOT ANALYZED

VOCs - VOLATILE ORGANIC COMPOUND

TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".

TICs - TENTATIVELY IDENTIFIED COMPOUNDS

EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91

NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93

EPA METHOD 8260: 12/21/94

EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-6				MW-7			
	7/14/89	11/25/91	3/20/92	6/16/93	7/14/89	11/25/91	3/20/92	6/16/93
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	<10	<10	<10	<10	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10	<10	<10	<10	<10
METHYLENE CHLORIDE	<5	<5	<5	<5	<5	<5	<5	<5
ACETONE	38	<10	<10	<10	92	<10	<10	<10
CARBON DISULFIDE	<5	<5	<5	<10	<5	<5	<5	<10
1,1-DICHLOROETHENE	<5	<5	<5	<10	<5	6	<5	<10
1,1-DICHLOROETHANE	<5	<5	<5	<10	<5	<5	<5	<10
1,2-DICHLOROETHENE	<5	<5	<5	<10	<5	<5	<5	<10
CHLOROFORM	<5	<5	<5	<10	<5	<5	<5	<10
1,2-DICHLOROETHANE	<5	<5	<5	<10	<5	<5	<5	<10
2-BUTANONE	66	<10	<10	<10	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5	<5	<5	<10	<5	20	<5	<10
CARBON TETRACHLORIDE	<5	<5	<5	<10	<5	<5	<5	<10
VINYL ACETATE	<10	<10	<10	NA	<10	<10	<10	NA
BROMODICHLOROMETHANE	<5	<5	<5	<10	<5	<5	<5	<10
1,2-DICHLOROPROPANE	<5	<5	<5	<10	<5	<5	<5	<10
cis - 1,3-DICHLOROPROPENE	<5	<5	<5	<10	<5	<5	<5	<10
TRICHLOROETHENE	<5	<5	<5	<10	54	58	23	7 J
DIBROMOCHLOROMETHANE	<5	<5	<5	<10	<5	<5	<5	<10
1,1,2-TRICHLOROETHANE	<5	<5	<5	<10	<5	<5	<5	<10
BENZENE	<5	<5	<5	<10	<5	<5	<5	<10
trans-1,3-DICHLOROPROPENE	<5	<5	<5	<10	<5	<5	<5	<10
BROMOFORM	<5	<5	<5	<10	<5	<5	<5	<10
4-METHYL-2-PENTANONE	<10	<10	<10	<10	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10	<10	<10	<10	<10
TETRACHLOROETHENE	<5	<5	<5	<10	<5	<5	<5	<10
1,1,2,2-TETRACHLOROETHANE	<5	<5	<5	<10	<5	<5	<5	<10
TOLUENE	<5	<5	<5	<10	<5	<5	<5	<10
CHLOROBENZENE	<5	<5	<5	<10	<5	<5	<5	<10
ETHYLBENZENE	<5	<5	<5	<10	<5	<5	<5	<10
STYRENE	<5	<5	<5	<10	<5	<5	<5	<10
XYLENES (TOTAL)	<5	<5	<5	<10	<5	<5	<5	<10
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	**104**	**0**	**0**	**0**	**146**	**84**	**23**	**7**
TOTAL TICs	15	0	0	0	47	0	0	0
TOTAL VOCs & TOTAL TICs	**119**	**0**	**0**	**0**	**193**	**84**	**23**	**7**

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT.
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-8								MW-9			
	7/14/89	11/25/91	3/20/92	6/16/93	9/10/94	12/06/94	3/2/95	6/14/95	7/14/89	11/25/91	3/20/92	6/16/93
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA
CHLOROMETHANE	100	<10	<10	<10	<2	<2	<2	<2	18	<10	<10	<1000
BROMOMETHANE	<10	<10	<10	<10	<2	<2	<2	<2	<10	<10	<10	<1000
VINYL CHLORIDE	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<10	<1000
CHLOROETHANE	<10	<10	<10	<10	<1	<1	<1	<1	<10	<10	<10	<1000
METHYLENE CHLORIDE	<5	<5	<5	<10	<1	<1	<1	<1	<5	2.1J	<5	<1000
ACETONE	100	<10	<10	<10	NA	NA	NA	NA	<10	<10	<10	<1000
CARBON DISULFIDE	<5	<5	<5	<10	NA	NA	NA	NA	<5	<5	24	<1000
1,1-DICHLOROETHENE	<5	2.2J	<5	<10	<1	<1	<1	<1	48	1100	57	<1000
1,1-DICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	69	59	24	<1000
1,2-DICHLOROETHENE	<5	<5	<5	<10	<1	<1	<1	<1	41	100	62	<1000
CHLOROFORM	<5	<5	<5	<10	<1	<1	<1	<1	3J	<5	6	<1000
1,2-DICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	4J	<5	6	<1000
2-BUTANONE	<10	<10	<10	<10	NA	NA	NA	NA	<10	<10	<10	<1000
1,1,1-TRICHLOROETHANE	<5	7	<5	<10	<1	<1	<1	<1	1800	3900	1800 E	4500
CARBON TETRACHLORIDE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
VINYL ACETATE	<10	<10	<10	NA	NA	NA	NA	NA	<10	<10	<10	NA
BROMODICHLOROMETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
1,2-DICHLOROPROPANE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
cis - 1,3-DICHLOROPROPENE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
TRICHLOROETHENE	<5	16	<5	<10	<1	<1	<1	<1	2000	10000	3500 E	11000
DIBROMOCHLOROMETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
1,1,2-TRICHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	4J	33	8	<1000
BENZENE	3J	<5	<5	<10	NA	NA	NA	NA	<5	<5	<5	<1000
trans-1,3-DICHLOROPROPENE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
BROMOFORM	<5	<5	<5	<10	<2	<2	<2	<2	<5	<5	<5	<1000
4-METHYL-2-PENTANONE	<10	<10	<10	<10	NA	NA	NA	NA	<10	<10	<10	<1000
2-HEXANONE	<10	<10	<10	<10	NA	NA	NA	NA	<10	<10	<10	<1000
TETRACHLOROETHENE	<5	83	<5	<10	<1	<1	<1	<1	19	83	40	<1000
1,1,2,2-TETRACHLOROETHANE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
TOLUENE	<5	<5	<5	<10	NA	NA	NA	NA	<5	<5	<5	<1000
CHLOROBENZENE	<5	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<1000
ETHYLBENZENE	<5	<5	<5	<10	NA	NA	NA	NA	<5	<5	<5	<1000
STYRENE	<5	<5	<5	<10	NA	NA	NA	NA	<5	<5	<5	<1000
XYLENES (TOTAL)	<5	<5	<5	<10	NA	NA	NA	NA	<5	3.1J	<5	<1000
1,3-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	203	101	0	0	0	0	0	0	4,004	15,280	5,527	15,500
TOTAL TICs	38		0	0	0	0	0	0	20		0	0
TOTAL VOCs & TOTAL TICs	241	101	0	0	0	0	0	0	4,024	15,280	5,527	15,500

ALL RESULTS IN PARTS PER BILLION (UG/l)
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NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
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WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-9 Con't												
	9/10/94	10/10/94	11/08/94	12/05/94	1/5/95	2/2/95	3/2/95	4/7/95	5/5/95	6/14/95	7/13/95	8/8/95	9/12/95
DICHLORODIFLUOROMETHANE	<250	<25	NA	<250	<50	<50	<50	<50	<250	<250	<250	<5	<250
TRICHLOROFLUOROMETHANE	<50	<5	NA	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
2-CHLOROETHYL VINYL ETHER	<50	<5	<100	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
CHLOROMETHANE	<100	<10	<100	<100	<20	<20	<20	<20	<100	<100	<100	<2	<100
BROMOMETHANE	<100	<10	<100	<100	<20	<20	<20	<20	<100	<100	<100	<2	<100
VINYL CHLORIDE	<50	<5	<100	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
CHLOROETHANE	<50	<5	<100	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
METHYLENE CHLORIDE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
ACETONE	NA	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<50	<5	<50	<50	11	<10	<10	<10	<50	<50	<50	27	<50
1,1-DICHLOROETHANE	<50	8.6	<50	<50	24	<10	<10	<10	<50	<50	<50	22	54
1,2-DICHLOROETHENE	210	8.8	<50	68	52	14	18	36	150	59	<50	47	120
CHLOROFORM	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	20	<50
1,2-DICHLOROETHANE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	7.9	<50
2-BUTANONE	NA	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	1400	64	320	740	400	220	180	180	730	1000	650	570	1400
CARBON TETRACHLORIDE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
VINYL ACETATE	NA	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
1,2-DICHLOROPROPANE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
cis - 1,3-DICHLOROPROPENE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
TRICHLOROETHENE	2700	370	910	1700	950	450	320	480	2000	2000	1300	1200	3600
DIBROMOCHLOROMETHANE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
1,1,2-TRICHLOROETHANE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	12	<50
BENZENE	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
BROMOFORM	<100	<10	<50	<100	<20	<20	<20	<20	<100	<100	<100	<2	<100
4-METHYL-2-PENTANONE	NA	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	54	5.2	<50	<50	12	<10	<10	<10	<50	<50	<50	16	<50
1,1,2,2-TETRACHLOROETHANE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
TOLUENE	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	<50	<5	<50	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
ETHYLBENZENE	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	<50	<5	<100	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
1,4-DICHLOROBENZENE	<50	<5	<100	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
1,2-DICHLOROBENZENE	<50	<5	<100	<50	<10	<10	<10	<10	<50	<50	<50	<1	<50
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	4,364	456.6	1,230	2,508	1,449	684	518	696	2,880	3,059	1,950	1,921.9	5,174
TOTAL TICs													
TOTAL VOCs & TOTAL TICs	4,364	456.6	1,230	2,508	1,449	684	518	696	2,880	3,059	1,950	1,921.9	5,174

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-9 Continued									
	10/9/95	11/13/95	12/15/95	1/22/96	2/15/96	3/12/96	4/15/96	5/14/96	6/10/96	7/8/96
DICHLORODIFLUOROMETHANE	<1000	<50	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	<400	<20	NA	NA	NA	NA	NA	NA	NA	NA
BROMOMETHANE	<400	<20	NA	NA	NA	NA	NA	NA	NA	NA
VINYL CHLORIDE	<200	<10	<50	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
CHLOROETHANE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
1,1-DICHLOROETHANE	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	2.8	<5.0
1,2-DICHLOROETHENE	210	15	<25	25	16	<5.0	<5.0	6.5	5.0	<5.0
CHLOROFORM	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
1,2-DICHLOROETHANE	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
2-BUTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	1800	85	110	240	200	41	61	72	93	67
CARBON TETRACHLORIDE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
VINYL ACETATE	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROPROPANE	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
cis - 1,3-DICHLOROPROPENE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE	4600	270	370	780	640	130	230	280	350	220
DIBROMOCHLOROMETHANE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	<200	<10	<25	<20	<10	<25	<25	<5.0	<2.0	<5.0
BENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	<400	<20	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	<200	<10	<25	22	26	<5.0	<5.0	6.1	8.6	9.0
1,1,2,2-TETRACHLOROETHANE	<200	<10	<25	<20	<10	<5.0	<5.0	<5.0	<2.0	<5.0
TOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	<200	<10	NA	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	6,610	370	480	1,067	882	171	291	364.6	459.4	296
TOTAL TICs										
TOTAL VOCs & TOTAL TICs	6,610	370	480	1,067	882	171	291	364.6	459.4	296

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT
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NA - NOT ANALYZED
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TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
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EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
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EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-10							MW-11					
	11/29/93	9/02/94	12/05/94	3/2/95	6/14/95	9/12/95	3/11/96	11/29/93	9/10/94	10/10/94	11/08/94	12/05/94	1/5/95
DICHLORODIFLUOROMETHANE	NA	<5	<5	<5	<5	<5	NA	NA	<2500	<100	NA	<25	<5
TRICHLOROFLUOROMETHANE	NA	<1	<1	<1	<1	<1	NA	NA	<500	<20	NA	<5	<1
2-CHLOROETHYL VINYL ETHER	NA	<1	<1	<1	<1	<1	NA	NA	<500	<20	<200	<5	<1
CHLOROMETHANE	<10	<2	<2	<2	<2	<2	NA	<2000	<1000	<40	<200	<10	<2
BROMOMETHANE	<10	<2	<2	<2	<2	<2	NA	<2000	<1000	<40	<200	<10	<2
VINYL CHLORIDE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<200	<5	<1
CHLOROETHANE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<200	<5	<1
METHYLENE CHLORIDE	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	31	<100	<5	<1
ACETONE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<400	NA	NA
CARBON DISULFIDE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<100	NA	NA
1,1-DICHLOROETHENE	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	<20	<100	<5	<1
1,1-DICHLOROETHANE	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	59	<100	<5	<1
1,2-DICHLOROETHENE	<10	<1	<1	<1	<1	<1	<1.0	490 J	550	510	<100	17	17
CHLOROFORM	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	31	<100	<5	<1
1,2-DICHLOROETHANE	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	46	<100	<5	<1
2-BUTANONE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<400	NA	NA
1,1,1-TRICHLOROETHANE	<10	25	2.2	<1	<1	1.1	<1.0	21000	23000	1000	270	40	11
CARBON TETRACHLORIDE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<100	<5	<1
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<400	NA	NA
BROMODICHLOROMETHANE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<100	<5	<1
1,2-DICHLOROPROPANE	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	<20	<100	<5	<1
cis - 1,3-DICHLOROPROPENE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<100	<5	<1
TRICHLOROETHENE	3 J	21	26	1.7	1.8	6.2	<1.0	29000	22000	3500	910	130	58
DIBROMOCHLOROMETHANE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<100	<5	<1
1,1,2-TRICHLOROETHANE	<10	<1	<1	<1	<1	<1	<5.0	<2000	<500	70	<100	<5	4.1
BENZENE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<100	NA	NA
trans-1,3-DICHLOROPROPENE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<100	<5	<1
BROMOFORM	<10	<2	<2	<2	<2	<2	NA	<2000	<1000	<40	<100	<10	<2
4-METHYL-2-PENTANONE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<400	NA	NA
2-HEXANONE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<400	NA	NA
TETRACHLOROETHENE	<10	<1	<1	<1	<1	<1	<1.0	250 J	<500	58	<100	<5	1.5
1,1,2,2-TETRACHLOROETHANE	<10	<1	<1	<1	<1	<1	<1.0	<2000	<500	<20	<100	<5	<1
TOLUENE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<100	NA	NA
CHLOROBENZENE	<10	<1	<1	<1	<1	<1	NA	<2000	<500	<20	<100	<5	<1
ETHYLBENZENE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<100	NA	NA
STYRENE	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<100	NA	NA
XYLENES (TOTAL)	<10	NA	NA	NA	NA	NA	NA	<2000	NA	NA	<100	NA	NA
1,3-DICHLOROBENZENE	NA	<1	<1	<1	<1	<1	NA	NA	<500	<20	<200	<5	<1
1,4-DICHLOROBENZENE	NA	<1	<1	<1	<1	<1	NA	NA	<500	<20	<200	<5	<1
1,2-DICHLOROBENZENE	NA	<1	<1	<1	<1	<1	NA	NA	<500	<20	<200	<5	<1
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	3	46	28.2	1.7	1.8	7.3	ND	50,740	45,550	5,305	1,180	187	91.6
TOTAL TICs	0							0	0				
TOTAL VOCs & TOTAL TICs	3	46	28.2	1.7	1.8	7.3	ND	50,740	45,550	5,305	1,180	187	91.6

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTITATION LIMIT
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

BULOVATBL2/WTRQ1295

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-11 Con't											
	2/2/95	3/2/95	4/7/95	5/5/95	6/15/95	7/13/95	8/8/95	9/12/95	12/15/95	3/11/96	6/10/96	7/8/96
DICHLORODIFLUOROMETHANE	<50	<10	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
CHLOROMETHANE	<20	<4	<2	<2	<2	<2	<2	<2	NA	NA	NA	NA
BROMOMETHANE	<20	<4	<2	<2	<2	<2	<2	<2	NA	NA	NA	NA
VINYL CHLORIDE	<10	<2	<1	<1	<1	<1	<1	<1	<10	<5.0	<1.0	<1.0
CHLOROETHANE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
METHYLENE CHLORIDE	<10	<2	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<10	<2	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
1,1-DICHLOROETHANE	<10	<2	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
1,2-DICHLOROETHENE	11	10	3.9	1.2	2	1.9	2	2.3	<5	32	3.3	<1.0
CHLOROFORM	<10	<2	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
1,2-DICHLOROETHANE	<10	<2	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
2-BUTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	94	15	6.8	3.5	1	8.2	<1	2	<5	230	6.5	<1.0
CARBON TETRACHLORIDE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
1,2-DICHLOROPROPANE	<10	<2	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
cis - 1,3-DICHLOROPROPENE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
TRICHLOROETHENE	480	110	24	14	8.1	25	4.9	13	<5	170	30	4.1
DIBROMOCHLOROMETHANE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	18	5.3	<1	<1	<1	1.1	<1	<1	<5	<25.0	<1.0	<1.0
BENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
BROMOFORM	<20	<4	<2	<2	<2	<2	<2	<2	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	11	4.4	5.8	1.5	<1	2.1	<1	2.1	<5	<5.0	1.7	<1.0
1,1,2,2-TETRACHLOROETHANE	<10	2.1	<1	<1	<1	<1	<1	<1	<5	<5.0	<1.0	<1.0
TOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
ETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
1,4-DICHLOROBENZENE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
1,2-DICHLOROBENZENE	<10	<2	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ND	614	146.8	40.5	20.2	11.1	38.3	6.9	19.4	ND	432	41.5	4.1
TOTAL TICs												
TOTAL VOCs & TOTAL TICs	614	146.8	40.5	20.2	11.1	38.3	6.9	19.4	ND	432	41.5	4.1

ALL RESULTS IN PARTS PER BILLION (UG/l)
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VOCs - VOLATILE ORGANIC COMPOUND
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NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-12									MW-13			(Replicate)
	11/29/93	9/02/94	12/05/94	3/3/95	6/15/95	9/12/95	12/15/95	3/11/96	6/10/96	12/21/94	10/9/95	10/25/95	10/25/95
DICHLORODIFLUOROMETHANE	NA	<1000	<250	<100	<10	<5	NA	NA	NA	<10	<5	<10	<10
TRICHLOROFLUOROMETHANE	NA	<200	<50	<10	<2	<1	NA	NA	NA	<5	<1	<5	<5
2-CHLOROETHYL VINYL ETHER	NA	<200	<50	<20	<2	<1	NA	NA	NA	NA	<1	NA	NA
CHLOROMETHANE	<2000	<400	<100	<40	<4	<2	NA	NA	NA	<10	<2	<10	<10
BROMOMETHANE	<2000	<400	<100	<20	<4	<2	NA	NA	NA	<10	<2	<10	<10
VINYL CHLORIDE	<2000	<200	<50	<20	<2	<1	<10	<5.0	<1.0	10	4.1	8J	9J
CHLOROETHANE	<2000	<200	<50	<10	<2	<1	NA	NA	NA	<10	<1	<10	<10
METHYLENE CHLORIDE	<2000	<200	<50	<10	<2	<1	<5	<5.0	<1.0	<5	<1	5B	4J B
ACETONE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<2000	<200	<50	<10	<2	<1	<5	<5.0	<1.0	<5	<1	<5	<5
1,1-DICHLOROETHANE	1500 J	860	70	31	2.5	1.7	<5	<5.0	1.7	2J	<1	<5	<5
1,2-DICHLOROETHENE	7000	3600	360	180	13	3.3	<5	45	10	NA	<1	NA	NA
CHLOROFORM	<2000	<200	<50	<20	<2	<1	<5	<5.0	<1.0	<5	<1	<5	<5
1,2-DICHLOROETHANE	<2000	<200	<50	<20	<2	<1	<5	<5.0	<1.0	<5	<1	<5	<5
2-BUTANONE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	8500	7900	900	230	<25	5.2	5.8	53	9.5	<5	<1	<5	<5
CARBON TETRACHLORIDE	<2000	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	<2000	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
1,2-DICHLOROPROPANE	<2000	<200	<50	<20	<2	<1	<5	<5.0	<1.0	<5	<1	<5	<5
cis - 1,3-DICHLOROPROPENE	<2000	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	NA	NA
TRICHLOROETHENE	19000	14000	2200	760	100	34	37	160	49	4J	<1	NA	NA
DIBROMOCHLOROMETHANE	<2000	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
1,1,2-TRICHLOROETHANE	<2000	<200	<50	<20	<2	<1	<5	<25	<1.0	<5	<1	NA	NA
BENZENE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	5	NA	3J	3J
trans-1,3-DICHLOROPROPENE	<2000	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	NA	NA
BROMOFORM	<2000	<400	<100	<40	<4	<2	NA	NA	NA	<5	<2	<5	<5
4-METHYL-2-PENTANONE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	<2000	<200	<50	<20	<2	<1	<5	<5.0	<1.0	<5	<1	<5	<5
1,1,2,2-TETRACHLOROETHANE	<2000	<200	<50	<20	<2	<1	<5	<5.0	<1.0	<5	<1	<5	<5
TOLUENE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	2J	NA	2J	2J
CHLOROBENZENE	<2000	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
ETHYLBENZENE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	24	25
STYRENE	<2000	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
XYLENES (TOTAL)	<2000	NA	NA	NA	NA	NA	NA	NA	NA	–	NA	NA	NA
1,3-DICHLOROBENZENE	NA	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
1,4-DICHLOROBENZENE	NA	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
1,2-DICHLOROBENZENE	NA	<200	<50	<20	<2	<1	NA	NA	NA	<5	<1	<5	<5
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	4J	NA	<5	<5
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
META + PARA-XYLENES	NA	NA	NA	NA	NA	NA	NA	NA	NA	2J	NA	13	13
ORTHO-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	3J	4J
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	2J	NA	6	7
BROMOBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
N-PROPYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	17	17
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	2J	NA	<5	<5
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	3J	3J
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
N-BUTYLBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	2J	2J
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1J	NA	3J	2J
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
ND	36,000	28360	3530	1,201	140.5	44.2	42.8	258	70.2	34	4.1	89	91
TOTAL TICs	0												
TOTAL VOCs & TOTAL TICs	36,000	28360	3530	1,201	140.5	44.2	42.8	258	70.2	34	4.1	89	91

ALL RESULTS IN PARTS PER BILLION (UG/l)
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B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
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EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-13			MW-14	MW-15	MW-16							
	12/15/95	3/12/96	6/10/96	10/25/95	12/21/94	12/21/94	8/8/95	9/12/95	10/9/95	11/13/95	12/15/95	1/22/96	2/15/96
DICHLORODIFLUOROMETHANE	NA	NA	NA	<100	<10	<100	<5	<25	<100	<10	NA	NA	NA
TRICHLOROFLUOROMETHANE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	NA	NA	<1	<5	<20	<2	NA	NA	NA
CHLOROMETHANE	NA	NA	NA	<100	<10	<100	<2	<10	<40	<4	NA	NA	NA
BROMOMETHANE	NA	NA	NA	<100	<10	<100	<2	<10	<40	<4	NA	NA	NA
VINYL CHLORIDE	<10	7.3	16	<100	54	<100	<1	<5	<20	<2	<10	<10	<1.0
CHLOROETHANE	NA	NA	NA	<100	7J	<100	<1	<5	<20	<2	NA	NA	NA
METHYLENE CHLORIDE	<5	<1.0	<1.0	23J	<5	<50	<1	<5	<20	<2	<5	<10	<1.0
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<5	<1.0	<1.0	<50	<5	<50	2.2	<5	<20	<2	<5	<10	<1.0
1,1-DICHLOROETHANE	<5	4.4	5.2	<50	74	47J	15	28	50	5.2	10	<10	<1.0
1,2-DICHLOROETHENE	<5	4.9	13	NA	NA	NA	27	44	68	7.2	11	<10	1.2
CHLOROFORM	<5	<1.0	<1.0	<50	5	<50	<1	<5	<20	<2	<5	<10	<1.0
1,2-DICHLOROETHANE	<5	<1.0	<1.0	<50	<5	<50	<1	<5	<20	<2	<5	<10	<1.0
2-BUTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	<5	1.4	1.9	<50	7	210	43	110	220	28	45	19	5.7
CARBON TETRACHLORIDE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
1,2-DICHLOROPROPANE	<5	<1.0	<1.0	<50	<5	<50	<1	<5	<20	<2	<5	<10	<1.0
cis - 1,3-DICHLOROPROPENE	NA	NA	NA	NA	<5	<50	<1	<5	<20	<2	NA	NA	NA
TRICHLOROETHENE	<5	15	18	NA	48	730	140	270	590	75	170	87	22
DIBROMOCHLOROMETHANE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
1,1,2-TRICHLOROETHANE	<5	<5.0	<1.0	NA	<5	<50	<1	<5	<20	<2	<5	<10	<1.0
BENZENE	NA	NA	NA	<50	<5	<50	<1	<5	NA	NA	NA	NA	NA
trans-1,3-DICHLOROPROPENE	NA	NA	NA	NA	<5	<50	<1	<5	<20	<2	NA	NA	NA
BROMOFORM	NA	NA	NA	<50	<5	<50	<2	<10	<40	<4	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	<5	<1.0	<1.0	<50	<5	<50	<1	<5	<20	<2	<5	<10	<1.0
1,1,2,2-TETRACHLOROETHANE	<5	<1.0	<1.0	<50	<5	<50	<1	<5	<20	<2	<5	<10	<1.0
TOLUENE	NA	NA	NA	29J	<5	<50	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
ETHYLBENZENE	NA	NA	NA	120	<5	<50	NA	NA	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
XYLENES (TOTAL)	NA	NA	NA	NA	–	–	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	<50	<5	<50	<1	<5	<20	<2	NA	NA	NA
2,2-DICHLOROPROPANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	<50	16	33J	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROPROPENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROPROPANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
META + PARA-XYLENES	NA	NA	NA	440	<5	<50	NA	NA	NA	NA	NA	NA	NA
ORTHO-XYLENE	NA	NA	NA	190	<5	<50	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	NA	NA	78	<5	<50	NA	NA	NA	NA	NA	NA	NA
BROMOBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
N-PROPYLBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
2-CHLOROTOLUENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	200	<5	<50	NA	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
P-ISOPROPYLTOLUENE	NA	NA	NA	360	<5	<50	NA	NA	NA	NA	NA	NA	NA
N-BUTYLBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	920	<5	<50	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	NA	NA	NA	<50	<5	<50	NA	NA	NA	NA	NA	NA	NA
TOTAL VOCs	ND	33	54.1	2360	211	1,020	227.2	452	928	115.4	236	106	28.9
TOTAL TICs													
TOTAL VOCs & TOTAL TICs	ND	33	54.1	2360	211	1,020	227.2	452	928	115.4	236	106	28.9

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUATITATION LIMIT
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUNDS
EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (CONT.)
VOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-16 Con't					MW-17	MW-18	MW-19	MW-20	MW-21
	3/11/96	4/15/96	5/14/96	610/96	7/8/96	12/21/94	12/21/94	12/21/94	12/21/94	5/5/95
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	<10	<10	<10	<10	<10
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	NA	NA	NA	NA	NA	<10	<10	<10	<10	<10
BROMOMETHANE	NA	NA	NA	NA	NA	<10	<10	<10	<10	<10
VINYL CHLORIDE	<1.0	<2.0	<1.0	<1.0	<1.0	<10	<10	<10	<10	<10
CHLOROETHANE	NA	NA	NA	NA	NA	<10	<10	<10	<10	<10
METHYLENE CHLORIDE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
1,1-DICHLOROETHANE	3.6	5.4	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
1,2-DICHLOROETHENE	4.1	5.7	<1.0	<1.0	1.4	NA	NA	NA	NA	NA
CHLOROFORM	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
1,2-DICHLOROETHANE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
2-BUTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
1,1,1-TRICHLOROETHANE	19	23	2.2	2.5	5.6	<5	<5	<5	<5	<5
CARBON TETRACHLORIDE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2-DICHLOROPROPANE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
cis - 1,3-DICHLOROPROPENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
TRICHLOROETHENE	54	69	6.0	11	25	<5	6	<5	<5	3J
DIBROMOCHLOROMETHANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
BENZENE	NA	NA	NA	NA	NA	<5	1J	<5	3J	<5
trans-1,3-DICHLOROPROPENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
BROMOFORM	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
2-HEXANONE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	<1.0	<2.0	<1.0	<1.0	<1.0	<5	<5	1J	<5	<5
TOLUENE	NA	NA	NA	NA	NA	<5	<5	<5	1J	<5
CHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
ETHYLBENZENE	NA	NA	NA	NA	NA	<5	3J	<5	<5	<5
STYRENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
XYLENES (TOTAL)	NA	NA	NA	NA	NA	–	–	–	–	–
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
2,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,1-DICHLOROPROPENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
DIBROMOMETHANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2-DIBROMOETHANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,3-DICHLOROPROPANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
META + PARA-XYLENES	NA	NA	NA	NA	NA	<5	1J	<5	4J	<5
ORTHO-XYLENE	NA	NA	NA	NA	NA	<5	1J	<5	2J	<5
ISOPROPYLBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
BROMOBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
N-PROPYLBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
2-CHLOROTOLUENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
4-CHLOROTOLUENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	<5	11	<5	<5	1J
TERT-BUTYLBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	<5	10	<5	<5	1J
SEC-BUTYLBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
P-ISOPROPYLTOLUENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	2J
N-BUTYLBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2DIBROMO3CHLOROPROPANE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
NAPHTHALENE	NA	NA	NA	NA	NA	<5	4J	2J	<5	<5
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
1,2,3-TRICHLOROBENZENE	NA	NA	NA	NA	NA	<5	<5	<5	<5	<5
TOTAL VOCs	80.7	103.1	8.2	13.5	32	0	37	3	10	7
TOTAL TICs										
TOTAL VOCs & TOTAL TICs	80.7	103.1	8.2	13.5	32	0	37	3	10	7

ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUATITATION LIMIT
B - ANALYTE PRESENT IN FIELD OR LABORATORY BLANK
NA - NOT ANALYZED
VOCs - VOLATILE ORGANIC COMPOUND
TOTAL VOCs INCLUDE ESTIMATED VALUE DENOTED WITH A "J".
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EPA METHOD 624: 7/18/91, 7/23/91, 11/25/91
NYSASP CLP 91-1: 7/14/89, 3/20/92, 6/16/93, 11/29/93
EPA METHOD 8260: 12/21/94
EPA METHOD 8010: 9/4/94 THROUGH 11/13/95

SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-4 11/25/91	MW-4 11/29/93	MW-6 7/14/89	MW-7 7/14/89	MW-8 7/14/89	MW-9 7/14/89	MW-9 3/20/92	MW-9 9/16/93	MW-10 11/29/93	MW-11 11/29/93	MW-12 11/29/93	MW-13 10/25/95	(Replicate) 10/25/95	MW-14 10/25/95	MW-21 5/5/95
PHENOL	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1.5	<1.5	<1.5	<10
bis (2-CHLOROETHYL) ETHER	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<5.7	<5.7	<5.7	<10
2-CHLOROPHENOL	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<3.3	<3.3	<3.3	<10
1,3-DICHLOROBENZENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
1,4-DICHLOROBENZENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<4.4	<4.4	<4.4	<10
BENZYL ALCOHOL	NA	NA	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	<20
1,2-DICHLOROBENZENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
2 METHYLPHENOL	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	<10
2,2' - OXYBIS(1-CHLOROPROPANE)	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<5.7	<5.7	<5.7	<10
4-METHYLPHENOL	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	44	NA	NA	NA	<10
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<10	<10	<10	<10
HEXACHLOROETHANE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.6	<1.6	<1.6	<10
NITROBENZENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
ISOPHORONE	<10	<10	3 J	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.2	<2.2	<2.2	<10
2-NITROPHENOL	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<3.6	<3.6	<3.6	<10
2,4 DIMETHYLPHENOL	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2.7	<2.7	<2.7	<10
BENZOIC ACID	NA	NA	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	<10
bis(2-CHLOROETHOXY) METHANE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<5.3	<5.3	<5.3	<10
2,4-DICHLOROPHENOL	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2.7	<2.7	<2.7	<10
1,2,4-TRICHLOROBENZENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
NAPHTHALENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	5 XJ	1.1J	1J	280E	<10
4-CHLOROANILINE	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	NA	NA	NA	<10
HEXACHLOROBUTADIENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<0.9	<0.9	<0.9	<10
4-CHLORO-3-METHYLPHENOL	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<3	<3	<3	<10
2-METHYLNAPHTHALENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	44 X	NA	NA	NA	2J
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2	<2	<2	<10
2,4,6-TRICHLOROPHENOL	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<2.7	<2.7	<2.7	<10
2,4,5-TRICHLOROPHENOL	NA	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25	NA	NA	NA	<25
2-CHLORONAPHTHALENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
2-NITROANILINE	NA	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25 X	NA	NA	NA	<25
DIMETHYLPHTHALATE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.6	<1.6	<1.6	<10
ACENAPHTHYLENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<3.5	<3.5	<3.5	<10
2,6-DINITROTOLUENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
3-NITROANILINE	NA	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25 X	NA	NA	NA	<25
ACENAPHTHENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	3.3	3.4	32	<10
2,4-DINITROPHENOL	<50	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25	<40	<40	<40	<25
4-NITROPHENOL	<50	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25	<2.4	<2.4	<2.4	<25
DIBENZOFURAN	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	1 XJ	NA	NA	NA	<10
2,4-DINITROTOLUENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<5.7	<5.7	<5.7	<10
DIETHYLPHTHALATE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<4.2	<4.2	<4.2	<10
FLUORENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	2 XJ	<1.9	<1.9	11	<10
4-NITROANILINE	NA	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25 X	NA	NA	NA	<25
4,6-DINITRO-2-METHYLPHENOL	<50	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25	<24	<24	<24	<25
N-NITROSODIPHENYLAMINE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10

RESULTS REPORTED IN UG/L (PPB)
B - ANALYTE PRESENT IN BLANK
J - ESTIMATED VALUE, BELOW METHOD QUANTITATION LIMIT, ABOVE INSTRUMENT DETECTION LIMIT
TOTAL SEMIVOLATILES INCLUDE ESTIMATED VALUES DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUND
X - ESTIMATED CONCENTRATION RELATED TO SAMPLE SPECIFIC MATRIX EFFECT AFFECTING QUANTITATION.
NYSASP CLP 91-2: 7/14/89, 3/20/92, 9/16/93, 11/29/93

WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS

COMPOUND	MW-4 11/25/91	MW-4 11/29/93	MW-5 7/14/89	MW-7 7/14/89	MW-8 7/14/89	MW-9 7/14/89	MW-9 3/20/92	MW-9 6/16/93	MW-10 11/29/93	MW-11 11/29/93	MW-12 11/29/93	MW-13 10/25/95	(Replicate) 10/25/95	MW-14 10/25/95	MW-21 5/5/95
HEXACHLOROBENZENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<1.9	<1.9	<1.9	<10
PENTACHLOROPHENOL	<50	<25	<50	<50	<50	<50	<50	<26	<25	<25	<25	<3.6	<3.6	<3.6	<25
PHENANTHRENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	2 XJ	11	12	27	<10
ANTHRACENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	1.4J	1.6J	<1.9	<10
CARBAZOLE	NA	<10	NA	NA	NA	NA	<10	<10	<10	<10	<10 X	NA	NA	NA	<10
DI-N-BUTYLPHTHALATE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
FLUORANTHENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.2	<2.2	1.1J	<10
PYRENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	1.5J	1.5J	1.6J	<10
BUTYLBENZYLPHTHALATE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
3,3-DICHLOROBENZIDINE	<20	<10	<20	<20	<20	<20	<20	<10	<10	<10	<10 X	<17	<17	<17	<10
BENZO(A)ANTHRACENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<7.8	<7.8	<7.8	<10
CHRYSENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
bis(2-ETHYLHEXYL)PHTHALATE	<10	<10	37 B	28 B	24 B	11 B	<10	9 JB	3 JB	3 JB	3 XJB	<2.5	<2.5	<2.5	<10
DI-N-OCTYLPHTHALATE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
BENZO(B)FLUORANTHENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<4.8	<4.8	<4.8	<10
BENZO(K)FLUORANTHENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
BENZO(A)PYRENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
IDENO(1,2,3-CD)PYRENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<3.7	<3.7	<3.7	<10
DIBENZ(A,H)ANTHRACENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<2.5	<2.5	<2.5	<10
BENZO(G,H,I)PERYLENE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 X	<4.1	<4.1	<4.1	<10
TOTAL SEMI VOLATILES	0	0	3	0	0	0	0	0	0	0	98	18.3	19.6	353.7	2
TOTAL TICs	0	26	28	42	52	ND	47	15	11	82	460	242.9	236.5	1232	15
TOTAL SEMIVOLATILES & TICs	0	26	31	42	52	0	47	15	11	82	558	261.2	256.1	1585.7	17

RESULTS REPORTED IN UG/L (PPB)
B - ANALYTE PRESENT IN BLANK
J - ESTIMATED VALUE, BELOW METHOD QUANTITATION LIMIT, ABOVE INSTRUMENT DETECTION LIMIT
TOTAL SEMIVOLATILES INCLUDE ESTIMATED VALUES DENOTED WITH A "J".
TICs - TENTATIVELY IDENTIFIED COMPOUND
X - ESTIMATED CONCENTRATION RELATED TO SAMPLE SPECIFIC MATRIX EFFECT AFFECTING QUANTITATION.
NYSASP CLP 91-2: 7/14/89, 3/20/92, 6/16/93, 11/29/93
8ULOVATABLES2/WTRSEMI.WK3

TABLE 4 con't
WATCH CASE FACTORY SITE
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
PESTICIDES/PCBs

COMPOUND	MW-2 7/23/91	MW-3 7/23/91	MW-4 7/23/91	MW-4 11/25/91	MW-5 7/23/91	MW-6 7/14/89	MW-7 7/14/89	MW-8 7/14/89	MW-9 7/14/89	MW-4 11/29/93	MW-10 11/29/93	MW-11 11/29/93	MW-12 11/29/93
ALPHA-BHC	<0.03	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
BETA-BHC	<0.06	<0.06	<0.06	<0.06	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
DELTA-BHC	<0.09	<0.09	<0.09	<0.09	<0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
GAMMA-BHC (LINDANE)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
HEPTACHLOR	<0.03	<0.03	<0.03	<0.03	<0.03	<0.08	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
ALDRIN	<0.04	<0.04	<0.04	<0.04	<0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
HEPTACHLOR EPOXIDE	<0.83	<0.83	<0.83	<0.83	<0.83	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
ENDOSULFAN I	<0.14	<0.14	<0.14	<0.14	<0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.058	<0.05	<0.052
DIELDRIN	<0.02	<0.02	<0.02	<0.02	<0.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	<0.10
4,4'-DDE	<0.04	<0.04	<0.04	<0.04	<0.04	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	0.57 P
ENDRIN	<0.06	<0.06	<0.06	<0.06	<0.06	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	0.050 JP
ENDOSULFAN II	<0.04	<0.04	<0.04	<0.04	<0.04	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	<0.10
4,4'-DDD	<0.11	<0.11	<0.11	<0.11	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	0.051 JP
ENDOSULFAN SULFATE	<0.66	<0.66	<0.66	<0.66	<0.66	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	<0.10
4,4'-DDT	<0.12	<0.12	<0.12	<0.12	<0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	<0.10
METHOXYCHLOR	NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.50	<0.58	<0.50	0.42 J
ENDRIN KETONE	NA	NA	NA	NA	NA	<0.10	<0.10	<0.10	<0.10	<0.10	<0.12	<0.10	0.26 P
CHLORDANE	<0.14	<0.14	<0.14	NA	<0.14	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
ENDRIN ALDEHYDE	<0.23	<0.23	<0.23	<0.23	<0.23	NA	NA	NA	NA	<0.10	<0.12	<0.10	<0.10
ALPHA-CHLORDANE	NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.050	<0.058	<0.050	<0.052
GAMMA-CHLORDANE	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<0.050	<0.058	<0.050	0.048 JP
TOXAPHENE	<2.4	<2.4	<2.4	<2.4	<2.4	<0.5	<0.5	<0.5	<0.5	<5.0	<5.8	<5.0	<5.2
AROCLOR-1016	<1.0	<1.0	<1.0	<0.65	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0	<1.2	<1.0	<1.0
AROCLOR-1221	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<2.0	<2.3	<2.0	<2.1
AROCLOR-1232	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0	<1.2	<1.0	<1.0
AROCLOR-1242	<0.65	<0.65	<0.65	<0.65	<0.65	<0.5	<0.5	<0.5	<0.5	<1.0	<1.2	<1.0	<1.0
AROCLOR-1248	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0	<1.2	<1.0	<1.0
AROCLOR-1254	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.2	<1.0	<1.0
AROCLOR-1260	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.2	<1.0	<1.0

ALL RESULTS REPORTED IN UG/L (PPB)
NA - NOT ANALYZED
J - Estimated concentration. Value less than reporting limit but greater than method detection limit.
P - Result from primary and secondary difference greater than 25%.

BULOVA:WTRPCBS.WK3

TABLE 4
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
INORGANICS

COMPOUND	MW-2					MW-3					MW-4				
	7/23/91	11/25/91	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	7/23/91	11/25/91	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	7/23/91	11/25/91	3/20/92	11/29/93 TOTAL	11/29/93 DISSOLVED
ALUMINUM	1000		2480	1070	24.4B	15000		13700	293	<18.2	5100		14300	4280	<9.4
ANTIMONY	<60		<19	<24	<24	<60		<19	<24	<24	<60		<19	<10.2	<10.2
ARSENIC	6.1		2.0B	1.2B	<0.67	<5		2.9B	<0.67	<0.67	5.4	10	10.7	3.2 B	1.2 B
BARIUM	<200		59.5B	39.0	19.9B	380		259	42.5B	40.6B	<200		105B	40.1 B	<10.5
BERYLLIUM	<5		0.27B	<0.36	<0.36	<5		0.73B	<0.36	<0.36	<5		0.53B	0.50 B	<0.45
CADMIUM	<5		<1.5	<2.2	<2.2	<5		<1.5	<2.2	<2.2	<5		<1.5	<1.6	<1.6
CALCIUM	58000		43900	44700	43800	71000		49700	41300	42400	31000		29700	33100	31900
CHROMIUM	13	18	9.6B	3.6B	<3.2	22	12	16.7	<3.2	<3.2	230	170	411	186	15.0
COBALT	<50		<4.9	<5	<5	<50		24.2B	<5	<5	<50		6.9B	<4.2	<4.2
COPPER	73	45	25.3	55.9	16.5B	92	39	79.2	9.6B	3.5B	200	110	210	100	24.3 B
IRON	3600		4780	2370	28.2B	22000		16200	408	<6.7	16000		34200	10500	<19.6
LEAD	270	340	88.6	63.7	1.2B	22	11	14	1.9B	0.73B	160	100	149	99.9	1.7 B
MAGNESIUM	6400		7490	5820	5620	8200		5920	3630B	3500B	4900		6520	5210	4100 B
MANGANESE	110		44.3	49.8	4.7B	2700		1820	45.4	<1.1	340		193	64.5	5.2 B
MERCURY	<2.5		<0.16	<0.05 B	<0.05	<1		<0.16	<0.05	<0.05	<1		0.37	0.32 B	0.08 B
NICKEL	<40		15.4	<7.6	<7.6	<40		25.8B	<7.6	<7.6	77	45	76.6	33.1 B	<11.2
POTASSIUM	<5000		4450B	2570B	2180B	12000		9770	6640	6580	<5000		5510	3360 B	2420 B
SELENIUM	<5		<1.3	1.7B	1.5B	<5		<1.3	<1.2	1.3B	<5		1.6B	1.0 B	<0.88
SILVER	12	67	29.6	17.3	<3.6	<10		<4.2	<3.6	<3.6	65	66	165	73.9	<2.6
SODIUM	11000		10400	9110	9240	46000		47800	39000	40900	7400		8810	14000	14600
THALLIUM	<40		<1.2	<0.95	<0.95	<40		<1.2	<0.95	<0.95	<40		<1.2	<0.95	<0.95
VANADIUM	<50		9.33	5.7B	<3.1	<50		25.2B	<3.1	<3.1	<50		45.6 B	19.3 B	5.1 B
ZINC	60		27.5	19.7B	8.7B	74		58.2	6.3B	5.6B	530		692	232	62.5
CYANIDE	NA		NA	<1.6	NA	NA		NA	<1.7	NA	NA		1.4B	<7.5	NA
CHLORIDE	9900		NA	NA	NA	7300		NA	NA	NA	7200		NA	NA	NA

ALL SAMPLES REPORTED IN UG/L (PPB)
NA - NOT ANALYZED
B - ANALYTE PRESENT IN BLANK
J - ESTIMATED VALUE, ABOVE INSTRUMENT DETECTION LIMIT, BELOW METHOD QUANTITATION LIMIT
DETECTION LIMITS COULD NOT BE LISTED FOR CERTAIN COMPOUNDS DUE TO LACK OF ORIGINAL ANALYTICAL RESULTS
EPA METHOD 6010: 7/18/89, 7/23/91, 11/25/91
NYSASP CLP 12-91: 7/14/89, 3/20/92, 6/16/93, 11/29/93
DISSOLVED SAMPLES WERE FIELD FILTERED THROUGH A 0.45 MICRON FILTER
bulova tables2/wtrmets

TABLE 4 (CONT'D)
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
INORGANICS

COMPOUND	MW-5						MW-6						
	7/23/91	11/25/91	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	12/21/94 TOTAL	7/14/89 TOTAL	7/14/89 DISSOLVED	11/25/91	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	12/22/94 TOTAL
ALUMINUM	2300		808	186B	<18.2	250	77800	199 B		119000	19400	1330	1900
ANTIMONY	<60		<19	<24	<24	ND	<48	35 B		<19	<24	<24	ND
ARSENIC	<5		0.6B	<0.67	0.68B	ND	6.6B	<2.0		7.4B	2.2B	<0.67	ND
BARIUM	<200		45.5B	44.3B	42.2B	31	514	<200		681	167B	63.7B	63
BERYLLIUM	<5		<0.27	<0.36	<0.36	ND	7	<2.0		6	1.8B	0.90B	ND
CADMIUM	<5		<1.5	34.2	13.4	ND	12	<3.0		<1.5	45.5	23.2	ND
CALCIUM	36000		13200	16400	15800	22000	45400	43700		11500	12000	10800	11000
CHROMIUM	<10		4.5B	<3.2	<3.2	ND	79	<9.0	110	104	18.7	<3.2	ND
COBALT	<50		<4.9	<5.0	<5.0	ND	60	<13.0		58.8	11.2B	<5	ND
COPPER	<25		20.7	6.1B	2.1B	ND	116	<11.0	160	152	27.6	2.1B	ND
IRON	2300		1780	345	<6.7	130	95000	213		120000	18100	24.6B	ND
LEAD	44	15	4.4	2.0	0.88B	ND	96	5.3	110	93.8	21.1	1.4B	ND
MAGNESIUM	3000		1790B	1790B	1710B	2200	18900	2850 B		24500	6460	3000B	3300
MANGANESE	130		72.4	11.6B	1.3B	11	2620	493		2830	555	110	140
MERCURY	<1		<0.16	0.07B	<0.05	ND	<0.20	<0.20		<0.16	<0.05	<0.05	ND
NICKEL	<40		<10	<7.6	<7.6	ND	58	<21.0	92	104	18.4B	<7.6	ND
POTASSIUM	<5000		7070	18800	11800	21000	10900	2000 B		15500	5650	3680B	3100
SELENIUM	<5		<1.3	<1.2	<1.2	ND	<1	<1.0		<1.3	<1.2	<1.2	ND
SILVER	<10		<4.2	<3.6	<3.6	ND	<10	49.0		<4.2	<3.6	<3.6	ND
SODIUM	44000		43100	51500	49000	33000	8030	10350		10300	10900	10300	10000
THALLIUM	<40		<1.2	<0.95	<0.95	ND	<3	<3.0		1.3B	<0.95	<0.95	ND
VANADIUM	<50		<3.0	<3.1	<3.1	ND	134	<17.0		177	26.2B	<3.1	ND
ZINC	40		9.9B	48.9	23	54	341	66		454	115	51.5	50
CYANIDE	NA		NA	<1.6	NA	NA	NA	NA		NA	<1.6	NA	NA
CHLORIDE	4700		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA

B - ANALYTE PRESENT IN BLANK
J - ESTIMATED VALUE, ABOVE INSTRUMENT DETECTION LIMIT, BELOW METHOD QUANTITATION LIMIT
DETECTION LIMITS COULD NOT BE LISTED FOR CERTAIN COMPOUNDS DUE TO LACK OF ORIGINAL ANALYTICAL RESULTS
EPA METHOD 6010: 7/18/89, 7/23/91, 11/25/91
NYSASP CLP 12-91: 7/14/89, 3/20/92, 6/16/93, 11/29/93
DISSOLVED SAMPLES WERE FIELD FILTERED THROUGH A 0.45 MICRON FILTER
bulovatables/wtrmets

TABLE 4 (CONT'D)
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
INORGANICS

COMPOUND	MW-7							MW-8						MW-9		
	7/14/89 TOTAL	7/14/89 DISSOLVED	11/25/91	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	12/20/94 TOTAL	7/14/89 TOTAL	7/14/89 DISSOLVED	11/25/91	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	7/14/89 TOTAL	7/14/89 DISSOLVED	11/25/91
ALUMINUM	50000	177 B		81900	4660	40.2B	210	193000	133 B		128000	41800	187B	67800	<102	
ANTIMONY	<48	<26.0		20.7B	<24	<24	ND	48B	<26.0		20.6B	<24.2	<24.0	<48	<26.0	
ARSENIC	7.8B	<2.0		8.0B	1.1B	<0.67	ND	<2.0	<2.0	12	7.9B	1.5B	<0.67	15.3	<2.0	<1
BARIUM	357	200		549	58B	27B	23	1400	200		957	546	11.9B	538	<200	
BERYLLIUM	6	<2.0		4.0B	<0.36	<0.36	ND	17	<2.0		6	2.4B	<0.36	7	<2.0	
CADMIUM	11	<3.0		<1.5	5.4	<2.2	ND	41	<3.0		<1.5	6.5	<2.2	10	<3.0	
CALCIUM	35600	30900		27200	25900	27700	17000	67600	55500		77000	69000	57300	32300	30800	
CHROMIUM	69	11.0	48	117	8.6B	<3.2	ND	193	<9.0	170	122	49	<3.2	83	<9.0	28
COBALT	60	<13.0		71.8	5.0B	<5.0	ND	143	<13.0		67.3	26.4	<5	77	<13.0	
COPPER	131	<11.0	72	164	12.3B	2.5B	ND	235	14.0 B	220	163	958	9.1B	953	19.0 B	400
IRON	90000	147		141000	8550	44.3B	240	224000	128		144000	46800	189	102000	121	
LEAD	110	<2.0	120	152	9.1	<0.61	ND	1520	<2.0	170	106	178	1.3B	82	<2.0	39
MAGNESIUM	18100	3630 B		25500	4860B	3860B	2100	48100	6390		39700	18600	7810	17100	2770 B	
MANGANESE	3380	60.0		5340	311	2.3B	22	8150	8.0 B		5170	2610	11.1B	2760	36.0	
MERCURY	<0.20	<0.20		<0.16	0.12B	<0.05	ND	0.4	<0.20		<0.16	0.16B	0.10B	1.2	<0.20	
NICKEL	35B	<21.0		95	<7.6	<7.6	ND	222	21.0 B	180	138	60	<7.6	94	<21.0	53
POTASSIUM	11000	4100 B		18100	5840	4820B	5600	26100	1600 B		17000	7170	1300B	10800	2900 B	
SELENIUM	1.5B	1.3 B		1.6B	1.6B	1.3B	ND	<1.0	1.5 B		<1.3	2.1B	1.9B	1.2 B	1.0 B	
SILVER	<10	21.0		<4.2	<3.6	<3.6	ND	<10.0	18.0		<4.2	<3.7	<3.6	<10	8.0 B	
SODIUM	16900	18300		18100	18200	19900	17000	5250	6760		8220	6300	6300	8340	9810	
THALLIUM	<3	<3.0		<1.2	<0.95	<0.95	ND	<3	<3.0		1.5B	<0.95	<0.95	<3.0	<3.0	
VANADIUM	122	<17.0		196	11.7B	<3.1	ND	351	<17.0		229	74.4	<3.1	152	17.0 B	
ZINC	433	32.0		381	25.3	5.3B	ND	649	32.0		422	257	7.2B	582	36.0	
CYANIDE	NA	NA		NA	<1.7	NA	NA	NA	NA		NA	<1.6	NA	NA	NA	
CHLORIDE	NA	NA		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	

ALL SAMPLES REPORTED IN UG/L (PPB)
NA - NOT ANALYZED
B - ANALYTE PRESENT IN BLANK
J - ESTIMATED VALUE, ABOVE INSTRUMENT DETECTION LIMIT, BELOW METHOD QUANTITATION LIMIT
DETECTION LIMITS COULD NOT BE LISTED FOR CERTAIN COMPOUNDS DUE TO LACK OF ORIGINAL ANALYTICAL RESULTS
EPA METHOD 6010: 7/18/89, 7/23/91, 11/25/91
NYSASP CLP 12-91: 7/14/89, 3/20/92, 6/16/93, 11/29/93
DISSOLVED SAMPLES WERE FIELD FILTERED THROUGH A 0.45 MICRON FILTER
bu\ovatables\wtrmets

TABLE 4 (CONT'D)
WATCH CASE FACTORY SITE
SAG HARBOR, NEW YORK
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
INORGANICS

COMPOUND	MW-9 (CONT'D.)			MW-10		MW-11		MW-12			MW-13		MW-14	MW-20
	3/20/92	6/16/93 TOTAL	6/16/93 DISSOLVED	11/29/93 TOTAL	11/29/93 DISSOLVED	11/29/93 TOTAL	11/29/93 DISSOLVED	11/29/93 TOTAL	11/29/93 DISSOLVED	12/22/94 TOTAL	10/25/95	10/25/95 (Replicate)	10/25/95	12/22/94 TOTAL
ALUMINUM	16600	4240	<18.2	6100	4730	71300	198 B	132000	<9.4	230	NA	NA	NA	ND
ANTIMONY	<19	<24	<24	<10.2	<10.2	<51.1	<10.2	<10.2	<10.2	ND	NA	NA	NA	ND
ARSENIC	6.1B	1.8B	<0.67	2.6 B	2.7 B	6.9 B	1.6 B	9.3 B	2.6 B	ND	<10	<10	<10	ND
BARIUM	216	93.4B	60.8B	57.7 B	36.5 B	791 B	<10.5	1790	13.4 B	7.8	7.2	6.3	19	39
BERYLLIUM	0.95B	<0.36	<0.36	<0.45	<0.45	4.1 B	<0.45	3.2 B	<0.45	ND	NA	NA	NA	ND
CADMIUM	<1.5	6.8	2.6B	<1.6	1.6 B	<8.1	<1.6	<1.6	<1.6	ND	<5.0	<5.0	<5.0	ND
CALCIUM	27800	27800	24600	35600	32400	39300	26000	77600	56300	36000	NA	NA	NA	51000
CHROMIUM	20.3	6.3B	<3.2	16.5	10.4	366	4.0 B	1260	5.8 B	20	<10	<10	<10	ND
COBALT	27.7B	9.9B	<5	<4.2	<4.2	29.5 B	<4.2	42.0 B	4.4 B	ND	NA	NA	NA	ND
COPPER	358	160	24.2B	38.9	<16.6	464	20.8 B	4310	238	150	NA	NA	NA	ND
IRON	25500	6890	8.9B	1990	<19.6	220000	780	173000	<19.6	870	NA	NA	NA	ND
LEAD	31.6	15.6	0.82B	86.7	0.63 B	848	5.8	1930	0.47 B	ND	<3.0	<3.0	<3.0	ND
MAGNESIUM	7410	5870	4260B	774 B	417 B	23400 B	3490 B	32200	7020	4700	NA	NA	NA	3200
MANGANESE	1320	636	221	72.6	<1.2	984	49.1	1570	263	82	NA	NA	NA	1200
MERCURY	<0.16	0.22	<0.05	0.18 B	<0.07	9.0	0.14 B	30.3	0.10 B	0.85	<0.50	<0.50	<0.50	ND
NICKEL	53.7	17.7B	<7.6	<11.2	<11.2	108 B	<11.2	198	19.3 B	ND	NA	NA	NA	ND
POTASSIUM	6840	4120B	3600B	54300	52600	24600 B	3360 B	25800	5870	4300	NA	NA	NA	5800
SELENIUM	1.4B	<1.2	<1.2	<0.88	<0.88	1.4 B	<0.88	1.8 B	1.1 B	ND	<5.0	<5.0	<5.0	ND
SILVER	6.0B	<3.6	<3.6	3.1 B	<2.6	89.0	<2.6	924	<2.6	15	33000	<5.0	<5.0	ND
SODIUM	13100	12900	13300	66100	64000	6610 B	4890 B	6800	5450	4600	NA	NA	NA	71000
THALLIUM	<1.2	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	ND	NA	NA	NA	ND
VANADIUM	36.9B	9.9B	<3.1	13.0 B	11.7 B	316	6.5 B	272	<2.9	5.1	NA	NA	NA	ND
ZINC	136	54.6	16.3B	29.4	4.4 B	503	10.3 B	717	11.8 B	20	NA	NA	NA	ND
CYANIDE	NA	<1.6	NA	<7.5	NA	31.3	NA	145	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ALL SAMPLES REPORTED IN UG/L (PPB)
NA - NOT ANALYZED
B - ANALYTE PRESENT IN BLANK
J - ESTIMATED VALUE, ABOVE INSTRUMENT DETECTION LIMIT, BELOW METHOD QUANTITATION LIMIT
DETECTION LIMITS COULD NOT BE LISTED FOR CERTAIN COMPOUNDS DUE TO LACK OF ORIGINAL ANALYTICAL RESULTS
EPA METHOD 6010, 7/18/89, 7/23/91, 11/25/91
NYSASP CLP 12-91: 7/14/89, 3/20/92, 6/16/93, 11/29/93
DISSOLVED SAMPLES WERE FIELD FILTERED THROUGH A 0.45 MICRON FILTER
BULOVA TABLES2/WTRMETS

FORMER WATCH CASE FACTORY SITE
SUMMARY OF GEOPROBE GROUNDWATER LABORATORY ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
OCTOBER 25-26,1995

COMPOUND	CLASS GA GROUNDWATER QUALITY STANDARD	GP-1	GP-2	GP-2D	GP-3	GP-3D	GP-4	GP-5	GP-6
DICHLORODIFLUOROMETHANE	5	<10	<10	<10	<10	<10	<10	<10	<10
CHLOROMETHANE	NA	<10	<10	<10	<10	<10	<10	<10	<10
BROMOMETHANE	5	<10	<10	<10	<10	<10	<10	<10	<10
VINYL CHLORIDE	2	<10	<10	<10	<10	<10	<10	<10	<10
CHLOROETHANE	5	<10	<10	<10	<10	<10	<10	<10	<10
TRICHLOROFLUOROMETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
METHYLENE CHLORIDE	5	7B	5 B	4 J B	5 B	5 B	3 J	15	18
1,1-DICHLOROETHENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROETHANE	5	<5	<5	<5	5	<5	<5	<5	<5
2,2-DICHLOROPROPANE	5	<5	<5	<5	<5	<5	<5	<5	<5
TRANS-1,2-DICHLOROETHENE	5	<5	<5	<5	<5	<5	<5	<5	<5
CIS-1,2-DICHLOROETHENE	5	<5	<5	<5	<5	<5	<5	<5	<5
CHLOROFORM	7	<5	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROPROPENE	5	<5	<5	<5	<5	<5	<5	<5	<5
DIBROMOMETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
BROMOCHLOROMETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	5	2 J	<5	<5	<5	<5	<5	<5	<5
CARBON TETRACHLORIDE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-DIBROMOETHANE	NA	<5	<5	<5	<5	<5	<5	<5	<5
BROMODICHLOROMETHANE	50*	<5	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROPROPANE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-DICHLOROPROPANE	5	<5	<5	<5	<5	<5	<5	<5	<5
TRICHLOROETHENE	5	<5	<5	29	<5	<5	<5	<5	<5
DIBROMOCHLOROMETHANE	50*	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
BENZENE	0.7	<5	<5	<5	6	<5	<5	<5	<5
BROMOFORM	50*	<5	<5	<5	<5	<5	<5	<5	<5
TETRACHLOROETHENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1,2-TETRACHLOROETHANE	5	<5	<5	<5	<5	<5	<5	<5	<5
TOLUENE	5	2 J	2 J	<5	2 J	1 J	<5	<5	<5
CHLOROBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
ETHYLBENZENE	5	<5	<5	<5	3 J	<5	<5	<5	<5
STYRENE	5	<5	<5	<5	<5	<5	<5	<5	<5
META + PARA-XYLENES	10**	1 J	1 J	<5	2 J	3 J	<5	<5	<5
ORTHO-XYLENE	5	<5	<5	<5	2 J	<5	<5	<5	<5
ISOPROPYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
BROMOBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-TRICHLOROPROPANE	5	<5	<5	<5	<5	<5	<5	<5	<5
N-PROPYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
2-CHLOROTOLUENE	5	<5	<5	<5	<5	<5	<5	<5	<5
4-CHLOROTOLUENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-TRIMETHYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
TERT-BUTYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-TRIMETHYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
SEC-BUTYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-DICHLOROBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,4-DICHLOROBENZENE	4.7**	<5	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	4.7**	<5	<5	<5	<5	<5	<5	<5	<5
P-ISOPROPYLTOLUENE	5	<5	<5	<5	<5	<5	<5	<5	<5
N-BUTYLBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-DIBROMO-3-CHLOROPROPANE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-TRICHLOROBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
NAPHTHALENE	10*	<5	2 J	<5	2 J	<5	<5	<5	18
HEXACHLOROBUTADIENE	5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-TRICHLOROBENZENE	5	<5	<5	<5	<5	<5	<5	<5	<5
TOTAL VOCs*		5	5	29	22	4	ND	ND	18

STANDARDS OBTAINED FROM THE NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES DATED OCTOBER 1993.
* NO STANDARD REPORTED. NUMBER IS LISTED AS THE GUIDANCE VALUE.
** NUMBER APPLIES TO THE SUM OF THESE SUBSTANCES.
ALL RESULTS IN PARTS PER BILLION (UG/l)
J - ESTIMATED VALUE, BASED ON CONCENTRATIONS ABOVE THE INSTRUMENT DETECTION LIMIT BUT BELOW THE METHOD QUANTIFICATION LIMIT.
B - ANALYTE PRESENT IN METHOD BLANK.
ND- NOT DETECTED
NOTE: METHYLENE CHLORIDE WAS NOT USED TO SUM THE TOTAL VOCs DUE TO ITS PRESENCE IN THE METHOD AND FIELD BLANKS.

bulovadisk4/geoprvol

APPENDIX A
WORK PLAN APPROVAL LETTER

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road, Albany, New York 12233

Michael D. Zagata
Commissioner

September 5, 1995

Mr. Albert M. Tonn
Groundwater Technology
101-1 Colin Drive
Holbrook, NY 11741

Dear Mr. Tonn:

Re: Remedial Investigation/Feasibility Study
Work Plan (May 31, 1995); Bulova Watch Factory
Site # 152139

The New York State Department of Environmental Conservation (NYSDEC), in conjunction with the New York State Department of Health (NYSDOH), has reviewed your letter dated August 22, 1995. This letter was submitted in response to our comments dated July 31, 1995 on the above-referenced work plan. Your responses are acceptable and the work plan will be considered approved upon the Department's execution of the consent order. Please incorporate the following clarifications/ modifications.

1. Groundwater Technology's (GTech) response to the NYSDEC comment #6 - According to the NYSDOH, soil samples must be collected at 0-3" (below grass cover) to determine the risk due to dermal contact and ingestion. As indicated in our comment letter, one sample per courtyard taken at the 0-3" interval will satisfy the NYSDOH's requirement. The rest of the soil samples are to be collected from the 3"-6" interval as recommended by GTech.

2. In the Field Sampling and Analysis Plan and the GTech response to the NYSDOH comments, it is stated that the air analysis will be performed by EPA Method TO-14. If this method is to be used, please replace references to EPA Method TO-3 with EPA Method TO-14 in the QAPjP.

In order to expedite the field work while weather permits, it has been decided that a fact sheet will be sent to the concerned parties instead of holding a public meeting. As the Department would like the fact sheet sent out as soon as possible, please submit a draft of the fact sheet for our review by Sept. 12, 1995.

An executed original copy of the consent order will be sent to Bulova shortly. You may now schedule field work as called for in the work plan. Please give the Department ten days notice prior to starting this work.

If you have any questions or comments please call Mr. Vimal Minocha, P.E., of my staff at 518-457-3395.

Sincerely,

Susan D. McCormick, P.E.
Chief, Eastern Tech. Support Section
Bureau of Eastern Remedial Action
Div. of Hazardous Waste Remediation

VM/dd
a:sagharbo

c: Robert Weber, Bulova Corporation
Mitchell H. Bernstein, Esq., (Van Ness, Feldman)
Paul Maus, Groundwater Technology
Linda Naussbaum, Esq., (Goodkind, Labator, Rudoff & Suchgrow)
Mark A. Chertok, Esq. (Sive, Paget & Riesel, P.C.)
Geoffrey J. Laccetti, NYSDOH
Joshua Epstein, NYSDEC Region 1
Ajay Shah, NYSDEC Region 1
Karen Chytalo, NYSDEC Region 1
Ronnie Lee
Chris Magee
Vimal Minocha

APPENDIX B
GEOPROBE AND MONITORING WELL BORING LOGS

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring GP-1

Project *Watch Case Factory Site* Owner *Bulova*
Location *15 Church Street, Sag Harbor, N.Y.* Proj. No. *01113-7013*
Surface Elev. ____ Total Hole Depth *12 ft.* Diameter *1.5 in.*
Top of Casing ____ Water Level Initial ____ Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *Geoprobe*
Drill Co. *Zebra* Method *Macro-core*
Driller *Paul Olewnicki* Log By *Chris Bona* Date *10/25/95* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Collected groundwater sample at 17-19'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					
	2.0	0-2'		SM	Dark brown, silty SAND, trace of gravel, dry. Grades to tan sand, fine to medium grained, trace of small gravel, dry.
2					
	1.6	2-4'		SW	Tan SAND, same as above.
4					
	5.1	4-6'		SW	Same as above, some fine sand.
6					
	3.5	6-8'		SW	Tan SAND, fine to medium grained, trace of gravel, dry, fairly well sorted.
8					
	4.8	8-10'		SM	Tan silty, fine SAND with clayey silt lenses. Dry.
10					
	4.6	10-12'		SW	Tan SAND, fine to medium grained, trace of gravel, moist at tip, fairly well sorted.
12					End of exploration at 12 feet.
14					
16					
18					
20					
22					
24					

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring GP-2

Project *Watch Case Factory Site* Owner *Bulova*
Location *15 Church Street, Sag Harbor, N.Y.* Proj. No. *01113-7013*
Surface Elev. ____ Total Hole Depth *12 ft.* Diameter *1.5 in.*
Top of Casing ____ Water Level Initial ____ Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *Geoprobe*
Drill Co. *Zebra* Method *Macro-core*
Driller *Paul Olewnicki* Log By *Chris Bona* Date *10/25/95* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Collected first groundwater sample at 13-15' below grade, labeled as GP-2. Then collected second groundwater sample at 25-27' below grade, labeled as GP-2D.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					
2					No sample in liner.
4	0.3	3-4'		PT	Brown topsoil, soft.
6	1.7	4-8'		SP	Tan SAND, fine to medium grained, some small and medium gravel, dry.
8	2.3	8-10'		SP	Same as above, wet.
10	3.3	10-12'		SP	Same as above.
12					End of exploration at 12 feet.
14					
16					
18					
20					
22					
24					

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring GP-3

Project *Watch Case Factory Site* Owner *Bulova*
Location *15 Church Street, Sag Harbor, N.Y.* Proj. No. *01113-7013*
Surface Elev. _____ Total Hole Depth *8 ft.* Diameter *1.5 in.*
Top of Casing _____ Water Level Initial *7 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Geoprobe*
Drill Co. *Zebra* Method *Macro-core*
Driller *Paul Olewnicki* Log By *Chris Bona* Date *10/25/95* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

Collected first groundwater sample at 11-13' below grade, labeled as GP-3. Then collected second groundwater sample at 25-27' below grade, labeled as GP-3D.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0				Con/	
2	42	0-4'		SP	4" Concrete (sidewalk). Then brown SAND, fine to medium grained, some gravel, dry.
4	6.4	4-6'		SW	Orange SAND, fine grained, fairly well sorted, trace of gravel.
6	2.8	6-8'		SW ▽	Same as above, wet.
8					End of exploration at 8 feet.
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring GP-4

Project Watch Case Factory Site Owner Bulova
Location 15 Church Street, Sag Harbor, N.Y. Proj. No. 01113-7013
Surface Elev. ____ Total Hole Depth 8 ft. Diameter 1.5 in.
Top of Casing ____ Water Level Initial 3 ft. Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core Geoprobe
Drill Co. Zebra Method Macro-core
Driller Paul Olewnicki Log By Chris Bona Date 10/26/95 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Collected groundwater sample at 4-6' below grade.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0						
2	11	0-2'			SM	Dark brown, SILT and SAND with some gravel.
4	3.0	2-4'			SM	Same as above, wet.
6	1.0	4-6'			SP	Brown SAND, fine to medium grained, poorly sorted, trace of gravel.
8	2.1	6-8'			SP	Same as above, some small shells.
10						End of exploration at 8 feet.
12						
14						
16						
18						
20						
22						
24						

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring GP-5

Project *Watch Case Factory Site* Owner *Bulova*
Location *15 Church Street, Sag Harbor, N.Y.* Proj. No. *01113-7013*
Surface Elev. ____ Total Hole Depth *4 ft.* Diameter *1.5 in.*
Top of Casing ____ Water Level Initial *3 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *Geoprobe*
Drill Co. *Zebra* Method *Macro-core*
Driller *Paul Olewnicki* Log By *Chris Bona* Date *10/26/95* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Collected groundwater sample at 5-7' below grade.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					
2	0	0-2'		SP	Brown and dark brown, SAND, some gravel. Poorly sorted.
	0	2-4'		SP	Same as above, black peat lens. Wet.
4					End of exploration at 4 feet.
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring GP-6

Project Watch Case Factory Site Owner Bulova
Location 15 Church Street, Sag Harbor, N.Y. Proj. No. 01113-7013
Surface Elev. ____ Total Hole Depth 4 ft. Diameter 1.5 in.
Top of Casing ____ Water Level Initial 3 ft. Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core Geoprobe
Drill Co. Zebra Method Macro-core
Driller Paul Olewnicki Log By Chris Bona Date 10/26/95 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Collected groundwater sample at 4-6' below grade.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0	0	0-2'			SP	Dark brown SAND, poorly sorted, some gravel, dry.
2	0	2-4'			SP	Same as above, with black sand and gravel, some wood. Wet.
4						End of exploration at 4 feet.
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

Drilling Log

GROUNDWATER TECHNOLOGY

Monitoring Well MW-21

Project Watch Case Factory Site Owner Bulova
Location 15 Church Street, Sag Harbor, N.Y. Proj. No. 01113-7013
Surface Elev. ____ Total Hole Depth 25 ft. Diameter 10.5 in.
Top of Casing ____ Water Level Initial ____ Static ____
Screen: Dia 2 in. Length 15 ft. Type/Size PVC 0.02 in.
Casing: Dia 2 in. Length 8 ft. Type PVC Riser
Fill Material Morie #2 Rig/Core B-61
Drill Co. ADT Method Hollow Stem Auger
Driller Tommy Log By Chris Bona Date 4/28/95 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

2" Screen is pre-packed inside 4" screen.

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2 to 30					BF	Backfill.
10		20	2/3 2/2		SW	Brown fine SAND, well sorted, stained dark brown at 11 feet. Wet at 11 feet.
12					SW	
14					SW	
16		40	9/9 7/10			Brown fine SAND, well sorted, gray gravel lens at 16 feet.
18					SW	
20		250	3/5 6/6			Brown SAND, fine to medium grained, trace of pebbles, some dark brown SAND.
22					SW	
24		600	8/6 10/17			Same as above, trace of medium grained, some dark brown SAND.
26						End of exploration at 25 feet.
28						
30						

APPENDIX C
QUALITY ASSURANCE FIELD AUDIT REPORTS

Thomas C. Jorling
Commissioner

DIVISION OF HAZARDOUS WASTE REMEDIATION

Checklist for DEC Quality Assurance Field Audit

Project Name BULOVA SAG HARBOR Date of Audit 10/24/95

DEC Project Manager _____ Signature of Auditor Anthony Fiorentino

Consultant Project Manager AL TOWN

Consultant QAO Anthony Fiorentino

Project Location _____

Weather Conditions SUNNY 68° F

Physical Characteristics of Site _____

I. REQUIREMENTS OF THE PROJECT QUALITY ASSURANCE PLAN:
NOTE: **This section is to be completed prior to site entry.**

Yes ✓ No___ N/A___

1. Was a QA Project Plan prepared?
Comments:

Yes ✓ No___ N/A___

2. Was QAPP approved by State QA Officer?
Date of approval: _____
Comments:

3. How many samples are to be taken at this site? (Matrix-Amount)
Comments: Soil - 14

4. How many QC samples (blanks, matrix spike/matrix spiké duplicate, etc.) are to be taken? (Matrix-Amount)
Comments: Replicate - 1, Field - 2
Rinsate - 1, TRIP - 1, MS/MSD - 1

5. How many samples (QC and field samples) are to be taken on day of audit? (Matrix-Amount)
Comments:
Field - 1

during field sampling activities? (bailers, pumps, hand augers, trowels, etc.)

a. Water Samples

1. Groundwater N/A
2. Surface Water N/A

b. Soil Samples

1. Subsurface N/A
2. Surface Stainless Steel Scoop and bowl

c. Other _____

_____

Yes___ No X N/A___ 7. Is dedicated equipment to be used on site?
Comments: _____

_____

_____

Yes___ No X N/A___ 8. Are solvents to be used on site? Name type if any.
Comments: _____

_____

_____

Yes___ No___ N/A___ 9. Are acceptable decontamination procedures for sampling equipment to be followed during sampling activities? (List decon steps)
Comments: Decon consisted of Alconox and water followed by distilled water rinse then air dry.

10. What is the procedure for decon of large equipment (i.e., drill rigs)? If steam cleaned, what is the temperature of steam?
Comments: N/A

_____

_____

11. What laboratory (ies) is (are) to be used for analysis of samples?

_____

Laboratory Resources

Yes X No___ N/A___ 12. Are there recent revisions to QAPP that sampling crew needs to know? (What are they?)
Date of revision: 9/15/95
Comments: LAB MUST receive samples within 48 hours of collection

Yes X No___ N/A___ 13. Are site personnel going to be informed of DEC QA visit?
Comments: 10/26/95

Yes___ No X N/A___ 14. Are NYSDEC Sample Information and Analytical Summary Forms to be used?
Comments:

Yes___ No X N/A___ 15. Are they to be filled out on site or at the lab.
[ ] site
[ ] lab

Yes___ No X N/A___ 16. Has consulting firms' QAO signed off on QAPP?
Date of signature:
Comments:

Yes X No___ N/A___ 17. Was a kick off meeting held with project participants? Date of meeting: 10/20/95
Comments:

Semi VOA / Metals / Pest + PCB - 8 03 JAK

Yes___ No___ N/A___ Do containers have a lot number for traceability (must be on bottle or COC)? _____

19. Order of sample collection: Volatiles and then Semi-volatiles / pest + PCBs / metals

Yes___ No___ N/A X 20. Did sampling proceed from area of least suspected contamination to area of most suspected contamination.

Yes X No___ N/A___ 21. Are the number, frequency, and types of samples collected as specified in the Project Plan?
Comments: _____

Yes X No___ N/A___ 22. Are samples preserved according to QAPP?
Comments: _____

23. List preservatives used: Soil - ICE ONly

Yes___ No___ N/A X 24. Are sample containers prespiked with preservatives?
Comments: _____

II.

Personnel on Site

Name/Title	Representing	Task
Chris Bova / Staff Geologist	GTI	Site Manager
Roy Terlaga / Technician	GTI	Soil Sampling
Anthony Fiorentine	GTI	Quality Assurance Audit

III. HEALTH & SAFETY:

Yes ✓ No____ N/A____ 1. Is a QAPP and Site Health and Safety Plan on site?
Comments:_____

_____

Yes____ No ✓ N/A____ 2. Are there any immediate Health and Safety concerns on the site at time of audit? If yes, explain:_____

_____

_____

Yes___ No___ N/A ___ 3. What level of protection was worn by the sampling team while on site?
Level of protection [ ]A [ ]B [ ]C [X]D
Comments:_____

_____

IV. SITE ACCESS:

Yes X No___ N/A___ 1. Was permission granted to enter and inspect the facility/sampling site?
Comments:_____

Yes___ No X N/A___ 2. Is permission to enter the facility documented?
Comments:_____

Yes___ No X N/A___ 3. Were all visitors required to sign in upon arrival at site? _____

Yes___ No___ N/A X 4. Were additional instructions given to project participants (samplign crew) about changes in QAPP once on site?
Comments:_____

V. SAMPLING:

Yes X No___ N/A___ 1. Is there a written list of sampling locations and descriptions?
Comments:

Yes X No___ N/A___ 2. Is there a map of sampling locations?
Comments:

Yes X No___ N/A___ 3. Is the transfer of field documents (Sample ID Tags, Chain-of-Custody Records, logbooks, etc.) to the field participants documented in a logbook?
Comments:

Yes___ No X N/A___ 4. Were split samples offered to the facility/client? If yes, was the offer accepted or declined?
Comments:

Yes___ No___ N/A X 5. If the offer to split samples was accepted, were the split samples collected?
Comments:

NA 6. What laboratory will analyze the splits?

Yes___ No___ N/A X 7. Is the offering of split samples recorded?
Comments:

Yes____ No__ N/A X 8. If split samples were collected, are they documented?
If yes, where are they documented?
Comments:_____

_____

_____

Yes____ No__ N/A____ 9. Sample Matrices Observed: [ ]Air; [X]Soil;
[ ]Water; [ ]Sludge; [ ]Hazardous Waste;
[ ]Other:_____

Comments:_____

_____

Yes X No___ N/A___ 10. Are the number, frequency, and types of field measurements and observations taken as specified in the project plan?
Comments:

Yes X No___ N/A___ 11. Are quality control checks documented (i.e., calibration of pH meters, conductivity meters, etc.)?
Comments: PID only

Yes X No___ N/A___ 12. Are field measurements recorded (pH, temperature, conductivity, etc.)? Where?
Comments: PID in field notebook

Yes X No___ N/A___ 13. Is the decontamination of sampling equipment done properly?
Comments:

14. Describe decontamination procedures: Same as #9

Yes X No___ N/A___ 15. Were adequate water, alconox, tyveks, etc. available for decontamination?

Yes X No___ N/A___ 16. Was adequate equipment available at start of sampling to complete the projected sampling ~~or were repeated trips needed to acquire the necessary equipment~~?

Yes___ No X N/A___ 17. Are samples collected in the types of containers specified in the project plan?
Comments: ~~VOA's 2 4oz JAR~~

~~SOA's, metals, pesticides 8 oz JAR~~

Yes___ No___ N/A X 25. Did sampler check pH of preserved samples to confirm that an adequate amount of preservatives had been added?

Yes X No___ N/A___ 26. Are samples packed for preservation as specified in the Project Plan (i.e., packed in ice, etc.)?
Comments:

27. Who supplied chain of custody forms? LAB Resources

Yes X No___ N/A___ 28. Is sample custody maintained at all times?
Comments:

Yes X No___ N/A___ 29. Are all samples identified with sample ID tags?
Comments:

Yes X No___ N/A___ 30. Are all sample ID tags completed (e.g., station no., location, date, time, analyses, signatures of samplers, type, preservatives, etc.)?
Comments:

Yes X No___ N/A___ 31. Are all samples collected listed on a chain-of-custody record? If yes, describe the type of chain-of-custody record used.
Comments: Laboratory Supplied CofC.

Yes X No___ N/A___ 32. Are the sample ID tag numbers recorded on the chain-of-custody records?
Comments:_____

Yes X No___ N/A___ 33. Are chain of custody records filled out completely? (Date, time, signature, etc.)
Comments:_____

Yes X No___ N/A___ 34. Does information on sample ID tags and chain-of-custody records match?
Comments:_____

Yes___ No X N/A___ 35. Do the chain-of-custody records indicate the method of sample shipment?
Comments:_____

Yes X No___ N/A___ 36. Is the chain-of-custody records included with the samples in the shipping container?
Comments:_____

Yes___ No___ N/A X 37. Do the sample traffic reports agree with the sample ID tags?
Comments:_____

Yes___ No___ N/A X 38. If required, has a copy of a receipt-for-samples form been provided to the facility?
Comments:_____

Yes___ No___ N/A X 39. If required, was the offer of a receipt for samples documented?
Comments:_____

Yes X No___ N/A___ 40. If used, are blank samples identified?
Comments:_____

Yes X No___ N/A___ 41. If collected, are duplicate samples identified on sample ID tags and chain-of-custody records?
Comments: Blind duplicate

Yes X No___ N/A___ 42. Are all QC samples collected at proper frequency?
Comments:_____

Yes X No___ N/A___ 43. Are samples iced immediately upon collection?
Comments:_____

Yes X No___ N/A___ 44. If used, are spiked samples identified?
Comments:_____

Yes X No___ N/A___ 45. Are field notebooks project-specific (by notebook or by page)?
Comments:_____

Yes X No___ N/A___ 46. Are field notebook entries dated and identified by author?
Comments:_____

Yes___ No___ N/A X

47. Is the facility's approval or disapproval to take photographs noted in a field notebook?
Comments:

Yes___ No___ N/A X

48. Are photographs documented in field notebooks (e.g., time, date, description of subject, photographer, etc.)?
Comments:

Yes___ No___ N/A X

49. If a Polaroid camera is used, are photos matched with field notebook documentation?
Comments:

Yes___ No___ N/A X

50. Are sample ID tag numbers recorded in the SPM logbook?
Comments:

Yes___ No___ N/A X

51. Are amendments to the Project Plan documented (on the Project Plan itself, in a project logbook, elsewhere)?
Comments:

VI.

DEBRIEFING WITH FIELD SAMPLING TEAM LEADER

Yes X No___ N/A___ 1. Was a debriefing held with project participants after the audit was completed?
Comments:_____

Yes___ No X N/A___ 2. Were any recommendations made to project participants during the debriefing?
If yes, briefly describe what recommendations were made.
Comments:_____

New York State Department of Environmental Conservation

DIVISION OF HAZARDOUS WASTE REMEDIATION

Thomas C. Jorling
Commissioner

Checklist for DEC Quality Assurance Field Audit

Project Name Bulova Date of Audit 10/26/95

DEC Project Manager _____ Signature of Auditor Anthony Fiorentine

Consultant Project Manager AL TONN

Consultant QAO Anthony Fiorentine

Project Location SAG HARBOR

Weather Conditions PARTLY Cloudy 60°F

Physical Characteristics of Site Geoprobe sampling ~~test~~ at location downgradient of site in municipal parking LOT.

I. REQUIREMENTS OF THE PROJECT QUALITY ASSURANCE PLAN:
NOTE: **This section is to be completed prior to site entry.**

Yes X No___ N/A___ 1. Was a QA Project Plan prepared?
Comments:_____

Yes X No___ N/A___ 2. Was QAPP approved by State QA Officer?
Date of approval: _____
Comments:_____

3. How many samples are to be taken at this site? (Matrix-Amount)
Comments: 1 Groundwater
Continuous Soil Sampling Field screen only

4. How many QC samples (blanks, matrix spike/matrix spiké duplicate, etc.) are to be taken? (Matrix-Amount)
Comments: WATER - duplicate
Rinsate water
Field and MS/MSD WATER

5. How many samples (QC and field samples) are to be taken on day of audit? (Matrix-Amount)
Comments: 3 - WATER

6. What type of sampling equipment is to be used during field sampling activities? (bailers, pumps, hand augers, trowels, etc.)
   a. Water Samples
      1. Groundwater Poly tubing & Check valve
      2. Surface Water N/A
   b. Soil Samples
      1. Subsurface Acetate liner
      2. Surface N/A
   c. Other N/A

Yes X No___ N/A___ 7. Is dedicated equipment to be used on site?
Comments: Tubing and Acetate liners

Yes___ No X N/A___ 8. Are solvents to be used on site? Name type if any.
Comments: NO

Yes X No___ N/A___ 9. Are acceptable decontamination procedures for sampling equipment to be followed during sampling activities? (List decon steps)
Comments:

10. What is the procedure for decon of large equipment (i.e., drill rigs)? If steam cleaned, what is the temperature of steam?
Comments:
N/A

11. What laboratory (ies) is (are) to be used for analysis of samples? LABORATORY ANALYSIS

Yes___ No___ N/A___ 12. Are there recent revisions to QAPP that sampling crew needs to know? (What are they?)
Date of revision:_____
Comments:_____

Yes X No___ N/A___ 13. Are site personnel going to be informed of DEC QA visit?
Comments: 10/26/95

Yes___ No X N/A___ 14. Are NYSDEC Sample Information and Analytical Summary Forms to be used?
Comments:_____

Yes___ No___ N/A X 15. Are they to be filled out on site or at the lab.
[ ] site
[ ] lab

Yes___ No X N/A___ 16. Has consulting firms' QAO signed off on QAPP?
Date of signature:_____
Comments:_____

Yes X No___ N/A___ 17. Was a kick off meeting held with project participants? Date of meeting:_____
Comments:_____

II.

Personnel on Site

Name/Title	Representing	Task
Roy Terlaga	GTI	Technician
Chris Bona	GTI	Geologist
AL Tonn	GTI	PM
Anthony Fiorentino	GTF	QAO
Ron Lee	DEC	
Vimal Minocha	DEC	
Paul O	Zebra	Geoprobe
Will C	Zebra	Geoprobe

III. HEALTH & SAFETY:

Yes X No____ N/A___ 1. Is a QAPP and Site Health and Safety Plan on site?
Comments:_____

_____

Yes___ No X N/A___ 2. Are there any immediate Health and Safety concerns on the site at time of audit? If yes, explain:_____

_____

_____

Yes___ No___ N/A ___ 3. What level of protection was worn by the sampling team while on site?
Level of protection [ ]A [ ]B [ ]C [X]D
Comments:_____

_____

IV. SITE ACCESS:

Yes X No___ N/A___ 1. Was permission granted to enter and inspect the facility/sampling site?
Comments: Road Opening Permit
Village of SAG HARBOR

Yes X No___ N/A___ 2. Is permission to enter the facility documented?
Comments:

Yes___ No X N/A___ 3. Were all visitors required to sign in upon arrival at site?

Yes___ No___ N/A X 4. Were additional instructions given to project participants (samplign crew) about changes in QAPP once on site?
Comments:

V. SAMPLING:

Yes X No___ N/A___ 1. Is there a written list of sampling locations and descriptions?
Comments:_____

Yes X No___ N/A___ 2. Is there a map of sampling locations?
Comments:_____

Yes___ No X N/A___ 3. Is the transfer of field documents (Sample ID Tags, Chain-of-Custody Records, logbooks, etc.) to the field participants documented in a logbook?
Comments:_____

Yes___ No X N/A___ 4. Were split samples offered to the facility/client? If yes, was the offer accepted or declined?
Comments:_____

Yes___ No___ N/A X 5. If the offer to split samples was accepted, were the split samples collected?
Comments:_____

N/A 6. What laboratory will analyze the splits?_____

Yes___ No___ N/A X 7. Is the offering of split samples recorded?
Comments:_____

Yes____ No___ N/A X 8. If split samples were collected, are they documented? If yes, where are they documented?
Comments:_____

_____

_____

Yes____ No___ N/A____ 9. Sample Matrices Observed: [ ]Air; [X]Soil; [X]Water; [ ]Sludge; [ ]Hazardous Waste; [ ]Other:_____

Comments:_____

_____

Yes ~~X~~ No X N/A ___ 10. Are the number, frequency, and types of field measurements and observations taken as specified in the project plan?
Comments: Groundwater was encountered at shallower depth than anticipated therefore soil samples were not collected to 12'.

Yes X No ___ N/A ___ 11. Are quality control checks documented (i.e., calibration of pH meters, conductivity meters, etc.)?
Comments: ___

Yes X No ___ N/A ___ 12. Are field measurements recorded (pH, temperature, conductivity, etc.)? Where?
Comments: PID only in soils

Yes X No ___ N/A ___ 13. Is the decontamination of sampling equipment done properly?
Comments: ___

14. Describe decontamination procedures: ___

Yes X No ___ N/A ___ 15. Were adequate water, alconox, tyveks, etc. available for decontamination? ___

Yes X No ___ N/A ___ 16. Was adequate equipment available at start of sampling to complete the projected sampling or ~~were repeated trips needed to acquire the necessary equipment?~~

Yes X No ___ N/A ___ 17. Are samples collected in the types of containers specified in the project plan?
Comments: ___

18. List the types of containers used for each parameter analysis: 40 ml VOAs - 8260

Yes X No ___ N/A ___ Do containers have a lot number for traceability (must be on bottle or COC)? LOT B 5213010

19. Order of sample collection: Volatiles only

Yes ___ No ___ N/A X 20. Did sampling proceed from area of least suspected contamination to area of most suspected contamination.

Yes X No ___ N/A ___ 21. Are the number, frequency, and types of samples collected as specified in the Project Plan?
Comments: yes

Yes X No ___ N/A ___ 22. Are samples preserved according to QAPP?
Comments:

23. List preservatives used: HCL

Yes ___ No X N/A ___ 24. Are sample containers prespiked with preservatives?
Comments: Preserved in field by geologist

Yes___ No X N/A___ 25. Did sampler check pH of preserved samples to confirm that an adequate amount of preservatives had been added?

Yes X No___ N/A___ 26. Are samples packed for preservation as specified in the Project Plan (i.e., packed in ice, etc.)?
Comments:

27. Who supplied chain of custody forms? LRI

Yes X No___ N/A___ 28. Is sample custody maintained at all times?
Comments:

Yes X No___ N/A___ 29. Are all samples identified with sample ID tags?
Comments:

Yes X No___ N/A___ 30. Are all sample ID tags completed (e.g., station no., location, date, time, analyses, signatures of samplers, type, preservatives, etc.)?
Comments:

Yes X No___ N/A___ 31. Are all samples collected listed on a chain-of-custody record? If yes, describe the type of chain-of-custody record used.
Comments:

Yes X No___ N/A___ 32. Are the sample ID tag numbers recorded on the chain-of-custody records?
Comments:_____

_____

_____

Yes X No___ N/A___ 33. Are chain of custody records filled out completely? (Date, time, signature, etc.)
Comments:_____

_____

Yes X No___ N/A___ 34. Does information on sample ID tags and chain-of-custody records match?
Comments:_____

_____

_____

Yes___ No X N/A___ 35. Do the chain-of-custody records indicate the method of sample shipment?
Comments:_____

_____

_____

Yes X No___ N/A___ 36. Is the chain-of-custody records included with the samples in the shipping container?
Comments:_____

_____

_____

Yes___ No___ N/A X 37. Do the sample traffic reports agree with the sample ID tags?
Comments:_____

_____

_____

Yes___ No___ N/A X 38. If required, has a copy of a receipt-for-samples form been provided to the facility?
Comments:_____

_____

_____

Yes___ No___ N/A X 39. If required, was the offer of a receipt for samples documented?
Comments:

Yes X No___ N/A___ 40. If used, are blank samples identified?
Comments:

Yes X No___ N/A___ 41. If collected, are duplicate samples identified on sample ID tags and chain-of-custody records?
Comments: As Blind duplicates

Yes X No___ N/A___ 42. Are all QC samples collected at proper frequency?
Comments:

Yes X No___ N/A___ 43. Are samples iced immediately upon collection?
Comments:

Yes X No___ N/A___ 44. If used, are spiked samples identified?
Comments:

Yes X No___ N/A___ 45. Are field notebooks project-specific (by notebook or by page)?
Comments:

Yes X No___ N/A___ 46. Are field notebook entries dated and identified by author?
Comments:

Yes___ No___ N/A X 47. Is the facility's approval or disapproval to take photographs noted in a field notebook?
Comments:

Yes___ No___ N/A X 48. Are photographs documented in field notebooks (e.g., time, date, description of subject, photographer, etc.)?
Comments:

Yes___ No___ N/A X 49. If a Polaroid camera is used, are photos matched with field notebook documentation?
Comments:

Yes X No___ N/A___ 50. Are sample ID tag numbers recorded in the SPM logbook?
Comments:

Yes___ No___ N/A X 51. Are amendments to the Project Plan documented (on the Project Plan itself, in a project logbook, elsewhere)?
Comments:

VI.

DEBRIEFING WITH FIELD SAMPLING TEAM LEADER

Yes X No___ N/A___ 1. Was a debriefing held with project participants after the audit was completed?
Comments:

Yes___ No___ N/A___ 2. Were any recommendations made to project participants during the debriefing?
If yes, briefly describe what recommendations were made.
Comments:

The use of a peristaltic pump was necessary to collect samples due to the amount of silt in the temporary well points which would not allow the check valve to close.

APPENDIX D
DATA VALIDATION REPORT

Data Validation Services

Cobble Creek Road P. O. Box 208

North Creek, N. Y. 12853

Phone 518-251-4429

TO: Groundwater Technology, Inc.

FROM: Judy Harry, Data Validation Services

DATE: 12-18-95

RE: Validation of Bulova Watch Case Site data package
Lab Resources submission No. T510360

Review has been performed on the laboratory data package provided by Lab Resources pertaining to samples collected at the Bulova Watch Case Site. Sixteen soil samples collected 10/23/95 were processed for volatiles (EPA8260), semivolatiles (EPA-8270), pesticide/PCBs (EPA-8080), and RCRA metals (6010/7000). Field blanks, a rinse blank, a trip blank, and sample matrix spikes were processed.

Data validation was performed with guidance from the the most current editions of the USEPA National Guidelines for Data Review and Region II validation SOPs HW-2 and HW-6. The following items were reviewed:

* Data Completeness
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Calibration Standards
* Method Compliance
* Sample Result Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with protocol requirements.

In summary, sample processing was primarily conducted with compliance to protocol requirements and with adherance to quality criteria. Exceptions include holding time violations for volatile reanalyses, and pesticide standard and breakdown responses. Also of concern is the insufficient information provided in the pesticide/PCB processing for conclusive validation (see later discussion).

Certain edits to, and qualification of, reported results are indicated. These issues are discussed in the following analytical sections.

Copies of laboratory case narratives are attached to this narrative, and should be reviewed in conjunction with this narrative. Also included are copies of resubmission communications, which include miscellaneous data items.

VOLATILE ANALYSES

No Tentatively Identified Compounds (TICs) were reported for the volatile analyses of these samples. If this information is of interest, the laboratory should be contacted for submission (this was discussed with Al Tonn on 12/14/95).

Most soil samples exhibited outlying low surrogate and internal standard responses, usually indicative of matrix effect. The samples were reanalysed at 24 days from collection, which was beyond the allowable holding time of 14 days, and also showed outlying responses. Due to the extended holding time for reanalysis, the initial analysis results (***not*** those labeled as "-RE") should be used for all samples except RA-16 (see below), qualified as discussed below.

The reanalysis results ("-RE") for RA-16 should be used due to extremely poor response of the internal standards in the initial analysis (less than 10%). The reanalysis results should be considered estimated, possibly biased very low due to extended holding time. These sample results are of borderline usability.

RA-9 produced outlying low responses for all four internal standards (below 33%), and extremely low responses for internal standards d5-chlorobenzene and d4-dichlorobenzene (less than 14%) on multiple analyses. The initial analysis should be used, with reported detection limits for the last thirty three compound entries on the sample report form, ***except*** toluene and benzene, in this sample (starting with 1,3-dichloropropane) to be rejected (unusable, "R" flag):; reported results for all other target analytes in these samples should be considered estimated.

Samples RA-1, RA-2, RA-3, RA-4, RA-6, RA-9, RA-16, RA-13, and RA-14 exhibited low surrogate d8-toluene recovery of 37% to 80% (lower limit is 81%). The reported volatile results (detected values and detection limits) for these samples should be considered estimated ("J" flag) (of these, samples RA-1 and RA-3 exhibited outlying recoveries of multiple surrogates). Of these, samples RA-1, RA-2, RA-3, RA-4, RA-13, and RA-14 also produced outlying internal standard recoveries.

RA-8 exhibited elevated recovery for surrogate d8-toluene (174%) and outlying recovery for internal standard d4-dichlorobenzene. Reported results for all detected compounds, and the detection limits for 1,1,2,2-tetrachloroethane and the last twenty compound entries on the sample report form, should be considered estimated for this sample

Sample RA-7 exhibited elevated recovery for surrogate d8-toluene, and outlying responses for internal standards 1,4-difluorobenzene and d4-dichlorobenzene. Therefore all detected values, and the reported detection limits for the following compounds should be considered estimated: 1,1-dichloropropene, 1,2-dichloroethane, carbon tetrachloride, benzene, trichloroethene, 1,2-dichloropropane, dibromomethane, bromodichloromethane, cis-1,3-dichloropropene, toluene, trans-1,3-dichloropropene, 1,1,2-trichloroethane, 1,2-dibromoethane, 1,1,2,2-tetrachloroethane, and the last twenty compound entries on the sample report form for this sample.

Sample RA-11 produced low responses for internal standards d5-chlorobenzene and d4-dichlorobenzene. Therefore reported results for the last thirty three compound entries on the sample report form, ***except*** toluene and benzene, in this sample should be considered estimated (starting with 1,3-dichloropropane).

RA-15 exhibited elevated recoveries for d8-toluene (175%, above limit of 117%); therefore reported results for *detected* compounds in this sample should be considered estimated.

RA-5, RA-10, and RA-12 produced acceptable responses for surrogates and internal standards, and results are not indicated for qualification, unless noted specifically below.

It was noted that low levels of various late-eluting target analytes were detected/reported for reanalyses of these samples, which were not detected/reported in the initial analyses. The initial analysis has more integrity (based upon QC considerations such as the nature of the initial outlying criteria, and the extended holding time of a previously opened vial), and the extraneous detections in the reanalyses should not be considered sample components. It is noted that the reanalysis of RA-9 showed chromatographic presence of significant levels of late-eluting compounds which were not detected in the initial analysis nor exhibited in the BNA analysis.

Certain compounds were not correctly evaluated in the initial and continuing calibration standards. In these instances, the same response was identified by the software as two different analytes. Although the responses of the two specified analytes are possibly similar, the individual analytes are not properly evaluated for linearity and consistency of response (this is required by protocol). Therefore the reported results for both analytes of each pair (as actual identification is not made) are to be considered estimated in all samples. They are the following:

n-propylbenzene and 2-chlorotoluene, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene, and 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene.

It is noted that the analytes were evaluated individually in those standards associated with the reanalyses (exception that 1,2,4-trimethylbenzene and sec-butylbenzene are now mutally associated), but the extended holding time of the reanalysis also lends the consideration of estimated results.

The reported detection of methylene chloride in the project samples should be rejected due to copresence in the associated trip and field blanks. The reported results in the samples should be edited to reflect nondetection at either the sample CRDL, or the originally reported value, whichever is greater.

The calibration standard E3470, analysed 11-06-96 at 10:49 produced low responses for several target analytes. The reported results for the associated samples, with the exception of RA-12, were already considered estimated due to matrix effect, as discussed above. The following analyte results in RA-12 should be considered estimated due to daily standard response exceeding 25% difference:

Analyte	%D
Dichlorodifluoromethane	34
trans-1,2-Dichloroethene	25
2,2-Dichloropropane	28
1,3-Dichloropropane	31
Isopropylbenzene	29
Bromobenzene	30
1,1,2,2-Tetrachloroethane	37
n-Propylbenzene	27*
2-Chlorotoluene	27*
4-Chlorotoluene	26
1,3-Dichlorobenzene	26
1,2-Dichlorobenzene	27
1,2-Dibromo-3-chloropropane	46
1,2,4-Trichlorobenzene	26*
Naphthalene	28
1,2,3-Trichlorobenzene	26*
n-Butylbenzene	25
Bromoform	30

* -these compounds also estimated due to nonresolved response.

The matrix spike of RA-7 produced acceptable recoveries; the matrix spike duplicate produced low recovery for 1,1-dichloroethene (10%, below limit of 59%) and toluene (52%, below limit of 59%). Duplicate correlation for the former was high (156%). The reported results for RA-7 are already considered estimated due to matrix effect (noted above).

The spectra for 1,1,2,2-tetrachloroethane and naphthalene, which were reported in some of the sample reanalyses, are not conclusive for identification of the analytes. As discussed above, these reanalysis results are not useable for reporting due to possible contamination.

The report Form 1 provided in the data package for the method blank of 11/16/95 incorrectly shows detection limits of a medium level analysis. The blank was processed as low level. Sample reported results are unaffected.

BNA ANALYSES

Samples RA-1 and RA-3 produced low responses for internal standard d12-perylene on repeated analysis. The reanalysis results for these two samples are preferred (16% and 48%, respectively), but the values/detection limits for the following compounds should be considered estimated:

di-n-octylphthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene.

Matrix spikes were performed on RA-12, with acceptable accuracy and precision values. These were extracted at 23 days from collection, beyond the allowable holding time; sample results are not affected.

Instrument tunes of 10/31/95 (files W0680 and W0686) were noncompliant in that no response was observed for m/z fragment 441 (which is required to be detected by *protocol). Although this shows incomplete mass resolution in the instrument, there is no apparent affect on the reported results of the samples in this project.

Although bis-(2-ethylhexyl)phthalate and di-n-octylphthalate were not detected in the blanks associated with these project samples, these compounds are common contaminants at the levels detected in the samples. The end-user of the data should regard their detection with caution.

Filenames are incorrectly denoted for the initial calibration standard summaries on pages 406 and 407.

PESTICIDE/PCB ANALYSES

The software output for the pesticide/PCB analyses provided in the data packages is not complete as regards instrument responses. What has been provided reflects analyst interpretation and editing. This affects the ability to verify sample reported results in the following ways:

1. As regards the quantitations for PCB Aroclor mixtures, a total area of four isomers of each mixture is provided; evaluation of the individual isomer area proportions (used in qualitiative identification) in a given sample is not possible, except with generalizations from viewing chromatographic peak intensities. In addition, verification that all four isomer areas are incorporated into the final total area is also not possible.
2. Responses corresponding to pesticides have been deleted from the software reports ("quant reports") of all PCB standards. This prohibits evaluation during validation of any contribution that PCB isomers may make to pesticide results.
3. Of greater concern is that these responses have also been deleted from the sample results (note that no pesticide detections are reported for those samples containing PCBs), yet review of the chromatograms show possible detections. It is noted that certain of the pesticide identifications for these samples are flagged on the quant report as "d" (possibly for "delete"); they appear to correspond to peak

responses on the chromatograms. Any response that may have been present for those analytes in the samples cannot be evaluated for quantitative level, as no area counts are present. However, none of the reported detection limits for these analytes reflect an elevated value, which would be appropriate in the event of possible interferences from the PCBs. In addition to possible interferences from PCBs, the samples may also have real levels of these components, which would not be reported with this sample processing. The laboratory should report the detections, so that validation criteria can be applied for qualification of the sample results.

Based upon the "d" flags on the software, it is appropriate that the reported detection limits in the following compounds be considered estimated. These are compounds which may have met criteria for reporting as present in the samples, at levels exceeding the reported detection limits. It cannot be said (with the provided information) what levels would be present, and therefore what detection limits are reasonable. It is also unknown whether these are responses which may include contribution from PCB isomers.

Heptachlor epoxide and endrin in RA-1
Endosulfan II, methoxychlor, 4,4'-DDE, and endosulfan sulfate in RA-2
Dieldrin, endosulfan II, 4,4'-DDE, and endrin in RA-4
Endosulfan II, methoxychlor, 4,4'-DDE, dieldrin, and endrin in RA-16
4,4'-DDT in RA-13

If any further resolution to this matter is desired, the laboratory should be contacted for specific documentation.

4. It is noted that the quant reports for the Aroclor 1221 and 1232 standards analysed on 9/5/95 do not recognize the presence of these PCBs, (although their presence is evident on the chromatograms). This is of concern, in that if the software does not recognize the standards, how can we be assured that these components will be detected in the samples. The standards of 10/25/95, which are associated with these project samples, DO have correct quant report recognition.

It is also noted that the Aroclor 1254 reported in sample RA-11 was not noted on the quant reports for the matrix spikes of RA-11, although evident qualitatively on the chromatograms. This is another example of concern with the use of the software. PCBs should have been detected and reported for the matrix spikes.

Due to poor dual column quantitative correlation (values of 5.3 ug/kg and 14.8 ug/kg), the reported result for dieldrin in RA-13 should be considered tentative in identification ("N" flag") and estimated in value.

No summaries of instrument resolution or breakdown were provided in the data package. Review of the raw data shows acceptable resolution. Breakdown evaluations were present in the raw data, and most were within protocol requirements. However, the breakdown for 4,4'-DDT in standard O3000 exceeds the allowable limit of 20%, at 26%. All soil sample analyses except RA-13 and RA-14 are associated with this standard, and reported values/detection limits for 4,4'-DDT in the project soil samples (except those two) should be considered estimated.

Noncompliant responses were observed in numerous calibration standards (responses exceeding 25% difference from the curve mean response). The following qualifications result from these outliers:

a. chlordane results estimated in both field blanks and the rinseate blank due to low responses in standard files O2899 and P2899 of 33% to 38%D.
b. 4,4'-DDT and methoxychlor estimated in both field blanks and the rinseate blank due to low responses in O2946 and P2946 of 44%D to 89%D.
c. 4,4'-DDT and methoxychlor estimated in all soil samples except RA-13 and RA-14, due to low responses in O3039 and P3039 of 74%D to 79%D.
d. Endosulfan sulfate detected value estimated in RA-13 due to elevated response in O3092 of 55%D and elevated responses in O3132 and P3132 of 72%D and 30%D.

Standard response factors reflect calculations using quantitative values which are denoted as "ppb" on the chromatograms, rather than the actual quantity injected on column with 2 uL. Sample reported results are unaffected, as they also fail to correct for 2uL, resulting in the same value as if done correctly.

Matrix spikes were performed on RA-11, with outlying recoveries for aldrin (220% and 173%, above 120% limit) and gamma-BHC (127%, above 123% limit). The laboratory states that it is probably due to contribution to these analytes from the Aroclor 1254 in the sample. However, no aldrin is reported in the unspiked sample (see above discussion). It is not possible with the submitted information to evaluate any contribution of the PCB congener responses to the pesticides. As noted above, the Aroclor 1254 response in the matrix spikes was not reported, and therefore no evaluation of PCB precision in the sample and spikes can be made.

Sample RA-14 was analysed several times, at dilution due to high levels of 4,4'-DDD. The reported analysis, which is reported as a 1:50 dilution, shows surrogate response of an undiluted sample. The reason for this is not obvious; lessor dilution analyses are not reported. The end-user of the data should exercise caution in the use of these sample results.

The report Forms 1 should be labeled as pesticide/PCB, rather than "semivolatile".

METALS

Please note the resubmitted report form for RA-2, in which the chromium reported result has been edited from 1500 ug/kg to 2,600,000 ug/kg.

Due to low post-digest spike recovery of arsenic in RA-13 (76%), the reported result for this element in the sample should be considered estimated (no corrective action was required) .

Due to elevated post-digest spike recovery of arsenic in RA-11 (119%), the reported result for this element in the sample should be considered estimated (no corrective action was required) .

Matrix spikes were performed on RA-1. Duplicate correlation was good, with two outliers (arsenic at a difference exceeding +-CRDL, and lead at 28%RPD). No qualification to sample reported results is indicated from the precision data. Spike recoveries were low for several elements. The reported results for the following elements in the soil samples should be considered estimated due to spike recoveries:

Element	Recoveries
arsenic	63% and 32%
barium	65% and 74%
cadmium	35% (and 82%)
mercury	58% and 54%
selenium	72% and 48%

The value for the cadmium spike duplicate reported on the QC form should be 11200 ug/kg, not 1120 ug/kg. Results for barium and selenium in the soil LCS reported on the QC form are not correct; actual values also fall within required limits.

Data Validation Services

Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone and Fax (518) 251-4429

December 11, 1995

Al Tonn
Groundwater Technology
101-1 Colin Drive
Holbrook, NY 11741

RE: Validation of Bulova Site, Bulova Site data packages
Lab Resources submission T510360

Dear Al:

Review is complete for the summary data packages generated by Lab Resources pertaining to samples collected at the Bulova Site (noted above).

Prior to finalizing the validation report, the following items need to be addressed by the laboratory:

1. No raw data for the solids/moisture determinations were provided in the data package. Please forward for review.

2. Raw ICP data for sample RA-15 are not in the data package (these possibly should have come between pages 1564 and 1565). Please forward for review.

3. No summary form showing true values for the aqueous LCSW is present (raw data are present). Please forward LCSW true values so that recoveries can be evaluated.

4. Please review the reported chromium value for RA-2. That reported does not match the raw data (pg. 1532).

5. The arsenic response for RA-14 was overrange (pg. 1676); no repeat reanalysis was provided in the data package. Please comment.

6. Please forward the raw data for the 5 TICs reported in the BNA SBLK02 (file J2650).

7. No raw data for the pesticide/PCB initial calibration standards were included in the data package. Please forward for review.

Please do not hesitate to contact me if you wish to discuss these requests.

Very truly yours,

Judy Harry

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700

12/14/95

Groundwater Technology
101-1 Colin Drive
Holbrook, NY 11741

Attn: Mr. Al Tonn

Dear Mr. Tonn,

This is in response to the data validation questions concerning Bulova site report LRI number T510360.

1) The raw data for % moisture is enclosed, pages 1863A, 1863B.

2) The raw ICP data for RA-15 (T510360-19) has been enclosed, page number 1564A.

3) The LCSW form is normally not enclosed if only associated with field blank samples. The results have been enclosed for your information.

4) The result for chromium on sample RA-2 (T510360-02) was in error. The corrected result page 1410 is enclosed.

5) The arsenic response for RA-14 (T510360-13) is accurate, however the instrument print out for these runs were mislabeled. Corrected pages 1681,1686 have been enclosed.

6) The raw data for BNA TIC's on SBLK02 are enclosed, pages 976A through 976E.

7) The raw data for the Pest/PCB initial calibration standards for 9/5 are located in pages 1083-1178, for 10/23 on pages 1183 through 1273.

I hope this information answers your question satisfactorily. If you require additional assistance please contact me at 201-288-3700.

Sincerely,

Daniel Glenn
Senior Project Manager, New Jersey Division Laboratory Resources

RESULTS REPORTED TO THREE (3) SIGNIFICANT FIGURES

Laboratory Resources, Inc.
Division: Tetarboro
Department: Wet Chemistry

PERCENT MOISTURE

ANALYST [illegible] DATE 10-26-95 CHECKED BY [illegible] DATE 11/06/95

SAMPLE ID NUMBER	DISH I.D.	D DISH WEIGHT (g)	I INITIAL WEIGHT (g)	F FINAL WEIGHT (g)	% SOLID	% MOISTURE
Blank	45	1.101		1.100		
570340- F	46	1.115	11.454	9.610		9.03
Dup	47	1.103	10.891	10.095		8.15
-9	48	1.116	11.598	11.026		
-10	49	1.122	9.728	8.773		
-11	50	1.117	14.786	12.029		
-12	51	1.097	7.591	5.362		
-13	52	1.110	9.175	8.649		
-14	53	1.166	11.796	10.150		
570341-1	54	1.142	9.898	8.640		
-10	55	1.128	10.020	8.763		
-2	56	1.107	11.028	9.420		
570344-1	57	1.102	9.518	7.685		27.9
-10	58	1.112	9.851	7.515		26.7
-2	59	1.118	19.403	15.002		
-3	60	1.107	7.215	6.970		
-4	61	1.106	10.744	7.419		
570360-1	62	1.096	7.935	5.444		
-2	63	1.119	9.110	6.897		
-3	64	1.110	11.065	9.596		
-4	65	1.097	11.663	9.868		
-5	66	1.107	12.949	11.373		

RPD: 1.08 X 100%

10.8%

CALC: % S = 100% X (F-D) / I-D

% Moist: 100 - % S

1863A

NB: RESULTS REPORTED TO THREE (3) SIGNIFICANT FIGURES

Laboratory Resources, Inc.
Division: Teterboro
Department: Wet Chemistry

PERCENT MOISTURE

ANALYST [illegible] DATE 10-26-95 CHECKED BY [illegible] DATE 11/06/95

SAMPLE ID NUMBER	DISH I.D.	DISH WEIGHT (g) D	INITIAL WEIGHT (g) I	FINAL WEIGHT (g) F	% SOLID	% MOISTURE
Blank	67	1.112		1.112		
510360-6	68	1.089	9.221	8.326		11
Dup	69	1.104	10.148	9.151		11
-7	70	1.113	13.930	11.879		
-8	71	1.110	8.102	6.569		
-9	72	1.109	15.672	14.359		
-10	~~73~~ 74	~~1.108~~ 1.104	14.749	13.573		
-12	~~74~~ 73	1.108	13.959	12.209		
-13	75	1.113	13.680	10.625		
~~-14~~ 17	76	1.111	10.152	9.080		
-14	77	1.113	9.598	9.202		
-19	78	1.105	9.580	8.220		
-20	79	1.124	11.063	10.809		
510335-1	80	1.104	9.364	8.735		
-2	81	1.101	8.725	8.102		
-3	82	1.113	10.108	8.652		
-4	83	1.093	12.048	10.762		
-5	84	1.113	8.483	8.000		
-6	85	1.101	7.571	6.919		
-7	86	1.112	12.014	10.726		
-8	87	1.118	14.547	12.860		
510345-1	88	1.113	11.577	9.264		

RPD: 0 X 100%

CALC: % S = $\frac{100\% \times (F-D)}{I-D}$

% Moist: 100 - % S

1863B

Method: TRACE Sample Name: 1036019 Operator: MP
Run Time: 11/10/95 23:54:31
Comment: 951110-1
Mode: CONC Corr. Factor: 1

page 1564A

Elem	Ag3280	Al3082	As1890	B_2496	Ba2/4	Be3130	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avge	5.5106	96685.	63.821	81.601	412.75	5.9366	15867.
SDev	.3560	347.	2.069	1.978	1.40	.0277	26.
%RSD	6.4597	.35851	3.2418	2.4234	.33925	.46665	.16116
#1	5.8411	96286.	62.302	82.521	411.14	5.9157	15838.
#2	5.1337	96858.	66.177	82.951	413.50	5.9680	15881.
#3	5.5570	96911.	62.984	79.331	413.63	5.9261	15883.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20000.	500000.	10000.	100000.	100000.	20000.	500000.
Low	-5.0000	-200.00	-10.000	-200.00	-5.0000	-5.0000	-200.00

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avge	5.0450	17.207	99.289	232.94	127710.	5968.8	10827.
SDev	.2027	.160	.402	1.27	217.	23.6	26.
%RSD	4.0176	.92769	.40481	.54319	.16977	.39481	.24180
#1	5.2145	17.287	99.223	231.54	127460.	5941.6	10797.
#2	4.8205	17.023	98.924	233.29	127850.	5983.2	10839.
#3	5.1000	17.310	99.720	234.00	127820.	5981.5	10844.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50000.	50000.	50000.	50000.	500000.	200000.	500000.
Low	-5.0000	-10.000	-10.000	-25.000	-100.00	-1000.0	-200.00

Elem	Mn2576	Mo2020	Na3302	Ni2316	Pb2203	Se1960	Sb2068
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avge	1307.9	5.1397	1156.8	58.985	1265.4	4.3415	1.1228
SDev	3.0	.3708	11.6	.346	3.9	2.4691	2.5415
%RSD	.22615	7.2148	1.0063	.58622	.30966	56.873	226.34
#1	1304.5	5.5369	1160.2	59.358	1260.9	6.1559	2.7002
#2	1309.5	5.0798	1166.3	58.920	1266.9	1.5297	-1.8090
#3	1309.7	4.8025	1143.8	58.676	1268.3	5.3390	2.4773
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20000.	50000.	500000.	50000.	10000.	10000.	50000.
Low	-5.0000	-25.000	-500.00	-20.000	-3.0000	-5.0000	-10.000

Elem	Si2881	Sn1899	Ti3372	Tl1908	V_2924	Zn2062	2203/1
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avge	2096.5	30.314	3327.6	-4.5012	180.92	695.08	1281.5
SDev	13.1	.631	8.8	1.6552	.71	.44	2.6
%RSD	.62565	2.0816	.26364	36.772	.39346	.06313	.20507

Laboratory Resources, Inc.

Metals QC Form

FOR: 1510360-17,15,16

Workorder No:

QC Sample No:

Batch No:

Parameters	True Value	LCSW RESULT		LCSWD RESULT			ICP POST SPIKE			ICP SERIAL DILUTION		
	ug/L	ug/L	% REC	ug/L	%REC	%LIMIT	RESULT	% REC	%LIMIT	RESULT	% RPD	%LIMIT
Aluminum	2000					80-120			75-125			10
Antimony	500					80-120			75-125			10
Arsenic	40					80-120			75-125			10
Barium X	2000	1900	95	1940	97	80-120			75-125			10
Beryllium	50					80-120			75-125			10
Boron	2000					80-120			75-125			10
Cadmium X	50	48.2	96	48.3	97	80-120			75-125			10
Calcium	20000					80-120			75-125			10
Chromium X	200	194	97	198	99	80-120			75-125			10
Cobalt	500					80-120			75-125			10
Copper	250					80-120			75-125			10
Iron	1000					80-120			75-125			10
Lead X	20	20.3	102	22.6	113	80-120			75-125			10
Magnesium	20000					80-120			75-125			10
Manganese	500					80-120			75-125			10
Mercury	4.00	3.86	97	4.16	104	80-120	NA	XXX	75-125	NA	XXX	10
Molybdenum	500					80-120			75-125			10
Nickel	500					80-120			75-125			10
Potassium	20000					80-120			75-125			10
Selenium	10					80-120			75-125			10
Silicon	20000					80-120			75-125			10
Silver X	50	46.5	93	47.4	95	80-120			75-125			10
Sodium	20000					80-120			75-125			10
Thallium	50					80-120			75-125			10
Tin	500					80-120			75-125			10
Titanium	500					80-120			75-125			10
Vanadium	500					80-120			75-125			10
Zinc	500					80-120			75-125			10

QUALIFIERS:

N – ICP POST SPIKE OUTSIDE OF CONTROL LIMITS

E – SERIAL DILUTION OUTSIDE OF CONTROL LIMIT

NA – SERIAL DILUTION NOT APPLICABLE; ANALYTE CONC. < 50X PQL

Laboratory Resources Inc. Metals QC Form

For T-510360-14, 15, 16

Workorder No: B1589 QC Sample:

Parameters	True Value	LCS RESULT		LCSWD RESULT			ICP POST SPIKE			ICP SERIAL DILUTION		
	UG/L	UG/L	% REC	UG/L	%REC	%LIMIT	RESULT	% REC	%LIMIT	RESULT	% RPD	%LIMIT
Aluminum	2000					80-120			75-125			10
Antimony ICP	500					80-120			75-125			10
Antimony FU	40					80-120			75-125			10
Arsenic ICP	2000					80-120			75-125			10
Arsenic FU X	40	3.9	82	33.2	83	80-120			75-125			10
Barium	2000					80-120			75-125			10
Beryllium	50					80-120			75-125			10
Boron	2000					80-120			75-125			10
Cadmium	50					80-120			75-125			10
Calcium	10000					80-120			75-125			10
Chromium	200					80-120			75-125			10
Cobalt	500					80-120			75-125			10
Copper	250					80-120			75-125			10
Iron	10000					80-120			75-125			10
Lead ICP	500					80-120			75-125			10
Lead FU	40					80-120			75-125			10
Magnesium	10000					80-120			75-125			10
Manganese	500					80-120			75-125			10
Mercury	4.0					80-120			75-125			10
Molybdenum	2000					80-120			75-125			10
Nickel	500					80-120			75-125			10
Potassium	20000					80-120			75-125			10
Selenium ICP	2000					80-120			75-125			10
Selenium FU X	40	34.5	86	34.4	86	80-120			75-125			10
Silicon	2000					80-120			75-125			10
Silver	50					80-120			75-125			10
Sodium	10000					80-120			75-125			10
Thallium ICP	2000					80-120			75-125			10
Thallium FU	40					80-120			75-125			10
Tin	10000					80-120			75-125			10
Titanium	2000					80-120			75-125			10
Vanadium	500					80-120			75-125			10
Zinc	500					80-120			75-125			10

QUAIFIERS: N = ICP POST SPIKE OUTSIDE OF CONTROL LIMITS

E = SERIAL DILUTION OUTSIDE OF CONTROL LIMIT

NA = SERIAL DILUTION NOT APPLICABLE: ANALYTE CONC. TOO LOW

12/14/1995 15:39 FROM GROUNDWATER TECH TO Data Validation Services P.08

12/14/95 15:42 009/017

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T510360
LRI Sample No: 2

Client: Groundwater Technology Inc.
Location: NY
Project: Bulova
Sample Description: RA-2

Date Collected: 10/23/95
Date Received: 10/24/95

Matrix: Soil
Percent Moisture: 27.7%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Arsenic by Furnace by 7060								
Arsenic	2900	690	ug/kg	11/08/95	MG	11/10/95	JT	1
Mercury by Cold Vapor by 7470								
Mercury	2700	350	ug/kg	11/09/95	AMB	11/09/95	AMB	1
Metals by ICP by 6010								
Barium	68000	350	ug/kg	11/08/95	MG	11/10/95	MP	1
Cadmium	1500	350	ug/kg	11/08/95	MG	11/10/95	MP	1
Chromium	2600000	690	ug/kg	11/08/95	MG	11/10/95	MP	1
Lead	900000	410	ug/kg	11/08/95	MG	11/13/95	MP	2
Silver	62000	350	ug/kg	11/08/95	MG	11/10/95	MP	1
Selenium by Furnace by 7740								
Selenium	550	350	ug/kg	11/08/95	MG	11/10/95	JT	1

1410

-0145

LABORATORY CHRONICLE : METALS DEPARTMENT

FURNACE

ELEMENT As
WAVE LENGTH 193.7
INSTR.NO. 3
LAMP NO. HCL
LAMP ENERGY 41
ID/WT FILE I 1589.IDW
DATA FILE AS1589.DAT
MDL , ppb 10.0
SDL 2.6

DATE 11/13/95
TIME 7:16
SHIFT AM
ANALYST JT
SUPERVISOR

BATCH NO. 1589
RAW DATA: w/:

Sample No.	Cup	Dilution Factors Prep.	Instr.	Final	Conc. ppb	~~Instr.~~ ATT %SR	Seq. No.	Obs.
ICV/CCV	33		1X		40.66			101.6
ICB/CCB	6		↓		0.85			
CRA	34		↓		12.38			12.38
1036017 (x10)	1	50X		500X	33.24	77.02		87.5
103013 (x5)	2	50X		250X	5.89	Rerun		
1036013 (x5)	3	50X		250X	38.37	85.39		94.0
10360010	4	↓		50X	30.82	.134 0		
10360011	5			↓	44.58	.194 20	Calc. = 47.7 ppb	
10360012	5				55.35	.240 40		
10360013	6				69.26	.301 60		.998
10360086 x10	7			500X	29.52	.129 0		
10360085 x10	8			↓	37.01	.161 20	Rerun	
10360082 x10	9				67.40	.293 40		
10360083 x10	10	↓		↓	87.39	.379 60		.977
ICV/CCV	33		1X		42.10			105.2
ICB/CCB	0		↓		-0.90			
10360090	11	50X		50X	38.08	.165 0		
10360091	12				50.67	.220 20	Calc = 44.7	
10360092	13				66.38	.287 40		
10360093	14				83.31	.362 60		.998
10360120	15				60.74	.264 0		
10360121	16				73.05	.317 20		82.X
10360122	17				85.65	.372 40	Calc =	
10360123	18	↓		↓	101.64	.441 60		.998

True ID 1036017 1036013 JT 12/15/95

dispensed: 10 from 0, 5 from 40, 20 from 33
eplicate 1 Time: 07:36

ak Area (A-s): 0.182 Peak Height (A): 0.151
ackground Pk Area (A-s): 0.121 Background Pk Height (A): 0.069
lank Corrected Pk Area (A-s): 0.177
ncentration (ug/L): 40.66

C sample is within range 36.00 - 44.00

---

s ID: ICB/CCB Seq. No.: 00008 A/S Pos.: 0 Date: 11/13/95

. dispensed: 10 from 0, 5 from 40, 20 from 0
eplicate 1 Time: 07:38
eak Area (A-s): 0.009 Peak Height (A): 0.028
ackground Pk Area (A-s): 0.099 Background Pk Height (A): 0.059
lank Corrected Pk Area (A-s): 0.004
oncentration (ug/L): 0.85

C sample is within range -10.00 - 10.00

---

s ID: CRA Seq. No.: 00009 A/S Pos.: 34 Date: 11/13/95

L dispensed: 10 from 0, 5 from 40, 20 from 34
eplicate 1 Time: 07:40
eak Area (A-s): 0.059 Peak Height (A): 0.067
ackground Pk Area (A-s): 0.112 Background Pk Height (A): 0.061
lank Corrected Pk Area (A-s): 0.054
oncentration (ug/L): 12.38

C sample is within range 5.00 - 20.00

---

s ID: ~~1036017x10~~ 12/13/95 Seq. No.: 00010 A/S Pos.: 1 Date: 11/13/95
1036017 (x10)

L dispensed: 10 from 0, 5 from 40, 20 from 1
eplicate 1 Time: 07:42
eak Area (A-s): 0.150 Peak Height (A): 0.126
ackground Pk Area (A-s): 0.131 Background Pk Height (A): 0.061
lank Corrected Pk Area (A-s): 0.144
oncentration (ug/L): 33.24 Corrected Conc (ug/L): 33.24

---

s ~~ID: 1036017x10~~ 12/13/95 Seq. No.: 00011 A/S Pos.: 1 Date: 11/13/95
1036017 (x10)

L dispensed: 5 from 40, 10 from 39, 20 from 1
eplicate 1 Time: 07:44
eak Area (A-s): 0.340 Peak Height (A): 0.315
ackground Pk Area (A-s): 0.143 Background Pk Height (A): 0.072
lank Corrected Pk Area (A-s): 0.334
oncentration (ug/L): 77.02 Corrected Conc (ug/L): 77.02

ecovery is 87.5%

---

s ID: ~~LCSW-1589~~ Seq. No.: 00012 A/S Pos.: 2 Date: 11/13/95

As ~~ID: 103013x5~~ 1036013 x5 12/13/95 Seq. No.: 00013 A/S Pos.: 2 Date: 11/13/95

uL dispensed: 10 from 0, 5 from 40, 20 from 2
Replicate 1
Peak Area (A-s): 0.031
Background Pk Area (A-s): 0.122
Blank Corrected Pk Area (A-s): 0.026
Concentration (ug/L): 5.89
Time: 07:49
Peak Height (A): 0.048
Background Pk Height (A): 0.058
Corrected Conc (ug/L): 5.89

As ID: ~~103013x4~~ 1036013 x4 12/13/95 Seq. No.: 00015 A/S Pos.: 2 Date: 11/13/95

uL dispensed: 10 from 0, 5 from 40, 20 from 2
Replicate 1
Peak Area (A-s): 0.172
Background Pk Area (A-s): 0.286
Blank Corrected Pk Area (A-s): 0.167
Concentration (ug/L): 38.37
Time: 07:58
Peak Height (A): 0.124
Background Pk Height (A): 0.152
Corrected Conc (ug/L): 38.37

As ID: 103013x4 Seq. No.: 00016 A/S Pos.: 2 Date: 11/13/95

uL dispensed: 5 from 40, 10 from 39, 20 from 2
Replicate 1
Peak Area (A-s): 0.376
Background Pk Area (A-s): 0.130
Blank Corrected Pk Area (A-s): 0.371
Concentration (ug/L): 85.39
Time: 08:00
Peak Height (A): 0.334
Background Pk Height (A): 0.064
Corrected Conc (ug/L): 85.39

Recovery is 94.0%

As ID: 10360010 Seq. No.: 00017 A/S Pos.: 3 Date: 11/13/95

uL dispensed: 10 from 0, 5 from 40, 20 from 3
Replicate 1
Peak Area (A-s): 0.139
Background Pk Area (A-s): 0.685
Blank Corrected Pk Area (A-s): 0.134
Concentration (ug/L): 30.82
Time: 08:02
Peak Height (A): 0.130
Background Pk Height (A): 0.336
Corrected Conc (ug/L): 30.82

As ID: 10360011 Seq. No.: 00018 A/S Pos.: 4 Date: 11/13/95

uL dispensed: 10 from 0, 5 from 40, 20 from 4
Replicate 1
Peak Area (A-s): 0.199
Background Pk Area (A-s): 0.687
Blank Corrected Pk Area (A-s): 0.194
Concentration (ug/L): 44.58
Time: 08:04
Peak Height (A): 0.159
Background Pk Height (A): 0.330
Corrected Conc (ug/L): 44.58

As ID: 10360012 Seq. No.: 00019 A/S Pos.: 5 Date: 11/13/95

uL dispensed: 10 from 0, 5 from 40, 20 from 5
Replicate 1
Peak Area (A-s): 0.246
Time: 08:06
Peak Height (A): 0.201

Library Search Compound Report

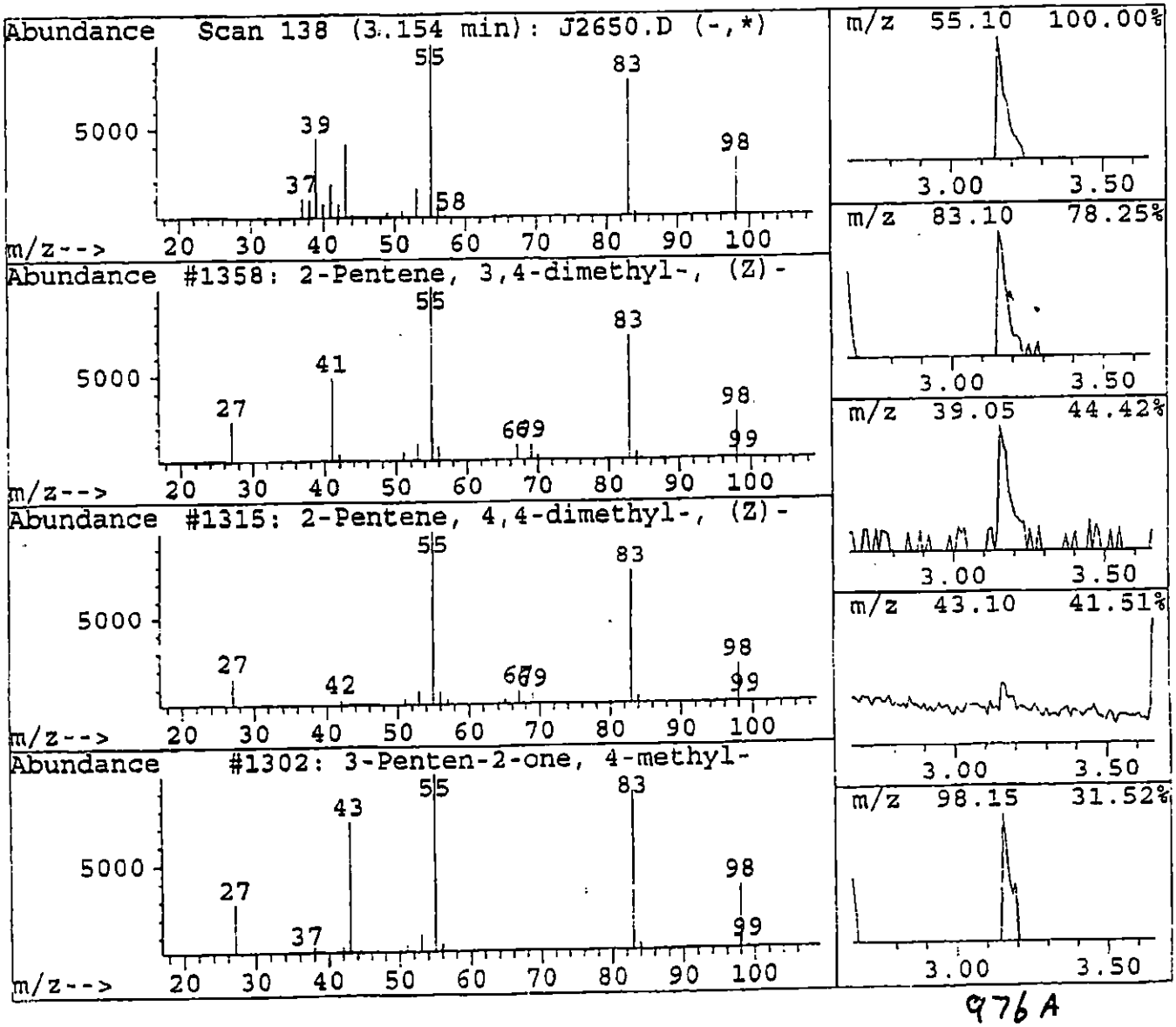
Data File : D:\J26'S\J2650.D
Acq On : 21 Nov 95 12:15 am
Sample : SBLKQM11517T2
Misc :

Vial: 11
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA4.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.15	1.55 NG	50079	1,4-Dichlorobenzene-d4	8.04

Hit# of 20	Tentative ID	MolForm	CAS#	Qual
1	2-Pentene, 3,4-dimethyl-, (Z)-	C7H14	004914-91-4	43
2	2-Pentene, 4,4-dimethyl-, (Z)-	C7H14	000762-63-0	43
3	3-Penten-2-one, 4-methyl-	C6H10O	000141-79-7	38
4	2-Pentene, 3-ethyl-	C7H14	000816-79-5	27
5	2-Pentene, 2,3-dimethyl-	C7H14	010574-37-5	25



976A

Library Search Compound Report

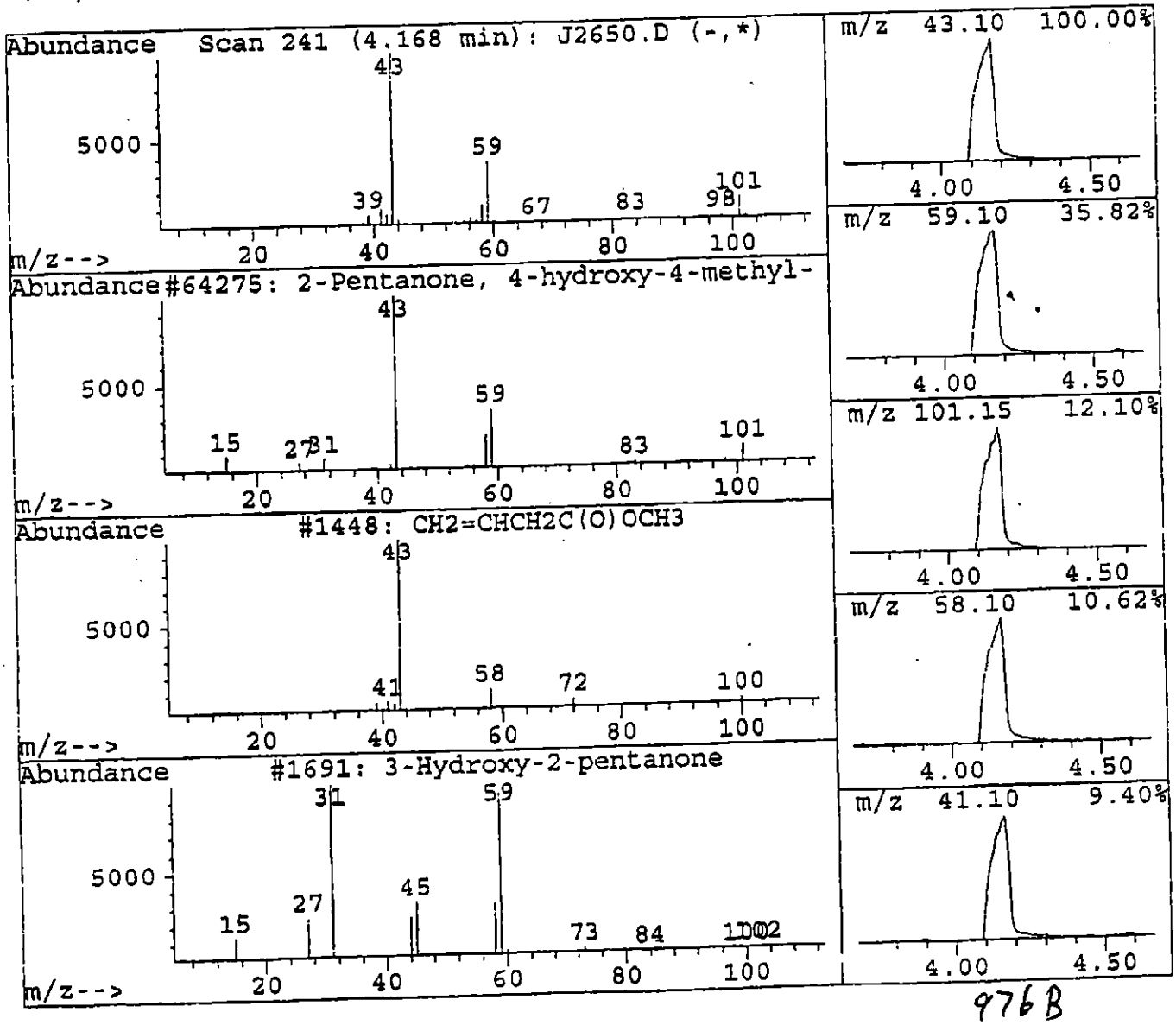
Data File : D:\J26'S\J2650.D
Acq On : 21 Nov 95 12:15 am
Sample : SBLKQM11517T2
Misc :

Vial: 11
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA4.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
4.17	130.96 NG	4237224	1,4-Dichlorobenzene-d4	8.04

Hit# of 20	Tentative ID	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	C6H12O2	000123-42-2	45
2	CH2-CHCH2C(O)OCH3	C5H8O2	003724-55-8	25
3	3-Hydroxy-2-pentanone	C5H10O2	003142-66-3	9
4	2-Propanone, 1-(1-methylethoxy)-	C6H12O2	042781-12-4	9
5	2,3-Butanedione, monooxime	C4H7NO2	000057-71-6	7



976B

Library Search Compound Report

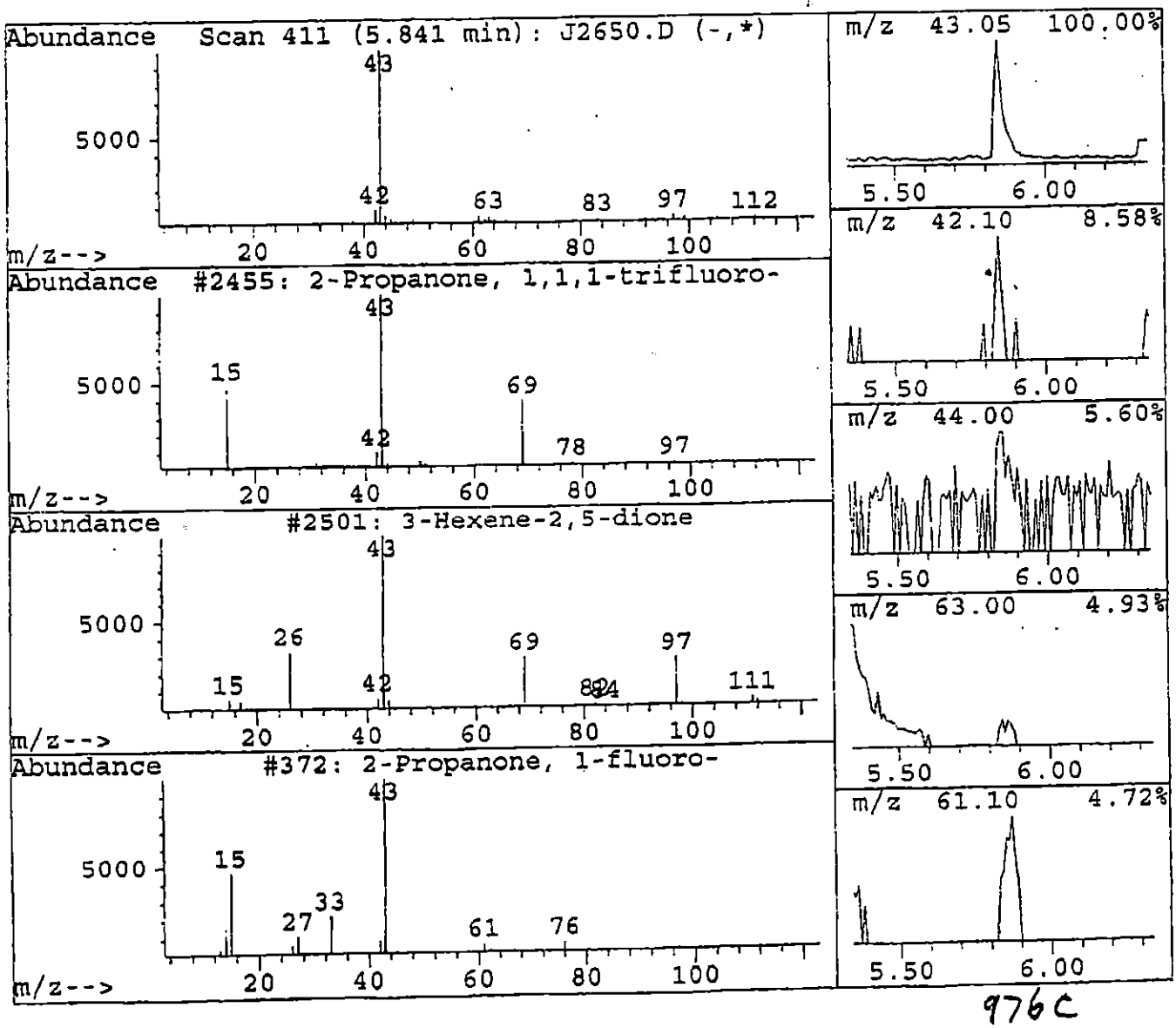
Data File : D:\J26'S\J2650.D
Acq On : 21 Nov 95 12:15 am
Sample : SBLKQM11517T2
Misc :

Vial: 11
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA4.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.84	2.22 NG	71702	1,4-Dichlorobenzene-d4	8.04

Hit# of 20	Tentative ID	MolForm	CAS#	Qual
1	2-Propanone, 1,1,1-trifluoro-	C3H3F3O	000421-50-1	9
2	3-Hexene-2,5-dione	C6H8O2	004436-75-3	5
3	2-Propanone, 1-fluoro-	C3H5FO	000430-51-3	4
4	Hydrogen azide	HN3	007782-79-8	4
5	Ethanol, 2-chloro-, acetate	C4H7ClO2	000542-58-5	4



976C

Library Search Compound Report

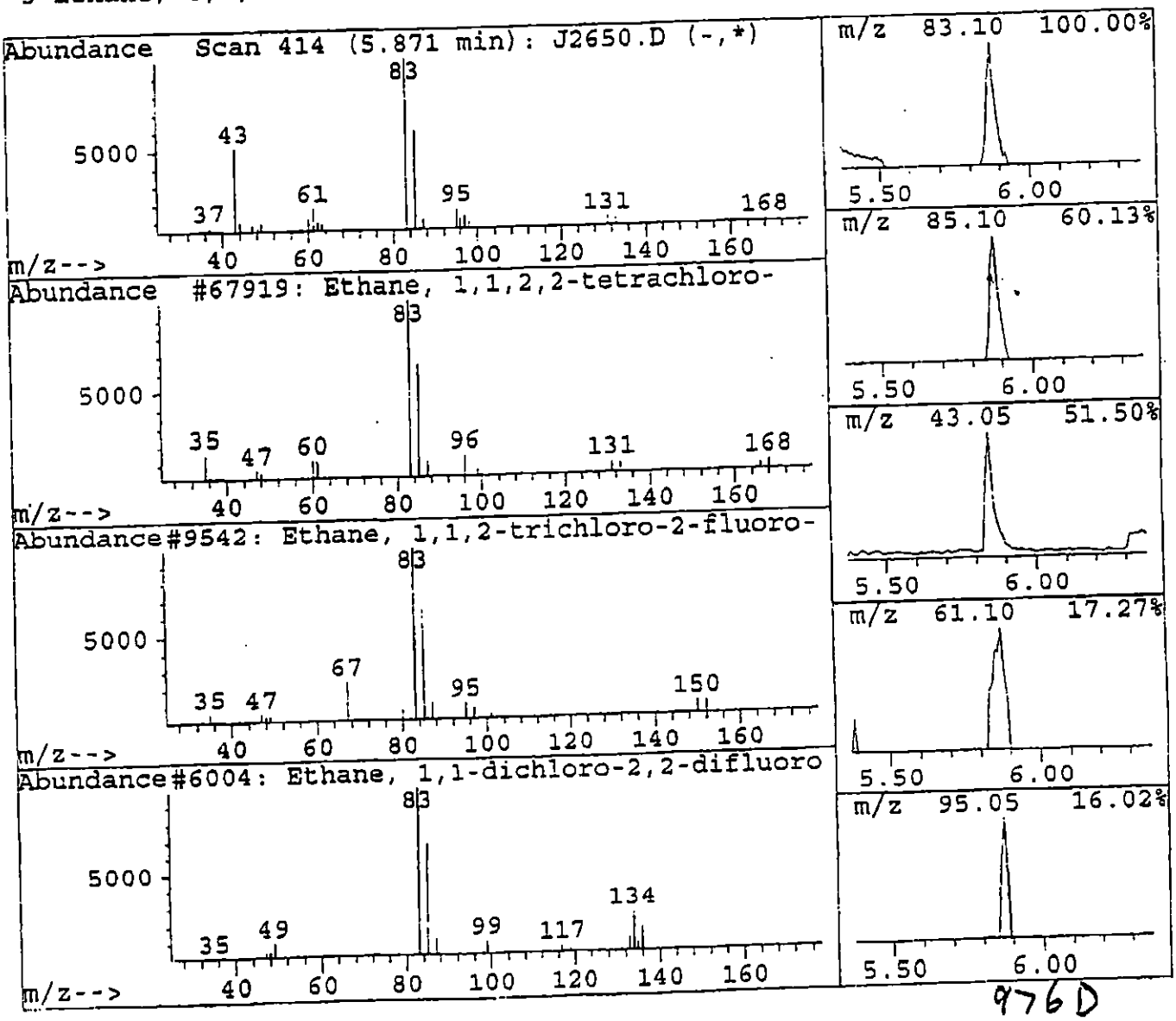
Data File : D:\J26'S\J2650.D
Acq On : 21 Nov 95 12:15 am
Sample : SBLKQM11517T2
Misc :

Vial: 11
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA4.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.87	1.03 NG	33352	1,4-Dichlorobenzene-d4	8.04

Hit# of 20	Tentative ID	MolForm	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	C2H2Cl4	000079-34-5	93
2	Ethane, 1,1,2-trichloro-2-fluoro-	C2H2Cl3F	000359-28-4	64
3	Ethane, 1,1-dichloro-2,2-difluoro-	C2H2Cl2F2	000471-43-2	59
4	Ethane, 2,2-dichloro-1,1,1-trifluor	C2HCl2F3	000306-83-2	53
5	Ethane, 1,2,2-trichloro-1,1-difluor	C2HCl3F2	000354-21-2	53



976D

arch Compound Report

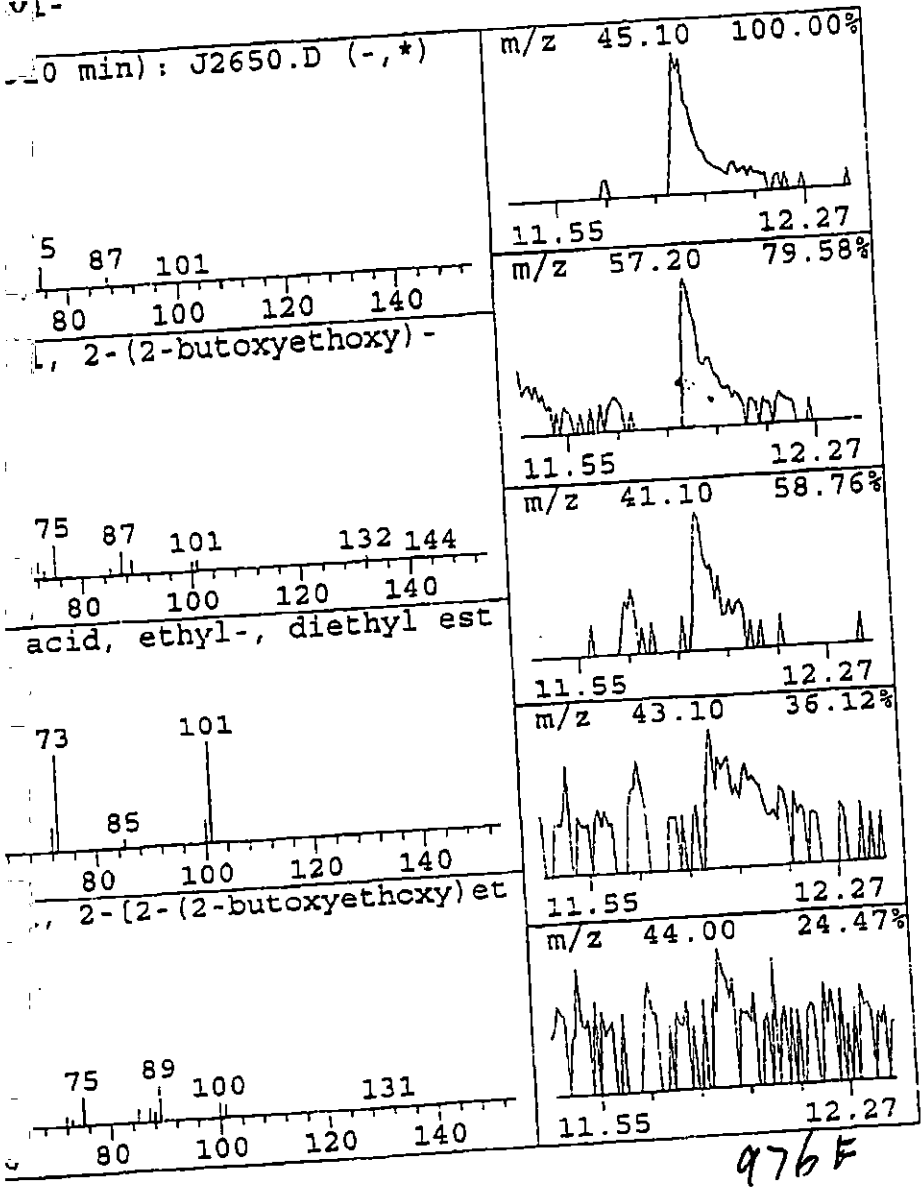
.D
:15 am
2

Vial: 11
Operator:
Inst : MSD_j
Multiplr: 1.00

ETHODS\IDJBNA4.M
270 FOR BASE/NEUTRAL&ACID
375K.L

Area	Relative to ISTD	R.T.
36468	Naphthalene-d8	11.69

tive ID	MolForm	CAS#	Qual
hoxy)-	C8H18O3	000112-34-5	50
ethyl ester	C6H15BO2	053907-92-9	25
ethoxy)ethox	C10H22O4	000143-22-6	16
ylethyl ester	C6H12O2	000637-78-5	9
vl-	C7H16O	006144-93-0	9



976F

Tue Nov 21 12:34:59 1995

n, received sixteen soil
ank and a trip blank for
r 24, 1995. The samples
in the chain of custody.

uired holding time. Any
spective quality control
ummaries.

reported in dry weight.

s regarding the enclosed

031

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS VOLATILE

1. The surrogate recovery of DCE was outside of the required QC limits in samples T510360-03 and 05. The samples were re-analyzed and the recovery of DCE was within QC limits.

2. The surrogate recovery of Toluene-d8 was outside of the required QC limits in samples T510360-02, 03, 04, 05, 07, 08, 12, 13, 17, 18 and 19. The samples were re-analyzed yielding similar results. The recovery of Toluene-d8 was also outside of the QC limits in samples T510360-01RE and 10RE.

3. The surrogate recovery of BFB was outside of the required QC limits in samples T510360-03, 05 and 08. The samples were re-analyzed yielding similar results.

4. The internal standard areas are outside of the required QC limits in samples T510360-01-05, 07, 08, 10, 12, 13, 17, 18RE and 19. The samples were re-analyzed yielding similar results. All samples were originally analyzed within holding time. All re-analyses, however, were analyzed out of holding time.

5. MSD is outside of the required QC limits for 1,1-Dichloroethene and Toluene in sample T510360-17.

6. RPD is outside of the required QC limits for 1,1-Dichloroethene in sample T510360-17.

GC/MS SEMI-VOLATILE

1. Aldol condensation was present in the library search of procedure blank W0701.

2. Aldol condensation and unknowns were present in the library search of procedure blank J2650.

3. The internal standard areas are outside of the required QC limits in samples T510360-01 and 03. The samples were re-analyzed yielding similar results.

4. All samples were extracted within holding time. However, the MS/MSD (only), which was performed on sample T510360-20, was extracted out of holding time.

GC SEMI-VOLATILE

1. The surrogate recoveries of TCMX and DBC were outside of the QC limits in sample T510360-13 due to matrix interference.

2. The quantitation limits are elevated due to the high concentration of analytes in samples T510360-01, 03, 04, 05, 12 and 13.

3. MS/MSD was outside of the QC limits for Aldrin and MSD was outside of the QC limits for Lindane in sample T510360-10 due to the presence of AR1254 in the sample.

INORGANIC NON-CONFORMANCE SUMMARY

METALS

1. The quantitation limits are elevated due to matrix interference for Ba, Cd, Cr, Pb and Ag analysis of samples T510360-05 and 07.

2. The quantitation limits are elevated due to the dilution required for Pb analysis of samples T510360-02 and 05.

3. The quantitation limits are elevated due to the dilution required for As analysis of samples T510360-08, 13 and 17.

4. Arsenic was quantitated by MSA due to matrix interference for samples T510360-08, 09, 12, 18 and 19.

5. MS is outside of the control limit due to matrix interference for Ba, Cd, Hg, As and Se analysis of sample T510360-01.

6. MSD is outside of the control limit due to matrix interference for Ba, Hg, As and Se analysis of sample T510360-01.

7. RPD is outside of the control limit due to matrix interference for Pb and As analysis of sample T510360-01.