

**FINAL**  
**Preliminary Site Assessment Report**

**Bellport Laundry Site**  
**Bellport, New York**

**NYSDEC Site ID #152137**  
**Work Assignment #D002925-09**

November 1995

Prepared for:

**New York State**  
**Department Of Environmental Conservation**  
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# Executive Summary

Under contract with the New York State Department of Environmental Conservation (NYSDEC), Camp Dresser & McKee (CDM) completed a Preliminary Site Assessment (PSA) of the Bellport Laundry site, located on Head of the Neck Road, in the Village of Bellport. The objective of this PSA was to determine if groundwater contamination exists within the site as the result of the documented and suspected onsite discharges of laundry wastewater and dry cleaning solvents.

This PSA included the collection of groundwater and soil samples from small diameter temporary boreholes using the Geoprobe™ System. The collected samples were analyzed for volatile organic compounds, semivolatile organic compounds, metals, pesticides and PCB's. CDM completed a review of available NYSDEC, local health department and historical records and files concerning the site. Information on local and regional hydrogeology was also reviewed.

The Bellport Laundry site has been used as a commercial laundry from 1930 to 1979. Operations included the generation of laundry wastewaters discharged to onsite lagoons. Drycleaning using tetrachloroethene (PCE) and possibly other organic solvents was conducted onsite from 1948 to 1979. PCE is reported to have been spilled onsite in 1974 and is suspected of being improperly disposed onsite through the disposal of drums containing the drycleaning solvent. Previous investigations conducted at the site have identified the presence of PCE within site soil and groundwater. Private well sampling by SCDHS had identified PCE and related chlorinated hydrocarbons within private and public supply wells located immediately west, east and southwest of the site.

The site is underlain by glacial outwash deposits consisting of highly permeable sands and gravels. Groundwater is between 23 and 28 feet below grade at the site and is assumed to flow in a south to southeasterly direction. Groundwater velocities within the glacial aquifer underlying the site range between one and four feet per day. Groundwater is the exclusive source of public drinking water within the site area. A public supply well field is located approximately 1,000 feet southwest of the site. Pumping of this well field likely influences groundwater flow within the site and therefore contaminant transport within the site. Numerous private wells are located throughout the site area.

Chemical analysis of groundwater samples collected as part of this PSA identified a number of VOCs at trace to low concentrations within site groundwater. PCE was the most commonly encountered VOC, detected in five out of ten sample locations, the highest observed concentration being 50

ug/l in GP-9. The NYSDEC Class GA groundwater standard for PCE is 5 ug/l.

One PCB compound Aroclor-1254 was detected in groundwater samples GP-7 and GP-9 at 0.69 and 0.65 ug/l respectively. The GA groundwater standard for Aroclor is 0.1 ug/l. The source of this PCB contamination is unknown.

Inorganic analysis identified elevated metals concentrations within all groundwater samples. Of primary concern is the presence of elevated chromium within the samples with the maximum concentration at 4,360 ug/l identified in GP-3. The GA groundwater standard for chromium is 50 ug/l. The source of the elevated metals within the site groundwater is not apparent. However, fill materials brought into the site may be a potential source. The turbidity of collected groundwater samples may have also attributed to the high metals concentrations.

Chemical analysis of two soil samples collected from the site at a depth of 16 to 20 feet did not reveal any significant contamination within the samples.

Based on the data generated as part of this PSA, CDM has concluded that groundwater contamination by PCE has likely occurred onsite as the result of past discharges of the drycleaning solvent by Bellport Laundry. Past sampling of private wells by SCDHS located immediately west and east of the site and the public supply well field southwest of the site has also identified PCE contamination. Given the influence of the nearby public supply well field on groundwater flow directions within the site area, it is likely that the observed PCE contamination within the private and public supply well fields is from the onsite discharge of the drycleaning solvents.

(bell/execsumm)

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# Section 1 Introduction

## 1.1 Project Objective

As part of New York State's program to investigate potential hazardous waste sites, the New York State Department of Environmental Conservation (NYSDEC) has entered into a contract with Camp Dresser & McKee (CDM) to undertake a Preliminary Site Assessment (PSA) of the Bellport Laundry site located in the Village of Bellport in Suffolk County, New York.

The objective of this PSA was to determine if groundwater contamination exists within the site as the result of documented wastewater discharges to onsite lagoons which occurred during an approximate time period of 1930 to 1979 and/or the result of suspected onsite illegal dumping of hazardous waste.

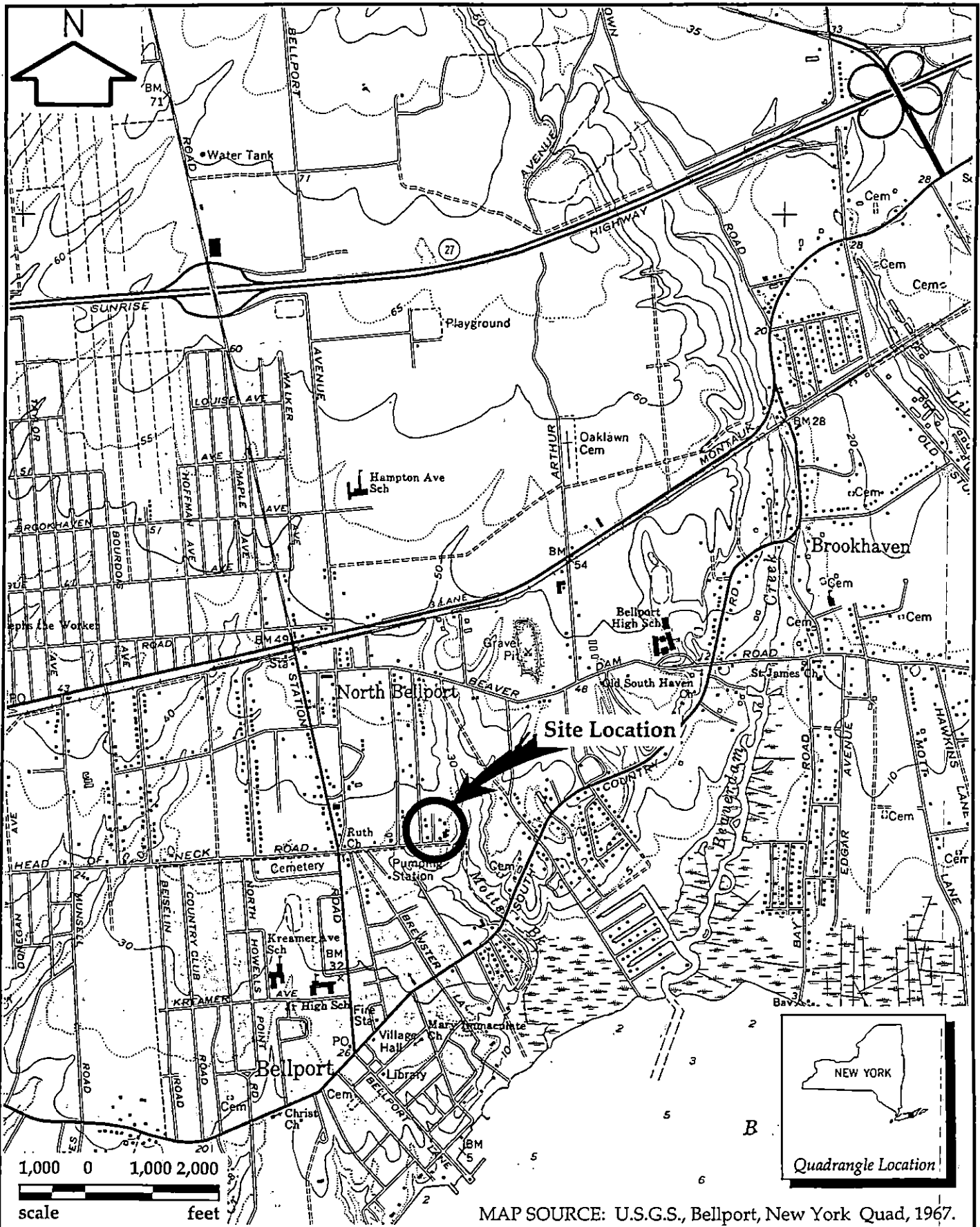
## 1.2 Site Location and Description

The Bellport Laundry site is located at the eastern terminus of Head of the Neck Road within a residential area of Bellport, New York. Residential homes are located to the north, west and south of the site. To the east of the site is Motts Creek and associated wetlands, see Figure 1-1. The site consists of an "L" shaped property approximately 2.6 acres in size. Currently, three structures are located on the site, one two-story wood frame residential house, a small wood shed approximately 20 feet north of the house, and a concrete block building located approximately 200 feet east of the house, see Figure 1-2. All structures are currently vacant. The majority of the site is unpaved and considerably overgrown. Numerous debris piles are located throughout the site. An embankment is located on the eastern side of the site which slopes steeply towards Motts Creek.

During CDM's investigation, there were no stormwater control systems such as storm drains observed on site. It is assumed the site is serviced by onsite septic systems given there are no sanitary sewers within the Village of Bellport.

## 1.3 Site History

According to a written statement, dated May 24, 1988, provided by Mr. Gardiner Hulse, (owner of the subject site and the Bellport Laundry establishment), present in NYSDEC files reviewed by CDM, the site was developed as a laundry business by a Asen Hamerun some time in 1928. Prior to this, the property was used as a residence and possibly farmland. In 1930, A. Hamerun sold the site to Hazel Hulse, who started Bellport Laundry at the site. According to the written statement, Bellport Laundry continued using the site until March 16, 1979, when the business ended in bankruptcy.



MAP SOURCE: U.S.G.S., Bellport, New York Quad, 1967.

**CDM**

environmental engineers, scientists,  
planners & management consultants

Preliminary Site Assessment Report  
Bellport Laundry Site, Bellport, New York  
NYSDEC Site ID #152137  
**Site Location Map**

Figure 1-1

In 1948, Bellport Laundry began dry cleaning operations using perchloroethylene (tetrachloroethane) as a solvent. However, an October 18, 1990 memo from the SCDHS indicates mineral spirits were used in site dry cleaning operations in lieu of chlorinated solvents. Mr. Hulse disputes this point in an October 30, 1995 letter to NYSDEC, indicating dry cleaning operations only used tetrachloroethene.

A large sump (lagoon) was constructed approximately 180 feet long by 30 feet wide on the Bellport Laundry property and was used to dispose of wastewaters discharged from the laundry process. In 1958, a second, larger sump was constructed on an adjoining property purchased by Bellport Laundry. According to available information, CDM understands the sumps or lagoons were open unlined pits excavated within the sandy site soils. The waste waters were discharged to the lagoons and allowed to percolate through the soil to eventually reach groundwater.

Mr. Hulse did not indicate in the written statement how long wastewaters were discharged to the two lagoons. Mr. Hulse indicated the wastewater discharged consisted of biodegradable soaps. According to NYSDEC records, estimated flow of wastewater was 4,000 gallons per day (gpd). Currently, the lagoons are buried; however, the date when the backfilling took place was not identified in records reviewed by CDM. Additionally, a septic system was reportedly located to the north of the laundry facility and received up to 1,000 gallons of sanitary waste each day.

Mr. Hulse's statement documents that the Village of Bellport dumped fill consisting of street sweepings on the site starting in the mid-1960's. Mr. Hulse did not indicate for how long the village used the site for disposal.

Mr. Hulse's statement indicates that Rollup Industries, a fabricator of aluminum doors, started using the site in September 1981. According to a NUS Corp. report completed for the USEPA, this company stopped using the site in the winter of 1988. At the time NUS Corp. completed their site investigation in October of 1989, the site was used as a residence and a garage. At the time of CDM's field investigation in December of 1994, the site was vacant.

Mr. Hulse's statement indicates a 1,000 gallon gasoline underground storage tank (UST) and a 12,000 gallon fuel oil UST were removed from the site in November of 1988 and January of 1989 respectively. Approximately 10 cubic yards of contaminated soil was also reportedly removed during the UST removal action.

In response to the presence of groundwater contamination identified in nearby private wells, as well as allegations of illegal dumping on the site, NUS Corporation (NUS), under contract with the USEPA, performed an investigation of the site in October of 1989, which included the collection of

eight surface soil samples and seven tap water samples from onsite and nearby properties. A discussion of sample analysis findings is provided in the Section 1.4.

## 1.4 Agency Records Review

CDM completed the review of all available NYSDEC and SCDHS records on February 23, 1995 concerning the Bellport Laundry site. Table 1-1 summarizes all significant records reviewed by CDM. The following paragraphs summarize the most significant information with regard to onsite waste discharges and soil and groundwater contamination.

In November of 1965, Suffolk County Department of Health (SCDHS) issued a notice of violation to Bellport Laundry for discharging untreated waste waters to groundwater and further required Bellport Laundry to submit plans for the treatment of waste. In September of 1971, SCDHS issued a second notice of violation to Bellport Laundry for the discharge of waste water without a permit.

A January 1974 correspondence from the Suffolk County Department of Environmental Control (SCDEC) to Bellport Laundry indicated a spill of perchloroethylene (tetrachloroethylene) occurred at the Bellport Laundry site on January 22, 1974. Reviewed records do not indicate where the spill occurred onsite, quantity of the spill, or if the spill was remediated. Mr. Hulse contends that perchloroethylene was never spilled onsite.

In January 1976, Bellport Laundry applied for a NYSDEC State Pollution Discharge Elimination System (SPDES) permit for the discharge of laundry wastewaters to onsite lagoons. In July 1977, NYSDEC issued a SPDES permit (No. NY0098698) to Bellport Laundry, with an expiration date given for the same month in 1982. In February 1982, the NYSDEC rescinds the SPDES permit for Bellport Laundry given they were out of business at this time.

An October 1986 correspondence from the Village of Bellport confirms that the village had dumped waste on the Gardiner Hulse property (the Bellport Laundry site) including street clippings, asphalt, concrete and brush for the past eight years. The letter indicates the village will attempt to rectify the situation. It is unclear from the review of available records whether the village actually completed any remedial action onsite.

A violation inspection report dated December 9, 1987 from John Pavacic of the Town of Brookhaven documents the presence of construction demolition debris, tree stumps, logs and other fill material on the Bellport Laundry site up to 20 feet thick on the eastern edge of the site adjoining Motts Creek. It is the opinion of the Brookhaven Town official that the fill material had encroached onto the wetlands associated with Motts Creek. Mr. Hulse has indicated that the depth of fill did not exceed ten feet.

Table 1-1  
**Summary Of Selected Public Records Files**

Bellport Laundry - NYSDEC Site ID #152137.  
 Bellport, New York (Suffolk County)  
 Grant Hardware Work Assignment  
 New York State Standby Contract D-002925-9

<i>Date</i>	<i>Document</i>	<i>From</i>	<i>Of</i>	<i>To</i>	<i>Of</i>	<i>Contents (1)</i>
11/30/65	Correspondence	H. Davids	SCDOH	Bellport Laundry	Bellport Laundry	Cites laundry as being in violation of Suffolk County Sanitary Code and New York Public Health Law. Directs owner to submit plans for waste treatment by 11/01/65.
08/13/71	Memorandum	G. Watt	SCDEC	J.H. Pim	SCDEC	Results of 08/12/71 site inspection indicates process waste water disposed into two basins at a rate of approximately 4,000 gallons per day. No changes made to the waste water disposal system as was recommended by plant engineer in 07/66.
09/08/71	Correspondence	J.M. Flynn	SCDEC	Bellport Laundry	Bellport Laundry	Cites discharge of liquid industrial waste without a discharge permit. Need for laundromat to retain the services of an engineer to fulfill requirements by 11/08/71.
01/23/74	Correspondence	G. Watt	SCDEC	W. Dolger	Bellport Laundry	Cites a 01/22/74 spill of per-chlorethylene at the site.
04/28/75	Water Pollution Case Report	R.E. Strzepeck	SCDEC	File	NA	Cites failure of laundromat to respond to SPDES requirements, failure to sign consent order of 03/28/72 and 12/10/74 and lack of cooperation by site owners.
07/21/75	Correspondence	A. Orensky	NYSDEC	B. Hulse	Bellport	Cites cleaners for violation of ECL due to lack of requisite permit. Requests meeting for remedial action.
01/29/76	Application For SPDES Permit	Bellport Laundry	Bellport Laundry	NYSDEC	NYSDEC	Application indicates that industrial waste water will be approximately 50,000 gallons per day discharged to lagoons.

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09/22/76	Correspondence	G. K. Hansen	SCDEC	Bellport Laundry	Bellport Laundry	Providing information to be published in "The Long Island Advance" newspaper as public notice that facility is applying for SPDES permit.
06/07/77	Correspondence	G. K. Hansen	NYSDEC	SCDEC	SCDEC	Outlines special conditions of a SPDES permit for facility.
06/23/77	Correspondence	A.R. Yerman	NYSDEC	Bellport Laundry	Bellport Laundry	Correspondence carries SPDEC permit.
09/01/77	Correspondence	J.B. Scherb	NYSDEC	B. Hulse	Bellport Laundry	Cites failure of Bellport Laundry to sign into consent order and the scheduling of a compliance conference under ECL guidelines.
11/07/77	Correspondence	R. Gilbert	NYSDEC	Bellport Laundry	Bellport Laundry	Notification of unsatisfactory industrial waste sampling results and need to implement corrective action.
02/18/82	Correspondence	W.L. Garvey	NYSDEC	G. Hulse	Bellport Laundry	Withdrawal of DEC SPDES permit due to apparent closure of business. Building found to be occupied by Rollup Company, Insulating Security Shutters.
10/31/86	Correspondence	G. Brisson	Bellport	G. Rosenblum	Attorney	Correspondence confirms that Village of Bellport has dumped street clippings, asphalt, concrete and brush on the Hulse property and Head of the Neck Road for eight years. Village to rectify the situation

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03/03/87 (?)	Correspondence	J. Pavacic	Town of Brookhaven	G. Hulse	Bellport	Correspondence discusses removal of fill, refuse and buried material, restoration of former wetland and regrading of site to original contours.
12/09/87 (?)	Violation Report	J. Pavacic	Town of Brookhaven	Unknown	Unknown	Results of 12/09/87 inspection of the Head of the Neck Road site. Includes present condition of site and chronology of site violations.
05/24/88	Correspondence	R. Haje	E.N. Consultants	L. Riley	Attorney	Provides history of site authored by the property owner, G. Hulse.
09/21/88	Correspondence	M. Trent	SCDHS	J. Licata	NYSDEC	Describes plume of dissolved petroleum constituents in vicinity of Head of the Neck Road and the SCWA wellfield.
01/02/89	Correspondence	G.J. Maytrott	NYSDEC	R. Denton	Fenley & Nicol	Directs the installation of 8 monitoring wells a Zitro Service Station to confirm if local petroleum contamination is from their tanks.
01/20/89	Correspondence	A. Santino	SCDHS	G. Hulse	Bellport	Describes removal of 12,000 gallon underground fuel storage tanks with associated contaminated soils. SCDHS requires a groundwater investigation to determine extent of contamination.
03/06/89	Correspondence	S. Miller	Bellport	J. Powell	Assemblyman	Describes illegal landfill on Head of Neck Road and potential negative impacts to the property and Motts Creek. Requests assistance.

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03/06/90	Correspondence	S. Luftig	EPA	M. O'Toole	NYSDEC	Notifies State that Wards Lane water supply contamination is not eligible for removal action, citing that contamination is from a gasoline spill which is not a hazardous substance according to EPA definition. Recommends using NYS oil spill funds for the investigation and cleanup.
03/15/90	Final Draft Site Inspection Report	NUS Corp.	NUS Corp.	USEPA	USEPA	Final Draft Report provides site summary, narrative conclusions and recommendations with maps and photos. Also provides detailed public record documents on site history and practices.
10/90	EPA Facts Report	USEPA	USEPA	Public Information	NA	Provides site history, EPA Actions at the site and additional information.
10/90	Draft Inspection Report	R. Stewart	NYSDEC	A. Candella	NYSDEC	Report cites incidence of landfilling activities, discovery of buried drums and interviews from area residents indicating discharge of aromatic liquids from drums during an October 1990 site regrading attempt by a facility tenant on the Hulse property.
10/18/90	Memorandum	J. Maloney	SCDHS	A. Andreoli	SCDHS	Describes site history and public information meeting chaired by Councilman J. Powell. Memo describes potential multiple sources of groundwater contamination in the area.
10/26/90	Correspondence	S. Latham	Counsel	J. Maloney	SCDHS	Provides environmental data collected at Bellport and at surrounding home owner drinking water wells.

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10/31/90	Memorandum	B. Baker	NYSDEC	P. Barbato	NYSDEC	Indicates that Bellport Laundry is potentially the source of on-site groundwater contamination but not downgradient contamination. 22 of 26 up-gradient wells are contaminated by BTX, not associated with the laundry - specific contaminants and possible sources included: BTX, Zitro Service Station; PCE, from vacant lot or industrial activities on Montauk Highway; Chlorinated Solvents, Country Corner Body Shop and/or a Cesspool Cleaning Service; Metals, unknown. Memo also cites removal of a 12,000 gallon UST (removal #8808239) on 01/16/89 with #6 fuel and solvent contamination of soils. Fuel oil removed by Rice Tank Cleaning, Solvents referred to SCDHS and NYSDEC.
12/17/90	Correspondence	R. Caspe	NYSDEC	M. O'Toole	NYSDEC	Informs recipient of possible site inclusion on NPL and suggests that DEC action at the site be consistent with the National Contingency Plan.
01/14/91	Correspondence	M. O'Toole	NYSDEC	R. Caspe	USEPA	Cites plan to expedite matters at Bellport Laundry by placing the site on the State Registry and pursuing a Phase II Investigation and a Part 360 removal under Order of Consent.
01/28/91	Correspondence	R. Stewart	NYSDEC	A. Candela	NYSDEC	Memo provided a site history, potential areas of concern, soil sampling results and groundwater contamination, list of citizen complaints, conclusions and suggestions.

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<i>Date</i>	<i>Document</i>	<i>From</i>	<i>Of</i>	<i>To</i>	<i>Of</i>	<i>Contents (1)</i>
10/24/91	Registry Site Classification	NYSDEC	NYSDEC	NYSDEC	NYSDEC	Bellport Laundry Site added to NYSDEC Division of Hazardous Waste Registry Site classification list due to the presence of drums of PCE and PCE contamination in well water.
08/20/92	Correspondence	J. Swartout	NYSDEC	S. Latham	Attorney	Indicates that Bellport Laundry may not be the only source of contamination in the area and therefore is being classified as a potential waste site. An investigation to be conducted.

**NOTE:**

(1) - This section provides a brief summary of the contents of each selected document. The reader is advised to thoroughly examine the complete document and/or file for complete evaluation, interpretation and intent of said document and/or file.

FILE SOURCE: Suffolk County Department of Health Services, Hauppauge, New York  
 New York State Department of Environmental Conservation, Stony Brook, New York

A letter from SCDHS to NYSDEC dated September 21, 1988 provides private well data documenting groundwater contamination by petroleum products and gasoline additives northwest of the Bellport Laundry site.

A January 20, 1989 letter from SCDHS to Mr. Gardiner Hulse, the property owner, indicates the SCDHS was present during the removal of one 12,000 gallon fuel oil UST and that excavated soil contaminated with fuel oil exhibited a solvent-like odor. As a result, SCDHS required the property owner to perform a groundwater investigation at the site. Based on the reviewed files, this groundwater investigation was never undertaken.

As discussed in Section 1.3, NUS Corporation completed an investigation of the Bellport Laundry site in October of 1989. According to the report, dated March 1990, analyses of soil samples indicate the presence of tetrachloroethene, 4-methylphenol, bis(2-ethylhexyl) phthalate, and fluoranthene in several of the samples. Pesticides were also detected in four of the soil samples; however, the presence of pesticides was attributed to the application of weed killer or similar product, rather than deposition of hazardous waste.

Review of NUS Corp. groundwater quality data indicates 1,1-dichloroethane, 1,1,1-trichloroethane and trichloroethene (TCE) were detected in the Shriver residence private well at 8, 29 and 12 ug/l respectively. This well is located immediately east, across Motts Creek, from the Bellport Laundry site. The only volatile organic compound detected in onsite groundwater was tetrachloroethene (PCE) at 5 ug/l. NUS Corp. concluded that no groundwater contaminants (VOCs) were detected in the downgradient well samples in excess of the concentrations found in the upgradient well. However, it should be noted that the downgradient wells used in this investigation were not located onsite but rather were private residential wells, known as the Miller residence wells, located southeast of the laundry site, offsite on the opposite side of Motts Creek.

NUS Corp. recommended additional investigations be conducted to differentiate groundwater contamination at the Bellport Laundry site from groundwater contamination associated with a nearby gasoline station. NUS Corp. recommended the installation and sampling of additional groundwater monitoring wells. NUS Corp. also recommended the sampling of Motts Creek. Based on review of available files, these actions were never undertaken.

A SCDHS internal memo from J.C. Maloney to A. Andreoli describing site history indicated that SCDHS personnel identified a one inch diameter pipe which was used to discharge waste water directly into Motts Creek rather than to the onsite lagoons.

According to a January 28, 1991 NYSDEC internal memo from Robert Stewart to Anthony Candella, Mr. Stewart observed two empty drums which were reportedly buried on the Bellport site but uncovered during a site regrading operation on October 20, 1990. Residents who observed the uncovering of the drums told Mr. Stewart that one drum appeared to be full of a fluid but spilled on the ground during excavation of the drum. Analysis of two soil samples collected by Mr. Stewart around this apparent spill detected PCE at 8 parts per billion (ppb) and 13 ppb. Total sum of tentatively identified volatile organic compounds were 1,574 ppb and 1,329 ppb.

The January 28, 1991 NYSDEC memo from Mr. Stewart also identifies groundwater contamination by PCE as well as cis-dichloroethene (DCE) and freon 113 in a shallow private well located southeast of Bellport Laundry site but on the opposite side of Motts Creek. CDM suspects that these are the same downgradient wells sampled by NUS Corp. in 1989, referred to as the Miller residence wells. A deeper well at this same location was free of contamination. Mr. Stewart concluded that since the private well is on the opposite side of Motts Creek, it was not downgradient of the Bellport Laundry site. Mr. Stewart further concluded that the only sample that may relate to the site is the Motts Creek water sample collected by the Town of Brookhaven on October 31, 1988. No volatile organic compounds were detected in the Motts Creek sample, though elevated concentrations of chromium, lead and iron were detected.

Mr. Stewart recommended in the NYSDEC memo that three monitoring wells be installed, one upgradient and two downgradient, as well as sampling Motts Creek. These actions were never undertaken. However, this PSA was initiated in their place.

A SCDHS internal memo from James Maloney to Martin Trent, dated October 17, 1990, provides a summary of private well testing conducted by SCDHS nearby the site, along with a map identifying the sampled locations and areas of observed contamination. According to this memo, 40 samples were collected from private wells within the area to the west and northwest of the site. The major environmental concern prompting SCDHS to collect the samples was gasoline contamination associated with a gasoline service station located approximately three quarters of a mile north-northwest of the Bellport Laundry site. Review of this data indicates PCE contamination up to a maximum of 61 ppb and to a lesser degree DCE and TCE within four private wells located immediately west of the site with no apparent gasoline related contamination.

A NYSDEC internal memo from Brian Baker to Phil Barbato dated October 31, 1990 provides Mr. Baker's evaluation of environmental data associated with the Bellport Laundry and nearby private wells. According to Mr. Baker's memo, a Suffolk County Water Authority well field, containing two Upper Glacial aquifer wells and one Magothy aquifer well are located off of Head of

the Neck Road, approximately 1,000 feet west of the Bellport Laundry site. According to Mr. Baker's memo, the Suffolk County Water Authority (SCWA) was notified on December 1, 1989 of the contaminated private wells upgradient of the wellfield (R. Schneck, letter to E. Rosavitch). Note that additional information concerning the SCWA wellfield is provided in Section 3.0.

In July 1992, the NYSDEC included the Bellport Laundry as a potential Inactive Hazardous Waste site due to the presence of PCE found in site soils, groundwater and within storage drums located onsite.

(bell/sect1)

## Section 2 Investigation Methods

### 2.1 Geoprobe Installation and Groundwater Sample Collection

Under subcontract with CDM, Direct Environmental Inc. completed ten geoprobe soil borings at the site, starting on December 20, 1994, and finishing the following day. The onsite NYSDEC representative concurred with the geoprobe locations selected by CDM. All geoprobe work was completed under the supervision of a CDM geologist. Figure 1-2 provides the location of each Geoprobe boring. All borings were completed to a total depth of between 27 and 33 feet below grade.

After placing the geoprobe four to five feet into groundwater, Direct Environmental Inc. exposed the Geoprobe screen point sampler in preparation for groundwater collection. After exposing the screen point, approximately one gallon of groundwater was purged from the screen using a foot valve and sample tube to draw groundwater through the screen prior to collecting a sample for chemical analysis. During the completion of geoprobe borings GP-4 and GP-5, soil samples were collected at an interval of 16 to 20 feet below grade for chemical analysis. No other soil samples were collected. After collection of each groundwater sample, the Geoprobe boring was backfilled.

Analysis of groundwater and soil samples completed by Energy Environmental Engineering, Inc., under subcontract with CDM, included volatile organic compounds (VOC's), semivolatile organic compounds (Semi VOCs), pesticides/PCBs, Target Compound List (TCL) metals. A blind duplicate sample was collected from Geoprobe GP-1 and labeled as GP-11. A matrix spike/matrix spike duplicate (MS/MSD) sample was collected from Geoprobe GP-1. One trip blank was provided by E3I along with the sample containers and analyzed for VOC's. Analysis of samples were completed in accordance with NYSDEC Analytical Service Protocol (ASP), December 1991. E3I's data package is provided in Appendix C. Section 4.0 discusses the results of groundwater sample analysis.

All Geoprobe equipment was decontaminated by Direct Environmental, using an Alconox detergent/water solution with a potable rinse before the completion of each Geoprobe boring. All plastic tubing used in the collection of groundwater samples was discarded after one use to avoid cross-contamination.

## 2.2 Motts Creek Sampling

As part of this PSA, CDM intended to collect up to four surface and sediment samples from Motts Creek for chemical analysis. However, an eight foot high chain-link fence prevented access to the creek from the Bellport Laundry site. Therefore, these samples were not collected.

## 2.3 Site Survey

In March of 1995, OM P. Popli, a New York licensed surveyor of Rochester, New York, completed a site survey of the CTI Metals site. All property line and right-of-ways were based on Suffolk County tax maps. The horizontal location of the Geoprobe boring was also surveyed. All elevations provided by the surveyor are based on using a bench mark with an assumed elevation of 100 feet above mean sea level (MSL). Figure 1-2 is the end product of this surveying task.

## 2.4 Data Validation

Under contract with CDM, ChemWorld Environmental Inc. completed data validation of E3I's analytical data package. The validation was conducted on all data for the eleven groundwater samples and associated QA/QC samples in accordance with USEPA Region II Organic Data Validation Checklists/Guidelines, January 1992, and NYSDEC ASP, December 1991. ChemWorld Environmental Inc. provided CDM with a summary report dated June 1995 for the eleven groundwater and two soil samples which is presented as Appendix C of this report. Significant validation findings are discussed in Section 4.0.

(bell/sec2)

## Section 3

# Physical Characteristics of the Study Area

### 3.1 Topography

The majority of the site is at an elevation of between 30 and 35 feet above mean sea level (MSL) with a gentle slope towards the east. Within the eastern and southeastern portion of the site, the landsurface drops off steeply towards Motts Creek and associated wetlands as shown in Figure 1-2, Site Survey. It is assumed that groundwater discharges to Motts Creek within the area of the site, an effluent stream, as opposed to water within Motts Creek contributing to groundwater. As discussed in Section 1.3, this portion of the site contains fill materials, including concrete rubble, wood, tree stumps, etc. Adjoining properties to the north and west of the site are generally at the same elevation as the site. Properties to the east, across Motts Creek, and south are at a considerably lower elevation of between 15 and 10 feet MSL.

### 3.2 Regional Hydrogeology

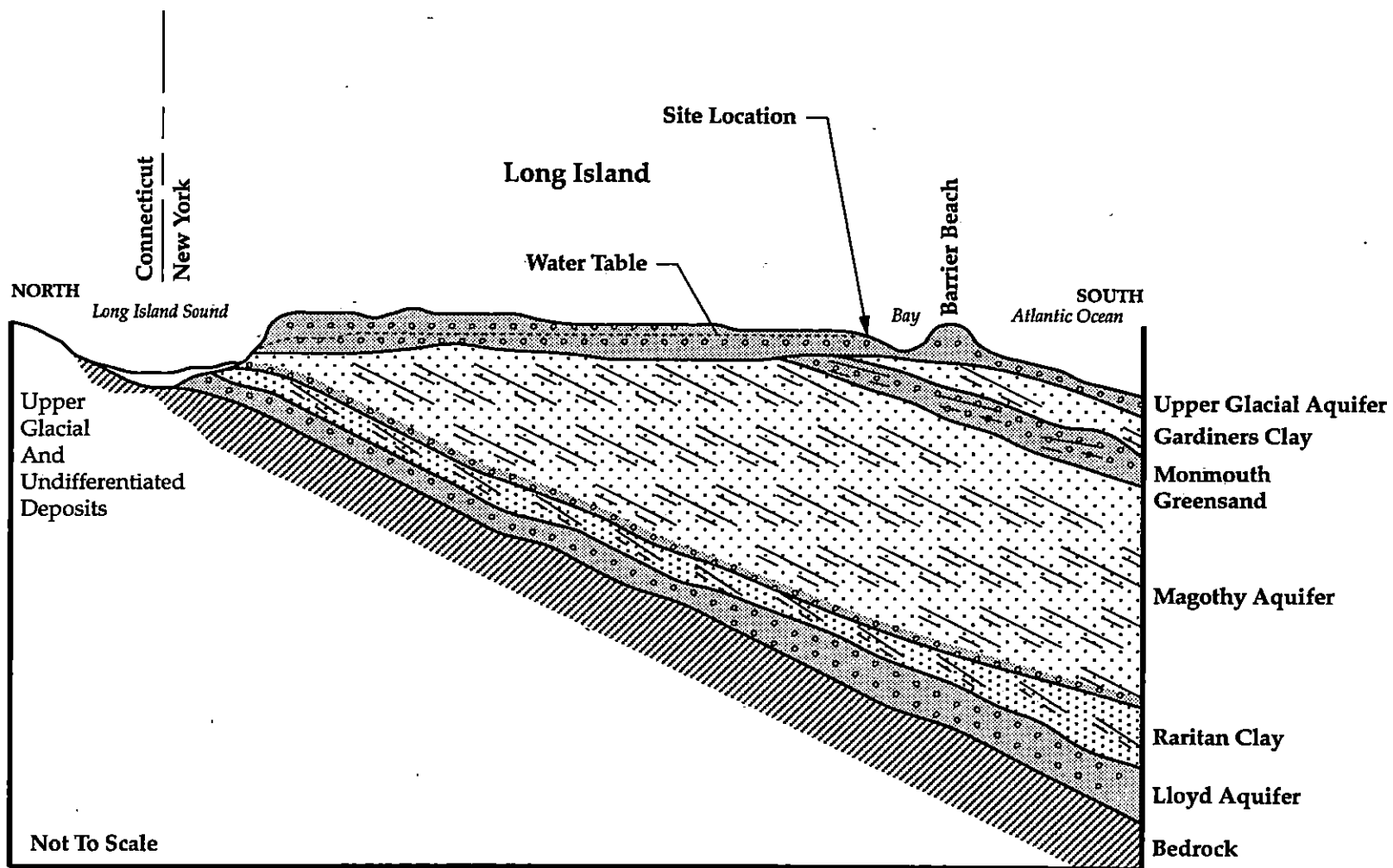
The Bellport Laundry site is located in an area of Suffolk County, New York, consisting of a relatively flat, gently south sloping, glacial outwash plain. Beneath the site area are unconsolidated sediments of Pleistocene and Cretaceous age, as shown in Figure 3-1.

The area is directly underlain by glacial outwash deposits consisting underlain by glacial outwash deposits consisting of highly permeable fine to coarse quartz sands with gravel. These glacial deposits comprise the Upper Glacial aquifer and are approximately 150 feet thick within the site area. Porosity within such deposits can be as high as 30 to 40 percent (Veatch et al, 1906) and average hydraulic conductivities of  $1.8 \times 10^5$  gpd/ft<sup>2</sup>, and transmissivities of  $2.3 \times 10^5$  gpd/ft are common (McClymonds & Franke, 1972).

Underlying the Upper Glacial aquifer is a separate Pleistocene aged geologic unit called the Gardiners Clay. The Gardiners Clay is a marine clay containing isolated silty sand zones, average vertical hydraulic conductivity of this unit is approximately 0.001 ft/day (D.A. Smolensky et. al. 1989) and is likely less than 50 feet thick within the site area. Where present, the Gardiners Clay will act as a confining unit reducing vertical flow of groundwater between the Upper Glacial aquifer and underlying aquifers.

Underlying the Gardiners Clay is a relatively minor Cretaceous aged sand/silt and clay geologic unit referred to as the Monmouth Green Sand. This unit has a relatively low hydraulic conductivity estimated at 0.001 ft/day (D.A. Smolensky et al. 1989) and is likely less than 100 feet thick within the site area.

Below the Monmouth Green Sand unit lies the Magothy aquifer consisting of Cretaceous aged high to moderately permeable sands, silts, and gravels. The

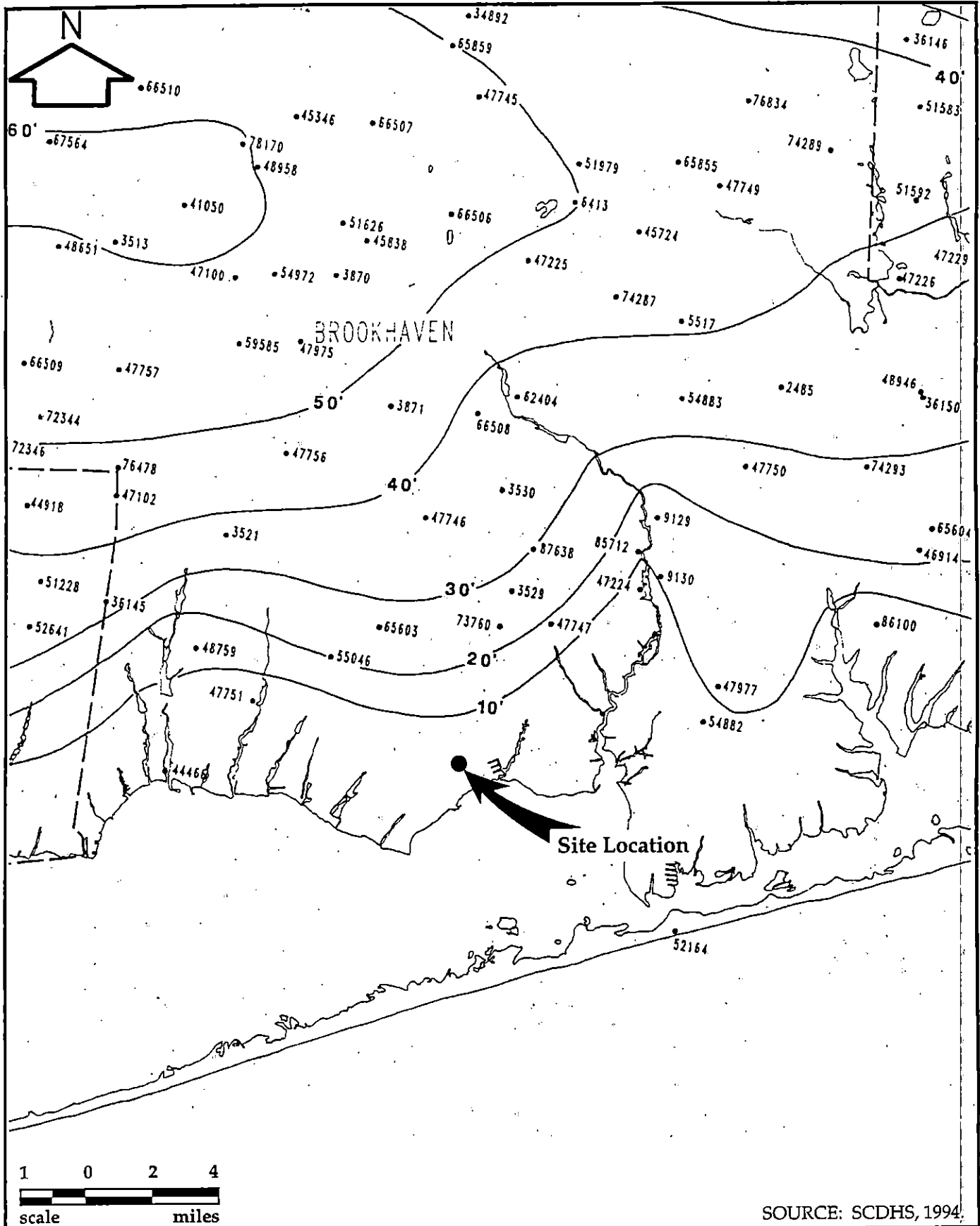


**CDM**

environmental engineers, scientists,  
planners & management consultants

Preliminary Site Assessment Report  
Bellport Laundry Site, Bellport, New York  
NYSDEC Site ID #152137

Generalized Geologic Cross Section Of Bellport Laundry Site



SOURCE: SCDHS, 1994.

**CDM**

environmental engineers, scientists,  
planners & management consultants

Preliminary Site Assessment Report  
Bellport Laundry Site, Bellport, New York  
NYSDEC Site ID #152137  
Water Table Contour Map  
Suffolk County, New York, 1993

Figure 3-2

Magothy aquifer is over 800 feet thick within the site area and is the primary source of drinking water for Suffolk County residents. The Magothy aquifer has an estimated horizontal hydraulic conductivity of 50 ft/day ( $1.7 \times 10^{-10}$  cm/sec) but individual sandy and gravelly beds may have values four to five times higher (Kimmel & Braids, USGS Prof. Paper 1085).

The Raritan Clay consisting of Cretaceous aged deltaic clay and silty clay beds underlie the Magothy aquifer and acts as an effective aquiclude or confining unit having a hydraulic conductivity of approximately 0.001 ft/day. Below the Raritan Clay is the Lloyd Sand member which lies unconformably on Pre-Cambrian aged bedrock and is of Cretaceous age. It is composed of highly variable sands, gravels, and clays of a deltaic origin and has a moderate hydraulic conductivity of 40 ft/day ( $1.3 \times 10^{-2}$  cm/sec) (Kimmel & Braids, USGS Prof. Paper 1085). The Lloyd Sand member, or Lloyd aquifer, is presently a minor source of drinking water within Suffolk County due primarily to its extreme depth.

According to the water table contour map provided as Figure 3-2 obtained from the Suffolk County Department of Health Service (SCDHS), groundwater within the general area of the site flows in a south-southeasterly direction. However, it is suspected that natural groundwater flow is, or was, in a more easterly direction within the site area with groundwater discharging to Motts Creek. Current groundwater flow patterns within the site may be considerably different due to pumping influences from public supply wells discussed below. This is not clearly shown by Figure 3-2 given the regional scale of the map. Groundwater velocities (horizontal) within the Upper Glacial aquifer range between one (1) and four (4) feet/day (McClymonds & Franke, 1972.). Based on completed Geoprobe borings, depth to water is between 23 and 28 feet below grade at the site.

Groundwater is the exclusive source of public drinking water within Suffolk County. According to information provided by the Suffolk County Water Authority, there are three operating public supply wells located approximately 1,000 feet southwest of the Bellport Laundry site referred to as the Head of the Neck wellfield. The three operating wells include:

- S-14710, Upper Glacial aquifer well, 118 feet deep, 750 gpm capacity.
- S-69364, Magothy aquifer well, 530 feet deep, 1200 gpm capacity.
- S-105524, Magothy aquifer well, 538 feet deep, 1300 gpm capacity.

A fourth well, S-1331, consisting of a 60 foot Upper Glacial aquifer well is also located at the well field, however SCWA removed the well from service in 1993 due to the age of the well. According to SCWA, Well S-105524 was installed in June of 1994 and has yet to be put into service. Mr. Steve Colabufo of SCWA indicated that SCWA well fields are not pumped continuously but are used intermittently based on system needs. Mr. Colabufo

indicated that it is common to have more than one well in a multiple well field pumping at the same time.

CDM obtained water quality data for three out of the four supply wells from SCDHS, data was not available for S-105524. Data for S-69364 indicated the Magothy aquifer well is free of organic contamination. However, data for the two Upper Glacial wells indicate sporadic detections of a number of volatile organic contaminants. A summary of detected volatile organic contaminants based on the obtained SCDHS data is as follows:

<u>Well</u>	<u>Date</u>	<u>Detected Contaminant</u>
S-14710	12/28/88	1,1-Dichloroethane, 0.9 ug/l
S-1331	3/16/88	1,1-Dichloroethane, 0.7 ug/l
S-14710	9/9/91	1,1-Dichloroethane, 0.7 ug/l 1,1-trichloroethane, 4.0 ug/l tetrachloroethene, 4.0 ug/l
S-1331	2/6/92	tetrachloroethene, 0.8 ug/l Methyl Tertiary Butylether
S-14710	12/22/93	1,1-Dichloroethene - 0.6 ug/l

The most recent sample data reviewed for the remaining active Upper Glacial aquifer well, S-14710, being September 20, 1994, indicated the well was free of VOCs.

Additionally, there are numerous private wells located throughout the Bellport Laundry based on review of SCDHS records discussed in Section 1.4.

(bel/vsect3)

## Section 4

# Nature and Extent of Contamination

The analytical summary tables provided in this section include all compounds detected in a given sample set. Positive detections that are below the contract required quantitation limit (CRQL), designated as an estimated concentration "J", as well as detections above the CRQL have been highlighted for all organic analysis. Table 4-1 provides a summary of analysis for collected groundwater samples. Table 4-2 provides a summary of analysis for collected soil samples.

Also included in the summary tables are compounds that were not detected but the analytical quantitation limits are reported as estimated quantities and qualified as "UJ" due to variances in quality control limits. Footnotes for other data qualifiers are provided in the tables. Finally, all groundwater sample results are compared to NYSDEC Class GA groundwater discharge standards/guidance values currently in place for each detected compound or non-detected compound qualified as "UJ".

Analysis of collected samples included:

- Volatile Organic Compounds
- Semi Volatile Organic Compounds
- Pesticides and PCB's
- TCL Metals

Analysis of samples was completed by Energy & Environmental Engineering Inc. (E3I) in accordance with NYSDEC ASP protocols, December 1991.

### 4.1 Groundwater Quality

Volatile organic compound (VOC) analysis of collected groundwater samples detected a number of VOC's at low to trace concentrations. The groundwater sample collected from GP-1, located within or near the building footprint of the former laundry building, exhibited no VOCs at detectable levels. This sample point is assumed to be upgradient of all waste discharge points. The blind duplicate for GP-1 labeled as GP-11 also was free of any detectable VOCs. Groundwater sample GP-2, located immediately east of the former laundry building, exhibited tetrachloroethene (PCE) at an estimated concentration of 2 ug/l. Trichloroethene (TCE) was also detected in GP-2 at an estimated concentration of 0.7 ug/l, however, data validation determined this value as non-detectable, given that TCE was also detected in the trip blank at 8 ug/l.

Geoprobe GP-3, located approximately 50 feet east of the laundry building, was free of detectable VOCs. GP-4, located within or near the northernmost former wastewater lagoon, exhibited no VOCs at detectable concentrations. GP-5, also located within or near the northern wastewater lagoon, contained

**TABLE 4-1  
GROUNDWATER DATA  
ANALYTICAL SUMMARY TABLE  
Bellport Laundry**

Volatiles		All results reported in ug/L.																								
Parameters	GA Standard *	Q	GP1	Q	GP11 (GP-1 dup.)	Q	GP2	Q	GP3	Q	GP4	Q	GP5	Q	GP6	Q	GP7	Q	GP8	Q	GP9	Q	GP10	Q		
Chloromethane	NONE				10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ	
Chloroethane		5 S		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
Methylene Chloride		5 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
Acetone		5 S		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
Carbon Disulfide		5 S		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
Total 1,2-Dichloroethylene		5 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		6 J		10 U		10 U
Chloroform		7 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		0.9 J		10 U		10 U		10 U		10 U
Trichloroethene		5 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
Tetrachloroethene		5 S		10 U		10 U		2 J		10 U		10 U		10 U		0.9 J		10 U		1 J		50 J		3 J		10 U
Toluene		5 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
Chlorobenzene		5 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U

Semi-Volatiles		All results reported in ug/L.																								
Parameters	GA Standard *	Q	GP1	Q	GP11 (GP-1 dup.)	Q	GP2	Q	GP3	Q	GP4	Q	GP5	Q	GP6	Q	GP7	Q	GP8	Q	GP9	Q	GP10	Q		
Phenol		1 S		10 U		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
bis (2-chloroethyl) ether		1 G		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
2-Chlorophenol		1 S		10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
2-Methylphenol	NONE			10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
bis(2-Chloroisopropyl)ether		5 S		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
4-methylphenol	NONE			10 U		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
2-Nitrophenol		1 S		10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
2,4-Dimethylphenol		1 S		10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
2,4-Dichlorophenol		1 S		10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
4-chloro-3-methylphenol		1 S		10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
2,4,6-Trichlorophenol		1 S		10 U		10 U		10 U		10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
2,4,5-Trichlorophenol		1 S		25 U		25 U		25 U		25 UJ		25 U		25 U		25 U		25 U		25 U		25 U		25 U		25 U
3-Nitroaniline		5 S		25 U		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ
2,4-Dinitrophenol		1 S		25 UJ		25 U		25 U		25 UJ		25 U		25 U		25 U		25 U		25 U		25 U		25 U		25 U
4-Nitrophenol		1 S		25 UJ		25 U		25 U		25 UJ		25 U		25 U		25 U		25 U		25 U		25 U		25 U		25 U
4-Nitroaniline		5 S		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ		25 UJ
4,6-Dinitro-2-methylphenol		1 S		25 U		25 U		25 U		25 UJ		25 U		25 U		25 U		25 U		25 U		25 U		25 U		25 U
Pentachlorophenol		1 S		25 U		25 U		25 U		25 UJ		25 U		25 U		25 U		25 U		25 U		25 U		25 U		25 U
Carbazole	NONE			10 UJ		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
Di-n-butylphthalate		50 S		41 U		51 U		10 U		46 U		10 U		10 U		12 U		10 U		10 U		10 U		10 U		10 U
Butylbenzylphthalate		50 G		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
3,3'-Dichlorobenzidine		5 S		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ
bis(2-ethylhexyl)phthalate		50 S		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U		10 U
Benzo(k)fluoranthene		0.002 G		10 U		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		10 UJ

**NOTES:**

\* GA Standard = Groundwater Discharge Standards, 6NYCRR Parts 700-705  
 S = Standard  
 G = Guidance Value  
 NONE = No Standard or Guidance Value  
 ND = GA Standard is below detection limit

Organic Data Qualifiers: J = The associated numerical value is an estimated quantity.  
 U = The compound was analyzed for but not detected at or above the Contract Required Quantitation Limit (CRQL), or the compound is not detected due to qualification through the method or field blank.  
 UJ = The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance in quality control limits.

**TABLE 4-1  
GROUNDWATER DATA  
ANALYTICAL SUMMARY TABLE  
Bellport Laundry**

**Pesticides/PCBs**

All results in ug/L

Parameters	GA Standards*	Q	GP1	Q	GP11 (GP-1 dup.)	Q	GP2	Q	GP3	Q	GP4	Q	GP5	Q	GP6	Q	GP7	Q	GP8	Q	GP9	Q	GP10	Q
alpha-BHC	ND		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
beta-BHC	ND		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
delta-BHC	ND		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
gamma-BHC(Lindane)	ND		0.050	UJ		R	0.050	UJ	0.050	UJ	0.014	JN	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.013	JN	0.050	UJ
Heptachlor	ND		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
Aldrin	NONE		0.050	UJ		R	0.014	JN	0.050	UJ	0.012	JN	0.0079	JN	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
Heptachlor Epoxide	ND		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
Endosulfan I	NONE		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ
Dieldrin	ND		0.10	UJ		R	0.012	JN	0.10	UJ	0.017	JN	0.11	JN	0.10	UJ	0.15	JN	0.10	UJ	0.061	JN	0.10	UJ
4,4'-DDE	ND		0.10	UJ		R	0.011	JN	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.13	JN	0.0065	JN	0.088	JN	0.0088	JN
Endrin	ND		0.10	UJ		R	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.018	JN		R	0.10	UJ	0.10	UJ
Endosulfan II	NONE		0.10	UJ		R	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.040	JN	0.10	UJ	0.10	UJ	0.10	UJ
4,4'-DDD	ND		0.10	UJ		R	0.16	JN	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.20	JN	0.10	UJ	1.6	E	0.12	JN
Endosulfan Sulfate	NONE		0.10	UJ		R	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ
4,4'-DDT	ND		0.10	UJ		R	0.43	JN	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.24	JN	0.10	UJ	0.12	JN	0.10	UJ
Methoxychlor		35 S	0.50	UJ		R	1.2	JN	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Endrin Kelone	NONE		0.10	UJ		R	2.1	E	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.023	JN	0.10	UJ	0.10	UJ
Endrin Aldehyde		5 S	0.10	UJ		R	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.10	UJ	0.018	JN	0.10	UJ	0.10	UJ	0.10	UJ
alpha-chlordane	NONE		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.078	JN	0.050	UJ	0.022	JN	0.050	UJ
gamma-chlordane	NONE		0.050	UJ		R	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.050	UJ	0.036	JN	0.050	UJ	0.020	JN	0.050	UJ
Toxaphene	NONE		5.0	UJ		R	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ
Aroclor-1016		0.1 S	1.0	UJ		R	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Aroclor-1221		0.1 S	2.0	UJ		R	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ
Aroclor-1232		0.1 S	1.0	UJ		R	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Aroclor-1242		0.1 S	1.0	UJ		R	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Aroclor-1248		0.1 S	1.0	UJ		R	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Aroclor-1254		0.1 S	1.0	UJ		R	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	0.69	JN	1.0	UJ	0.65	JN	1.0	UJ
Aroclor-1260		0.1 S	1.0	UJ		R	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ

**NOTES:**

\* GA Standard = Groundwater Discharge Standards, 6NYCRR Parts 700-705

- S = Standard
- G = Guidance Value
- NONE = No Standard or Guidance Value
- ND = GA Standard is below detection limit

Organic Data Qualifiers: J = The associated numerical value is an estimated quantity.  
 U = The compound was analyzed for but not detected at or above the Contract Required Quantitation Limit (CRQL), or the compound is not detected due to qualification through the method or field blank.  
 UJ = The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance in quality control limits.  
 JN = Tentatively identified with approximated concentrations.  
 E = Reported value is estimated due to quantitation above the calibration range.  
 R = Reported value is unusable and rejected due to variance from quality control limits.

**TABLE 4-1  
GROUNDWATER DATA  
ANALYTICAL SUMMARY TABLE  
Bellport Laundry**

Inorganics		All results in ug/L																						
Parameters	GA Standards *	Q	GP1	Q	GP11 (GP-1 dup.)	Q	GP2	Q	GP3	Q	GP4	Q	GP5	Q	GP6	Q	GP7	Q	GP8	Q	GP9	Q	GP10	Q
Aluminum	100	S	2120.00		2510.00		4070.00		4910.00		1760.00		1940.00		2960.00		3340.00		6990.00		5290.00		991.00	
Antimony	3	G	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ	58.00	UJ
Arsenic	25	S	2.80	B	4.10	B	4.40	B	7.60	B	1.70	U	1.70	U	1.80	B	2.90	B	3.50	B	5.50	B	2.00	B
Barium	1000	S	35.00	B	33.00	B	39.00	B	48.00	B	42.00	B	28.00	B	56.00	B	34.00	B	43.00	B	30.00	B	11.00	B
Calcium	NONE		11200.00		11600.00		8470.00		7630.00		11000.00		9040.00		68500.00		13800.00		11000.00		19600.00		9000.00	
Chromium	50	S	1700.00		1400.00		857.00		4360.00		518.00		930.00		336.00		802.00		423.00		1120.00		481.00	
Cobalt	NONE		21.40	B	27.70	B	9.30	U	48.60	B	9.30	U	15.50	B	10.20	B	11.90	B	9.30	U	19.40	B	9.80	B
Copper	200	S	54.60		47.20		107.00		172.00		26.50		36.90		20.10	B	82.80		77.20		98.10		51.20	
Iron	300	S	43500.00		41300.00		73900.00		146000.00		16600.00		25500.00		17900.00		78800.00		39500.00		68400.00		30100.00	
Lead	25	S	6.80		7.20		7.80		1.10	U	2.50	B	3.50		4.30		10.60		4.80		12.40		3.10	
Magnesium	35000	G	2430.00	B	2560.00	B	2700.00	B	2040.00	B	2140.00	B	1990.00	B	17200.00		2960.00	B	2680.00	B	3970.00	B	1950.00	B
Manganese	300	S	682.00		837.00		710.00		1620.00		386.00		391.00		543.00		434.00		247.00		890.00		356.00	
Mercury	2	S	0.37	J	0.28	J	0.62	J	4.00	J	0.28	J	1.80	J	0.49	J	0.27	J	0.25	J	0.20	U	0.24	J
Nickel	NONE		666.00		535.00		216.00		1450.00		246.00		364.00		118.00		205.00		111.00		328.00		144.00	
Potassium	NONE		4190.00	B	3950.00	B	2320.00	B	2990.00	B	3510.00	B	2270.00	B	4410.00	B	1570.00	B	3840.00	B	2820.00	B	2370.00	B
Selenium	10	S	1.20	U	1.20	U	1.20	U	1.20	U	1.20	B	1.20	U	1.20	U	1.20	U	1.20	U	1.20	U	1.20	U
Sodium	20000	S	8410.00		8950.00		8280.00		6970.00		9530.00		10700.00		5080.00		8530.00		6000.00		10800.00		8900.00	
Thallium	4	G	1.80	U	1.80	U	1.80	U	2.30	B	1.80	U	1.80	U	1.80	U	1.80	U	1.80	U	1.80	U	1.80	U
Vanadium	NONE		23.20	B	18.70	B	13.70	U	48.40	B	13.70	U	13.70	U	13.70	U	18.30	B	31.80	B	20.50	B	13.70	U
Zinc	300	S	198.00		352.00		1330.00		1460.00		195.00		220.00		152.00		918.00		248.00		853.00		121.00	

**NOTES:**

\* GA Standard = Groundwater Discharge Standards, 6NYCRR Parts 700-705

- S = Standard
- G = Guidance Value
- NONE = No Standard or Guidance Value
- ND = GA Standard is below detection limit

**Inorganic Data Qualifiers:**

- J = The reported value is estimated due to variance from quality control limits.
- U = Analyte was not detected at or below the the Contract Required Detection Limit (CRDL), or the compound is not detected due to qualification through the method or field blank.
- UJ = The element was analyzed for, but not detected. The sample quantitation limit is an estimate due to variance in quality control limits.
- B = Indicates analyte result is between Instrument Detection Limit (IDL) and CRDL.

**TABLE 4-2  
SOIL DATA  
ANALYTICAL SUMMARY TABLE  
Bellport Laundry**

**Volatiles**                      **All results reported in ug/kg**

Parameters	SSGP4	Q	SSGP5	Q
Acetone	11	U	10	U
2-Butanone	11	U	10	U
Trichloroethene	11	U	10	U

**Semi-Volatiles**                      **All results reported in ug/kg**

Parameters	SSGP4	Q	SSGP5	Q
bis (2-chloroethyl) ether	10	UJ	10	UJ
bis(2-Chloroisopropyl)ether	10	UJ	10	UJ
4-chloro-3-methylphenol	10	UJ	10	UJ
4-Nitrophenol	25	UJ	25	UJ
4-Nitroaniline	25	UJ	25	UJ
Di-n-butylphthalate	370	U	1400	U
3,3'-Dichlorobenzidine	10	UJ	10	UJ

**Pesticides/PCBs**                      **All results reported in ug/kg**

Parameters	SSGP4	Q	SSGP5	Q
alpha-BHC	0.050	UJ	0.050	UJ
beta-BHC	0.050	UJ	0.050	UJ
delta-BHC	0.050	UJ	0.050	UJ
gamma-BHC(Lindane)	0.050	UJ	0.050	UJ
Heptachlor	0.050	UJ	0.050	UJ
Aldrin	0.050	UJ	0.050	UJ
Heptachlor Epoxide	0.050	UJ	0.050	UJ
Endosulfan I	0.050	UJ	0.050	UJ
Dieldrin	0.68	J	0.10	UJ
4,4'-DDE	0.78	J	0.10	UJ
Endrin	0.10	UJ	0.10	UJ
Endosulfan-II	0.10	UJ	0.10	UJ
4,4'-DDD	0.98	J	0.73	J
Endosulfan Sulfate	0.10	UJ	0.10	UJ
4,4'-DDT	0.10	UJ	0.10	UJ
Methoxychlor	0.50	UJ	0.50	UJ
Endrin Ketone	0.10	UJ	0.10	UJ
Endrin Aldehyde	0.10	UJ	0.10	UJ
alpha-chlordane	0.74	JN	0.050	UJ
gamma-chlordane	0.96	J	0.050	UJ
Toxaphene	5.0	UJ	5.0	UJ
Aroclor-1016	1.0	UJ	1.0	UJ
Aroclor-1221	2.0	UJ	2.0	UJ
Aroclor-1232	1.0	UJ	1.0	UJ
Aroclor-1242	1.0	UJ	1.0	UJ
Aroclor-1248	1.0	UJ	1.0	UJ
Aroclor-1254	1.0	UJ	1.0	UJ
Aroclor-1260	1.0	UJ	1.0	UJ

**NOTES:** Organic Data Qualifiers

- J = The associated numerical value is an estimated quantity.
- U = The compound was analyzed for but not detected at or above the Contract Required Quantitation Limit (CRQL), or the compound is not detected due to qualification through the method or field blank.
- UJ = The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance in quality control limits.
- JN = Tentatively identified with approximated concentrations.

**TABLE 4-2  
SOIL DATA  
ANALYTICAL SUMMARY TABLE  
Bellport Laundry**

Inorganics      All results reported in mg/Kg

Parameters	SSGP4	Q	SSGP5	Q
Aluminum	548.00		395.00	
Antimony	58.00	UJ	58.00	UJ
Arsenic	0.30	U	0.48	B
Barium	0.92	B	0.87	U
Calcium	116.00	B	56.10	B
Chromium	2.80		2.80	
Copper	1.40	U	1.50	B
Iron	1250.00		1980.00	
Lead	2.20		1.40	
Magnesium	89.00	B	68.50	B
Manganese	12.70		14.90	
Mercury	0.10	J	0.10	U
Nickel	54.40		8.10	
Thallium	0.32	UJ	0.32	UJ
Zinc	5.90		4.10	

**NOTES:** Inorganic Data Qualifiers

- J = The reported value is estimated due to variance from quality control limits.
- U = Analyte was not detected at or below the the Contract Required Detection Limit (CRDL), or the compound is not detected due to qualification through the method or field blank.
- UJ = The element was analyzed for, but not detected. The sample quantitation limit is an estimate due to variance in quality control limits.
- B = Indicates analyte result is between Instrument Detection Limit (IDL) and CRDL.

chloroform at an estimated concentration of 1 ug/l. Additionally, toluene was detected in GP-5 at 0.5 ug/l, however, data validation determined toluene non-detectable within the sample, due to the presence of toluene in the trip blank at 0.7 ug/l. GP-6, located within or near the southern wastewater lagoon, exhibited a trace concentration of PCE at 0.9 ug/l. GP-7, also located within or near the southern wastewater lagoon, exhibited an estimated concentration of chloroform at 0.9 ug/l. GP-8, also located near the southern wastewater lagoon, exhibited PCE at an estimated concentration of 1 ug/l.

Geoprobe GP-9, located approximately 45 feet southeast (downgradient) of the former laundry building, contained the highest observed VOC concentration with PCE detected at 50 ug/l, exceeding the NYSDEC Class GA standard for PCE of 5 ug/l. GP-10, located immediately east of the former laundry building, also exhibited PCE at an estimated concentration of 3 ug/l. PCE, which is commonly used as a dry cleaning solvent, was known to be used by Bellport Laundry. As discussed in Section 1.3, one PCE spill has been documented as occurring at the Bellport Laundry site and it is suspected that illegal onsite disposal of PCE has also occurred in the past.

No semi-volatile organic compounds were detected above qualified detection limits. Pesticides were detected sporadically within groundwater samples at trace concentrations. Pesticide and PCB compounds for GP-11 were qualified as "J" estimated for positive detections and "R", unusable for non-detectable results due to the fact that one of two QA/QC surrogate recoveries was not within acceptable limits. One PCB compound Aroclor-1254 was detected at estimated concentrations with GP-7 and GP-9 at 0.69 and 0.65 ug/l respectively. The GA groundwater standard for Aroclor-1254 is 0.1 ug/l.

Inorganic analysis of groundwater samples indicates the presence of elevated metals concentrations within groundwater samples, primarily GP-1, GP-2, GP-3, GP-5, and GP-11. Aluminum and iron concentrations are consistently high within all samples with iron ranging from a maximum of 146,000 ug/l in GP-3 to a minimum of 17,800 ug/l in GP-6 and aluminum ranging from a maximum of 6,990 ug/l in GP-8 to a minimum of 991 ug/l in GP-10. Relatively high concentrations of chromium were observed in all groundwater samples with the maximum concentration of 4,360 ug/l identified in GP-3 to a minimum of 336 ug/l in GP-6. The NYSDEC Class GA Standard for chromium is 50 ug/l. Other relatively high concentrations included zinc at 1,330 ug/l in GP-2 and 1,460 ug/l in GP-3, the GA groundwater standard is 300 ug/l for zinc.

The source of the elevated metal concentrations are not clearly identifiable. However, the majority of the exceedances are centrally located around the former laundry building, namely GP-1, 2 and GP-3. The source of iron within the groundwater may be attributed to natural groundwater quality given native groundwater has been known to exceed drinking water standards for iron (SCDHS 1987). It is possible that fill material dumped onsite may be the source of the observed metals.

The other possible source of elevated metals may be attributed to the fact that the majority of collected groundwater samples were highly turbid. Placement of turbid groundwater samples in sample containers containing the specified nitric acid preservative may have resulted in the dissolution of minerals suspended in the groundwater sample resulting in the observed dissolved metal concentrations.

## 4.2 Soil Quality

Samples recovered from GP-4 and GP-5 consisted of brown to tan quartz rich sand typical of glacial outwash deposits. Chemical analysis of the two samples did not identify any volatile organic or semivolatile organic contaminants with the exception of 2-butanone detected at an estimated concentration of 2 ug/l. However, data validation qualified this as a non-detection due to the presence of 2-butanone in a QA/QC method blank at an estimated concentration of 5 ug/l. Trace levels of pesticide compounds were detected in both soil samples. No PCBs were detected in either sample.

Metals analysis of the two soil samples indicated no heavy metals at concentrations above typical background concentrations. However, iron concentrations observed at 1,250 mg/kg in SSGP-4 and in SSGP-5 at 1,980 mg/kg indicate a relatively high concentration of iron within soils which may explain the observed groundwater iron concentrations.

## 4.3 Conceptual Contaminant Fate and Transport

The site history, hydrogeologic setting and conditions associated with the Bellport Laundry site result in a complex contaminant fate and transport environment. Under natural pre-developed conditions, groundwater likely flowed in a southeasterly direction with shallow groundwater partially discharging into Motts Creek. However, with the placement of the SCWA Head of the Neck Well Field, it is likely this natural flow pattern was disrupted. Dry cleaning operations were reportedly conducted at the site from 1948 to 1979. There are multiple discharge sources of wastes at the site which contained or may have contained PCE and other VOCs, including:

- Onsite septic system
- Two wastewater lagoons
- Discharge pipe running from laundry building directly to Motts Creek
- Documented PCE spills occurring in 1974 (see Table 1)
- Documented burying of drums containing PCE and other VOC compounds
- Disposal of fill materials

Further complicating the identification of groundwater contamination associated with the site is the documentation of VOC groundwater contamination from a gasoline station located approximately three quarters of a mile north of the site.

Historical groundwater quality data from SCDHS, NYSDEC and NUS Corp. sampling has identified PCE and other chlorinated hydrocarbons in private wells located onsite, as well as to the west of the site and to the east of the site. Indicating there may be additional VOC sources within the site area other than the site and/or transient changes in groundwater flow directions induced by pumping of the SCWA Head of the Neck well field has resulted in site PCE contamination migrating offsite in more than one direction.

CDM has found that wells pumping from the Upper Glacial aquifer at rates comparable to 750 gpm will create a zone of influence typically greater than 1,000 feet. Obviously, the zone of influence would be even greater with more than one well pumping at the same time which is common practice.

Therefore, it is likely that pumping of Head of the Neck Road well field has and is currently influencing groundwater flow within the site. As a result, groundwater flow directions will be constantly fluxuating in response to the pumping well influence. Further support of this hypothesis is the fact that trace concentrations of VOCs were sporadically detected within the Upper Glacial wells located at the well field. Given the likelihood for the transient flow direction, it is feasible that the source of VOCs documented as occurring in private wells to the east and west of the site as well as VOCs observed in the public supply wells could be the Bellport Laundry site.

A PCE spill was documented as occurring within the site in January of 1974, however, the exact location and amount of spill is not known. Assuming that the PCE reached the site groundwater shortly afterward, and assuming a conservative migration rate of 0.15 foot/day in the direction of the well field, it could have reached the well field as early as 1992. PCE was first detected at the well field in September 1991 based on currently available information.

Contaminant data and flow characteristics of Motts Creek is essentially unavailable. Therefore, an assessment of whether the creek likely received contamination in the past or is currently receiving contamination from groundwater discharge cannot be made at this time. As discussed previously, Motts Creek likely received groundwater through natural discharge. However, with pumping occurring nearby, this natural flow may be reversed at times.

(bell/sect4)

## Section 5 Conclusions

The Bellport Laundry site has been used as a commercial laundry from 1930 to 1979. Operations included the generation of laundry wastewaters discharged to onsite lagoons. Drycleaning using tetrachloroethene (PCE) and possibly other organic solvents was conducted onsite from 1948 to 1979. PCE is known to have been spilled onsite in 1974 and is suspected of being improperly disposed onsite through the disposal of drums containing the drycleaning solvent. Previous investigations conducted at the site have identified the presence of PCE within site soil and groundwater. Private well sampling by SCDHS had identified PCE and related chlorinated hydrocarbons within private and public supply wells located immediately west, east and southwest of the site.

The site is underlain by glacial outwash deposits consisting of highly permeable sands and gravels. Groundwater is between 23 and 28 feet below grade at the site and is assumed to flow in a south to southeasterly direction. Groundwater velocities within the glacial aquifer underlying the site range between one and four feet per day. Groundwater is the exclusive source of public drinking water within the site area. A public supply well field is located approximately 1,000 feet southwest of the site. Pumping of this well field likely influences groundwater flow within the site and therefore contaminant transport within the site. Numerous private wells are located throughout the site area.

Chemical analysis of groundwater samples collected as part of this PSA identified a number of VOCs at trace to low concentrations within site groundwater. PCE was the most commonly encountered VOC, detected in five out of ten sample locations, the highest observed concentration being 50 ug/l in GP-9. The NYSDEC Class GA groundwater standard for PCE is 5 ug/l.

One PCB compound Aroclor-1254 was detected in groundwater samples GP-7 and GP-9 at 0.69 and 0.65 ug/l respectively. The GA groundwater standard for Aroclor is 0.1 ug/l. The source of this PCB contamination is unknown.

Inorganic analysis identified elevated metals concentrations within all groundwater samples. Of primary concern is the presence of elevated chromium within the samples with the maximum concentration at 4,360 ug/l identified in GP-3. The GA groundwater standard for chromium is 50 ug/l. The source of the elevated metals within the site groundwater is not apparent. However, fill materials brought into the site may be a potential source. The turbidity of collected groundwater samples may have also attributed to the high metals concentrations.

Chemical analysis of two soil samples collected from the site at a depth of 16 to 20 feet did not reveal any significant contamination within the samples.

Based on the data generated as part of this PSA, CDM has concluded that groundwater contamination by PCE has likely occurred onsite as the result of past discharges of the drycleaning solvent by Bellport Laundry. Past sampling of private wells by SCDHS located immediately west and east of the site and the public supply well field southwest of the site has also identified PCE contamination. Given the influence of the nearby public supply well field on groundwater flow directions within the site area, it is possible that the observed PCE contamination within the private and public supply well fields is the result of onsite discharge of the drycleaning solvents.

(bell/sect5)

## Appendix A References

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(bell/appendix)

# DATA VALIDATION REPORT

## ORGANIC AND INORGANIC ANALYSES

Bellport Laundromat Project

Sample Delivery Group No. GP1

Sampling Dates of December 20-21, 1994

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June 1995

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Bellport Laundromat Project  
Data Validation Report: Organic and Inorganic Analyses

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Bellport Laundromat Project  
Data Validation Report: Organic and Inorganic Analyses

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## DATA VALIDATION SUMMARY: ORGANIC and INORGANIC ANALYSES

Bellport Laundromat Project  
Sample Delivery Group No. GP1  
Sampling Dates of December 20-21, 1994

### INTRODUCTION

This Data Validation Summary report for organic and inorganic analyses was generated for 12 water samples, 2 soil samples, and the associated quality control samples for Sample Delivery Group (SDG) No. GP1. Sampling activities were conducted in support of the field investigation for the Bellport Laundromat Project. The analytical laboratory work was performed by Energy & Environmental Engineering, Inc.

Analytical testing consisted of Contract Laboratory Program (CLP) analyses, including Volatile Organic analyses by Gas Chromatography/Mass Spectroscopy (GC/MS); Base/Neutral and Acid Extractable Organics by GC/MS; and Pesticides and Polychlorinated Biphenyls (PCBs) by GC. Inorganics were analyzed by Atomic Absorption (AA) and Inductively Coupled Plasma (ICP), with Mercury by Cold Vapor. The analytical work was performed utilizing New York State Department of Environmental Conservation (NYSDEC) Analytical Service Protocols (ASP), December 1991.

This report provides a summary of data acceptability and deviations in accordance with the United States Environmental Protection Agency (USEPA) Region II Organic and Inorganic Data Validation Checklists/ Guidelines (January 1992); and, the CLP portion of the NYSDEC ASP (December 1991), where applicable and relevant. The validation report pertains to the following samples:

#### SDG No. GP1

GP1  
GP10  
GP11 (Duplicate of GP1)  
GP2001  
GP3001  
GP4001  
GP5001  
GP6001  
GP7001  
GP8001  
GP9001  
TB (Trip Blank 12/21/94)  
SSGP4  
SSGP5

The analytical data summary tables attached as Appendices A through D include all parameters that were analyzed for the samples noted. The tables include concentrations of the compounds that were detected in the samples. A blank space is included in the table for those compounds analyzed but not detected in the samples.

## 1.0 VOLATILE ORGANICS BY GC/MS

The following items/criteria were reviewed:

- \* Holding Times
- \* System Monitoring Compound (Surrogate) Recovery
- \* Matrix Spikes (MS) and Matrix Spike Duplicates (MSD)
- \* Initial and Continuing Calibration
- \* Blanks (Method and Field)
- \* GC/MS Instrument Performance Check
- \* Tentatively Identified Compounds (TICs)
- \* Internal Standards
- \* Field Duplicates
- \* Target Compound List (TCL) Compound Identification
- \* Compound Quantitation and Reported Detection Limits
- \* System Performance

All items above were generated within acceptable Quality Control (QC) specifications, with deviations detailed as follows. All data is considered to be valid and usable with the appropriate qualifiers, as noted on the data summary tables in Appendix A and within the following text.

### 1.1 Holding Times

All holding times were met within the acceptable time frame of 7 days from Verified Time of Sample Receipt (VTSR) at the laboratory for the water and soil samples.

### 1.2 System Monitoring (Surrogate) Compound Recovery

All system monitoring compound recovery (%R) was found to be generated within acceptable limits for the three surrogate compounds.

### 1.3 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

Two MS/MSD sample sets and two Matrix Spike Blanks (MSB) were analyzed for the SDG. Acceptable accuracy (percent recovery) and precision (relative percent difference) were generated.

### 1.4 Calibration

All initial and continuing calibrations were performed within acceptable limits for average Relative Response Factors (RRF), Percent Relative Standard Deviation (% RSD), Relative Response Factors (RRF), and percent Difference (% D), with the following exceptions.

#### 1.4.1 Initial Calibration

Date

11/07/94	Chloroethane	33.8% RSD (Limit 30%)
	Acetone	52.1%

The associated positive results for acetone were qualified as 'J', estimated. Chloroethane was not detected, therefore, qualification was not required.

#### 1.4.2 Continuing Calibration

##### Date, Time

12/28/94, 10:25	Chloromethane	85.3% D	(Limit 25%)
	Chloroethane	84.1%	
	Acetone	63.5%	
	Carbon Disulfide	56.3%	
12/29/94, 10:45	Chloromethane	39.3%	
	Chloroethane	64.0%	
	Acetone	30.5%	
	Carbon Disulfide	42.8%	

The samples associated with the continuing calibrations above were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for the compounds noted.

#### 1.5 Blanks

##### 1.5.1 Field Blanks

One trip blank was analyzed for the SDG. Trichloroethene was detected at 8 ug/L and toluene at 0.7 ug/L. Limits of five times the trichloroethene result and ten times the toluene result were used for review and qualification of the associated samples. All sample results were reported at less than the respective method blank limit and less than the Contract Required Quantitation Limit (CRQL). These sample results were qualified as 'U', not detected, at the CRQL.

##### 1.5.2 Method Blanks

Two water method blanks and one soil method blank were analyzed for the SDG. Volatile Organics were detected as follows.

##### Sample ID

VBLKW281	Acetone	13 ug/L
VBLKS28A	Acetone	25 ug/Kg
	2-Butanone	7 ug/Kg
VBLKW291	Methylene Chloride	1 ug/L, estimated

Limits of ten times the methylene chloride, acetone, and 2-Butanone method blank results above were used for review and qualification of the associated water and soil samples. Sample results that were found to be less than the respective method blank limit and reported at less than the CRQL were qualified as 'U', not detected, at the CRQL. Sample results that were found to be less than the respective method blank limit and were reported above the CRQL were qualified as 'U', not detected.

### 1.6 GC/MS Instrument Performance Check

Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB).

### 1.7 Tentatively Identified Compounds (TICs)

TICs were generated in accordance with protocol. Copies of the Form I's are included in Appendix E.

### 1.8 Internal Standards

All internal standards were generated within acceptable specifications for area counts and retention time variation.

### 1.9 Field Duplicates

Samples GP1 and GP11 were collected as the field duplicate samples and analyzed for Volatile Organics. Positive results were not detected for either sample, therefore, acceptable precision was generated.

### 1.10 TCL Identification

GC/MS qualitative analyses are considered to be acceptable for the data set. Retention times and mass spectra were generated within appropriate quality control specifications.

### 1.11 Compound Quantitation and Reported Detection Limits

GC/MS quantitative analyses are considered to be acceptable. Sample dilutions, internal standards and response factors were found to be within acceptable limits.

### 1.12 System Performance

Acceptable system performance was maintained throughout the analyses of the water and soil samples. This was exhibited through good resolution and consistent chromatographic performance.

## 2.0 SEMI-VOLATILE ORGANICS BY GC/MS (Base/Neutral and Acid Extractable Organics)

The following items/criteria were reviewed:

- \* Holding Times
- \* Surrogate Recovery
- \* MS/MSD
- \* Initial and Continuing Calibration
- \* Blanks (Method and Field)
- \* GC/MS Instrument Performance Check
- \* TICs
- \* Internal Standards
- \* Field Duplicates
- \* TCL Compound Identification
- \* Compound Quantitation and Reported Detection Limits
- \* System Performance

All items above were generated within acceptable QC specifications, with deviations detailed as follows. Sample GP3001-RE was qualified as 'R', unusable, due to extraction 51 days beyond the acceptable holding time. Various TIC results were qualified as 'R', unusable, due to their presence at less than five times the corresponding method blank value. The remaining data is considered to be valid and usable with the appropriate qualifiers, as noted on the data summary tables in Appendix B and within the following text.

### 2.1 Holding Times

All holding times were met for extraction and analysis of the soil and water samples, with the exception as noted below. The NYSDEC holding time is 5 days from VTSR at the laboratory for extraction, and 40 days from extraction to analysis.

<u>Sample ID</u>	<u>No. of Days Exceeding Hold Time</u>
GP3001-RE	51 (Extraction)

The sample above was qualified as 'R', unusable, due to extraction 51 days beyond the acceptable holding time.

### 2.2 Surrogate Recovery

All surrogate recovery was found to be generated within acceptable limits for the eight surrogate compounds, with the following exceptions.

<u>Sample ID</u>			
GP6001	Terphenyl-d14	32%	(Limit 33-141)
GP3001	Nitrobenzene-d5	24%	(Limit 35-114)
	2-Fluorophenol	16%	(Limit 21-110)
	2-Chlorophenol	29%	(Limit 33-110)

GP8001	Terphenyl-d14	27%
GP9001	Terphenyl-d14	25%

Sample GP3001 was qualified as 'UJ', estimated, for the non-detectable results, for the acid-phenol compounds, only. Positive results were not detected. The remaining samples above do not require qualification due to the fact that only one surrogate per fraction is out of specification (two are required for qualification).

### 2.3 MS/MSD

Two MS/MSD sample sets and two MSBs were analyzed for the SDG. Acceptable accuracy and precision were generated.

### 2.4 Calibration

All initial and continuing calibrations were performed within acceptable limits for  $\overline{RRF}$ , % RSD, RRF, and % D, with the exception of the following.

#### 2.4.1 Continuing Calibration

<u>Date, Time</u>			
2/01/95, 12:21	bis(2-Chloroethyl)ether	26.1% D	(Limit 25%)
	bis(2-Chloroisopropyl)ether	63.2%	
	2,4-Dinitrophenol	28.0%	
	4-Nitrophenol	29.7%	
	4-Nitroaniline	39.5%	
	Carbazole	37.2%	
2/02/95, 11:53	3,3'-Dichlorobenzidine	32.3%	
	Phenol	30.0%	
	bis(2-Chloroisopropyl)ether	78.0%	
	4-Methylphenol	30.0%	
	3-Nitroaniline	30.7%	
	4-Nitroaniline	82.7%	
	3,3'-Dichlorobenzidine	32.6%	
benzo(k)fluoranthene	27.4%		
2/03/95, 13:40	bis(2-Chloroethyl)ether	32.2%	
	bis(2-Chloroisopropyl)ether	82.7%	
	4-Chloro-3-methylphenol	30.8%	
	4-Nitrophenol	27.2%	
	4-Nitroaniline	44.3%	
	3,3'-Dichlorobenzidine	34.2%	
2/20/95, 14:04	4-Nitroaniline	27.4%	
	Di-n-octylphthalate	28.9%	

The samples associated with the continuing calibrations above were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for the compounds noted.

## 2.5 Blanks

### 2.5.1 Field Blanks

Field blanks were not collected for Semi-Volatile Organic analyses.

### 2.5.2 Method Blanks

Three water method blanks and one soil method blank were analyzed for the SDG. Semi-Volatile Organics were detected as follows.

<u>Sample ID</u>		
SBLKW262	Di-n-butylphthalate	61 ug/L
	Butylbenzylphthalate	5 ug/L, estimated
	bis(2-ethylhexyl)phthalate	12 ug/L
SBLKS271	Di-n-butylphthalate	550 ug/Kg
	Butylbenzylphthalate	33 ug/Kg, estimated

Limits of ten times the bis(2-ethylhexyl)phthalate value and five times the di-n-butylphthalate and butylbenzylphthalate values above were used for review and qualification of the associated samples. Sample results that were reported at less than the CRQL and less than the respective method blank limit were qualified as 'U', not detected, at the CRQL. Sample results reported over the CRQL and less than the respective method blank limit were qualified as 'U', not detected.

## 2.6 GC/MS Instrument Performance Check

Instrument performance was generated within acceptable limits and frequency for Decafluorotriphenylphosphine (DFTPP).

### 2.7 TICs

TICs were generated in accordance with protocol. The Form I's, including the appropriate qualifiers, are included in Appendix E. TICs were detected as follows:

<u>Sample ID</u>		
SBLKW262	1,2-Propanediol	4 ug/L, estimated
SBLKW271	1,2-Propanediol	9 ug/L, estimated
	2-methyl-1-propanoic acid	3 ug/L, estimated
SBLKS271	1,2-Propanediol	110 ug/Kg, estimated
	4-hydroxy-4-methyl-2-pentanone	5200 ug/Kg, estimated

All TIC sample results for the compounds above that were reported at less than five times the method blank value were qualified as 'R', unusable.

## 2.8 Internal Standards

All internal standards were generated within acceptable specifications for area counts and retention time variation.

## 2.9 Field Duplicates

Samples GP1 and GP11 were collected as the field duplicate samples and analyzed for Semi-Volatile Organics. Positive results were not detected for either sample, therefore, acceptable precision was generated.

## 2.10 TCL Compound Identification

GC/MS qualitative analyses are considered to be acceptable for the data set. Retention times and mass spectra were generated within appropriate quality control specifications.

## 2.11 Compound Quantitation and Reported Detection Limits

GC/MS quantitative analyses are considered to be acceptable for the data set. Sample dilutions, internal standards and response factors were found to be within acceptable limits.

## 2.12 System Performance

Acceptable system performance was maintained throughout the analyses of the water and soil samples. This was exhibited through good resolution and consistent chromatographic performance.

## 3.0 PESTICIDES AND PCBs BY GC

The following items/criteria were reviewed:

- \* Holding Times
- \* Surrogate Recovery
- \* MS/MSD
- \* Blanks (Method and Field)
- \* Instrument (GC) Performance
- \* Calibration
- \* Field Duplicates
- \* Compound Identification
- \* Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable QC specifications, with deviations detailed as follows. Samples GP5001-RE and GP11-RE were qualified as 'R', unusable, due to re-extraction 55 and 50 days beyond the acceptable holding time. Sample GP11 was qualified as 'R', unusable, for the non-detectable results, due to 0% surrogate recovery for DCB. The remaining data is considered to be valid and usable with the appropriate qualifiers, as noted on the data summary tables in Appendix C and within the following text.

### 3.1 Holding Times

All holding times were met within acceptable time frames for extraction and analysis of the water and soil samples, with the exceptions noted below. The NYSDEC holding time is 5 days from VTSR at the laboratory for extraction and 40 days from extraction to analysis.

<u>Sample ID</u>	<u>No. of Days Exceeding Holding Time</u>
GP1	1 (Analysis)
GP2001	6 (Analysis)
GP3001	1 (Analysis)
GP4001	6 (Analysis)
GP5001	6 (Analysis)
GP5001-RE	55 (Extraction)
GP6001	4 (Analysis)
GP7001	6 (Analysis)
GP8001	6 (Analysis)
GP9001	6 (Analysis)
GP10	6 (Analysis)
GP11	1 (Analysis)
GP11-RE	50 (Extraction)
SSGP4	6 (Analysis)
SSGP5	6 (Analysis)
PBLK1222	2 (Analysis)
W1222MSB	1 (Analysis)
GP1MS	1 (Analysis)
GP1MSD	1 (Analysis)
SSGP4MS	6 (Analysis)
SSGP4MSD	6 (Analysis)

The samples above were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results. However, samples GP5001-RE and GP11-RE was qualified as 'R', unusable, due to extraction 55 and 50 days beyond the acceptable holding time.

### 3.2 Surrogate Recovery

Surrogate recovery was generated within acceptable limits for both surrogate compounds, with the following exceptions.

<u>Sample ID</u>			
GP1MS	DCB1	58%	(Advisory Limit 60-150)
GP11	TCX1	57%	
	DCB1	0%	
	DCB2	0%	
PBLK0220	TCX1	37%	
	DCB1	49%	
	DCB2	43%	
PBLK0214	TCX1	42%	
GP11-RE	TCX1	37%	
GP5001-RE	TCX1	39%	

Sample PBLK0220 was qualified as 'UJ', estimated, for the non-detectable results, due to low surrogate recovery. Sample GP11 was qualified as 'J', estimated, for the positive results, and 'R', unusable, for the non-detectable results, due to 0% surrogate recovery for DCB. The remaining samples above did not require qualification due to the fact that only one of the two surrogates is out of specification.

### 3.3 MS/MSD

Two MS/MSD sample sets and one MSB were analyzed for the SDG. Acceptable accuracy and precision were generated.

### 3.4 Blanks

#### 3.4.1 Field Blanks

Field blanks were not collected for Pesticide/PCB analyses.

#### 3.4.2 Method Blanks

Four water method blanks and one soil method blank were analyzed for the SDG. Pesticides and PCBs were not detected in any of the method blanks.

### 3.5 Instrument (GC) Performance

Adequate chromatographic resolution and instrument sensitivity were achieved through the generation of data within acceptable limits for the Resolution Check Mixture and Performance Evaluation Mixtures, with the exceptions noted below. The review included resolution between adjacent peaks, retention time windows, Relative Percent Difference (RPD), and percent breakdown for DDT/Endrin.

#### Combined DDT/Endrin Breakdown:

<u>Date, Time</u>		
1/30/95, 20:17	44.65%	(Limit 30%)
1/31/95, 06:32	42.26%	
2/25/95, 14:34	38.79%	
1/13/95, 07:29	34.92%	
1/17/95, 14:19	53.01%	
2/01/95, 15:15	53.22%	
1/31/95, 07:13	53.41%	
2/14/95, 08:31	30.95%	
2/25/95, 15:15	42.37%	

#### Endrin Breakdown:

<u>Date, Time</u>		
2/01/95, 15:15	22.71%	(Limit 20%)
1/30/95, 20:17	38.67%	
1/31/95, 06:32	36.42%	
1/31/95, 06:32	36.42%	
2/09/95, 08:01	24.88%	
2/12/95, 02:58	20.70%	
2/25/95, 14:34	30.86%	
1/13/95, 07:29	24.57%	
1/13/95, 10:12	21.42%	
1/17/95, 14:19	43.15%	

2/01/95, 15:15	48.16%
1/30/95, 20:58	23.40%
1/31/95, 07:13	43.67%
2/25/95, 15:15	32.63%

The associated positive sample results for 4,4'-DDT and endrin were qualified as 'J', estimated. The associated positive sample results for 4,4'-DDD, endrin ketone, and endrin aldehyde were qualified as 'JN', presumptively present at an approximated quantity. The 4,4'-DDE sample results were not affected by the deviations above. The non-detectable results for endrin for samples GP8001 and GP11 were qualified as 'R', unusable, due to endrin breakdown.

Performance Evaluation Mixures:

<u>Date, Time</u>			
2/03/95, 21:59	Endrin	58.0% RPD	(Limit 25%)
2/14/95, 07:50	alpha-BHC	30.0%	
	beta-BHC	30.0%	
	gamma-BHC	30.0%	
	Endrin	28.0%	
2/25/95, 14:34	4,4'-DDT	28.0%	
	Methoxychlor	62.4%	
1/12/95, 21:14	Endrin	26.0%	
1/13/95, 07:29	4,4'-DDT	27.0%	
1/17/95, 14:19	Endrin	26.0%	
2/01/95, 15:15	Endrin	36.0%	
2/03/95, 20:37	Endrin	74.0%	
	Methoxychlor	36.0%	
2/14/95, 08:31	4,4'-DDT	31.0%	

The associated samples were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for the compounds noted above.

**3.6 Calibration**

All initial and continuing calibration was performed within acceptable limits for the individual standard mixtures, with the exceptions noted below. Review items included resolution, retention time windows, calibration factors (CF), percent RSD for linearity, RPD and %R.

Linearity:

<u>Date</u>			
1/13/95	alpha-BHC	24.0% RSD	(Limit 20%)
1/29/95	alpha-BHC delta-BHC	22.7% / 24.1% 26.4%	
1/30/95	beta-BHC Heptachlor Epoxide	21.5% 21.1%	
2/08/95	beta-BHC Heptachlor Epoxide Endosulfan II Endosulfan Sulfate Endrin Aldehyde	22.1% 21.2% 21.1% 22.2% 24.7%	
2/13/95	4,4'-DDT	30.1%	

The associated samples were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for the compounds noted. There were instances of retention time shifts noted within the data package. All samples affected by retention time shifts were previously qualified as estimated through *Section 3.1, Holding Times*. Additional qualification was not required.

Individual Standard Mixtures:

<u>Date, Time</u>			
2/04/95, 08:54	Dieldrin Endrin Methoxychlor	35.0% RPD 77.5% 26.5%	(Limit 25%)
2/04/95, 09:35	Aldrin Heptachlor Epoxide 4,4'-DDE Endosulfan II Endosulfan Sulfate Endrin Ketone Endrin Aldehyde alpha-Chlordane gamma-Chlordane	30.0% 30.0% 45.0% 40.0% 52.5% 45.0% 52.5% 35.0% 30.0%	
2/26/95, 04:14	4,4'-DDT Methoxychlor	32.5% 79.5%	
2/26/95, 04:55	Endrin Ketone	32.5%	
2/02/95, 04:50	Endrin	55.0%	

2/04/95, 09:35	Endrin	92.5%
	Methoxychlor	46.0%
2/11/95, 14:42	Endrin	30.0%

The associated samples were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for the compounds noted above.

Florisil Check:

Date			
12/30/94	alpha-BHC	74%	(Limit 80-120)
	gamma-BHC	71%	
	4,4'-DDT	68%	
	Methoxychlor	63%	

Samples PBLKS1227, PBLK1222, and W1222MSB were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for the compounds noted above.

GPC Calibration:

Date			
12/28/94	gamma-BHC	144%	(Limit 80-110)
	Heptachlor	132%	
	Aldrin	126%	
	Dieldrin	160%	
	Endrin	140%	
	4,4'-DDT	140%	
1/17/95	Heptachlor	74%	
	Endrin	115%	

The high recovery for the calibration from 12/28/94 did not impact the associated sample PBLKS1227. The soil samples were qualified as 'J', estimated, for the positive results, and 'UJ', estimated, for the non-detectable results, for heptachlor and endrin.

**3.7 Field Duplicates**

Samples GP1 and GP11 were collected as the field duplicate samples and analyzed for Pesticides and PCBs. Positive results were not detected for GP1. The case narrative states that sample GP11 was laboratory contaminated. In addition, the non-detectable results for GP11 were qualified as 'R', unusable, in *Section 3.2, Surrogate Recovery*, due to 0% recovery for DCB. The sample was re-analyzed. However, the re-analysis is unusable due to extraction 50 days beyond the acceptable holding time.

**3.8 Compound Identification**

GC qualitative analyses are considered to be acceptable. In accordance with protocol, the lower of the two values from the GC columns is reported. However, the following percent differences (%D) between the two GC columns exceeded the 25% limit.

<u>Sample ID</u>	<u>Compound</u>	<u>% D</u>
GP11	4,4'-DDT	481.4
	Methoxychlor	275.0
	Endrin Ketone	81.0
GP11-RE	4,4'-DDE	42.9
	4,4'-DDD	46.4
GP4001	gamma-BHC	171.4
	Aldrin	1400
	Dieldrin	35.3
GP5001	Aldrin	469.6
GP7001	4,4'-DDE	46.2
	Endrin	344.4
	Endosulfan II	67.5
	4,4'-DDT	58.3
	Endrin Aldehyde	677.8
	gamma-Chlordane	205.6
GP8001	Aroclor-1254	102.9
	4,4'-DDE	40.0
GP9001	Endrin Ketone	147.8
	4,4'-DDD	56.3
	alpha-Chlordane	95.5
GP10	gamma-Chlordane	105.0
	4,4'-DDE	127.3
GP2001	Aldrin	357.1
	Dieldrin	100.0
SSGP4	4,4'-DDE	28.2
	alpha-Chlordane	129.7
	gamma-Chlordane	45.8
W1222MSB	Endrin	44.9
GP1MS	Endrin	30.0
	4,4'-DDD	92.0
SSGP4MS	Heptachlor	26.7
	Aldrin	1400
	Dieldrin	36.1
	Endrin	42.5
	4,4'-DDT	64.3
	Endrin Ketone	71.1

SSGP4MSD	Aldrin	1540
	4,4'-DDE	41.7
	4,4'-DDT	46.2
	Endrin Ketone	138.1

The samples above were qualified as 'J', estimated, for the compound noted where the %D was reported at up to 50%. The samples were qualified as 'JN', presumptively present at an approximated quantity, where the percent difference exceeds 50%.

### 3.9 Compound Quantitation and Reported Detection Limits

GC quantitative analyses are considered to be acceptable for the water and soil samples. Supporting data was generated within the appropriate quality control specifications. However, the following information should be noted.

The Case Narrative states that both samples GP11 and GP5001 were contaminated in the preparation laboratory during the initial extraction. The re-analyses of these samples were found to be unusable due to the length of time from VTSR to re-extraction. In addition, sample GP9001 is reported at the calibration limit for 4,4'-DDD. The laboratory has flagged this 4,4'-DDD result with an 'E' (Estimated, due to quantitation at/above the calibration range). Sample GP9001 should have been diluted and re-analyzed to more accurately quantitate the 4,4'-DDD result.

### 4.0 INORGANIC ANALYSES BY AA AND ICP (Mercury by Cold Vapor)

The following items/criteria were reviewed:

- \* Holding Times
- \* Initial and Continuing Calibration
- \* CRDL Standards for AA and ICP
- \* Blanks (Initial, Continuing Calibration, and Preparation)
- \* Field Blanks
- \* ICP Interference Check Sample
- \* Matrix Spike Sample Recovery
- \* Laboratory Duplicates
- \* Field Duplicates
- \* Laboratory Control Sample (LCS)
- \* ICP Serial Dilution
- \* Furnace (AA) Quality Control
- \* Sample Result Verification

All items above were generated within acceptable QC specifications, with deviations detailed as follows. All data is considered to be valid and usable with the appropriate qualifiers, as noted on the data summary tables in Appendix D and within the following text.

### 4.1 Holding Times

All holding times were met within the acceptable time frame from VTSR at the laboratory for metals (180 days) and mercury (26 days).

## 4.2 Calibration

All initial and continuing calibration was performed within acceptable limits for percent recovery.

## 4.3 Contract Required Detection Limit (CRDL) Standards for AA and ICP

Percent recovery was found to be within the 80-120% limit, with the following exceptions.

### ICP

Cadmium	68.0% / 69.0%
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Positive results were not detected for cadmium, therefore, qualification was not required.

## 4.4 Blanks

### 4.4.1 Laboratory (Method) Blanks

All initial calibration, continuing calibration, and preparation blanks were generated in accordance with acceptable limits.

### 4.4.2 Field Blanks

Field blanks were not collected for inorganic analyses.

## 4.5 ICP Interference Check

The recoveries for the ICP Interference Check samples were found to be within the acceptable 80-120% limit.

## 4.6 Spiked Sample Recovery

All percent recoveries for the matrix spike samples were found to be within the 75-125% limit, with the following exceptions.

### GP1 (ug/L)

Antimony	67.9%
Mercury	138.0%

### SSGP4 (mg/Kg)

Antimony	63.9%
Mercury	176.9%
Thallium	60.2%

Positive results, only, for mercury were qualified as 'J', estimated, due to high spike recovery. All antimony results and thallium soil results were qualified as 'UJ', estimated, for the non-detectable results. Positive results were not detected for antimony and thallium.

#### 4.7 Laboratory Duplicates

Precision (relative percent difference) for the samples was found to be acceptable, with the following exceptions.

##### GP1 (ug/L)

Mercury 120.0% RPD

##### SSGP4 (mg/Kg)

Mercury 200% RPD

The positive results for mercury were qualified as 'J', estimated, through *Section 4.6, Spiked Sample Recovery*. Additional qualification is not required.

#### 4.8 Field Duplicates

Samples GP1 and GP1 1 were collected as the field duplicate samples and analyzed for Inorganics. Acceptable precision was generated for the water samples. However, elevated relative percent difference was generated for arsenic and zinc. Table 1 includes calculated precision for the duplicate pair.

#### 4.9 Laboratory Control Sample (LCS)

The aqueous and solid laboratory control samples were generated within acceptable limits.

#### 4.10 ICP Serial Dilution

ICP Serial Dilution was found to be within the acceptable 10% limit for percent difference (%D).

#### 4.11 Furnace (AA) Quality Control

Quality control for furnace atomic absorption was found to be acceptable.

#### 4.12 Sample Result Verification

Quantitative analyses are considered to be acceptable for the data set. Analyte quantitation was generated in accordance with protocols.

**TABLE 1**  
**FIELD DUPLICATE SAMPLE ANALYSIS**  
**PRECISION FOR INORGANICS**

Bellport Laundromat Project

Results in ug/L (ppb)

Parameter	GP1	GP11	RPD*
Aluminum	2120	2510	17%
Antimony	ND	ND	++
Arsenic	2.8	4.1	38%
Barium	35	33	6%
Beryllium	ND	ND	++
Cadmium	ND	ND	++
Calcium	11200	11600	4%
Chromium	1700	1400	19%
Cobalt	21.4	27.7	26%
Copper	54.6	47.2	15%
Iron	43500	41300	5%
Lead	5.8	7.2	22%
Magnesium	2430	2560	5%
Manganese	692	937	30%
Mercury	0.37	0.28	28%
Nickel	666	535	22%
Potassium	4190	3950	6%
Selenium	ND	ND	++
Silver	ND	ND	++
Sodium	8410	8950	6%
Thallium	ND	ND	++
Vanadium	23.2	18.7	21%
Zinc	198	352	56%

\* Relative Percent Difference (Calculated Precision)

ND Not Detected

++ Unable to be calculated due to non-detected results







APPENDIX B

DATA SUMMARY TABLES  
SEMI-VOLATILE ORGANICS

BELLPORT PROJECT

SEMI-VOLATILES/WATER - DATA SUMMARY

CASE NO. 0897

SDG NO. GP1

All results reported in ug/L

Parameters - SemiVolatiles	GP1	Q	GP10	Q	GP11	Q	GP2001	Q	GP3001	Q	GP3001 RE	Q	GP4001	Q	GP5001	Q
Phenol				UJ		UJ		UJ		UJ		R		UJ		UJ
bis (2-chloroethyl) ether		UJ										R				
2-Chlorophenol										UJ		R				
1,3-Dichlorobenzene												R				
1,4-Dichlorobenzene												R				
1,2-Dichlorobenzene												R				
2-Methylphenol										UJ		R				
bis(2-Chloroisopropyl)ether		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
4-methylphenol				UJ		UJ		UJ		UJ		R		UJ		UJ
N-Nitroso-di-n-propylamine												R				
Hexachloroethane												R				
Nitrobenzene												R				
Isophorone												R				
2-Nitrophenol										UJ		R				
2,4-Dimethylphenol										UJ		R				
bis(2-chloroethoxy)methane												R				
2,4-Dichlorophenol										UJ		R				
1,2,4-Trichlorobenzene												R				
Naphthalene												R				
4-chloroaniline												R				
Hexachlorobutadiene												R				
4-chloro-3-methylphenol										UJ		R				
2-methylnaphthalene												R				
Hexachlorocyclopentadiene												R				
2,4,6-Trichlorophenol										UJ		R				
2,4,5-Trichlorophenol										UJ		R				
2-Chloronaphthalene												R				
2-Nitroaniline												R				
Dimethylphthalate												R				
Acenaphthylene												R				
2,6-Dinitrotoluene												R				
3-Nitroaniline				UJ		UJ		UJ		UJ		R		UJ		UJ

BELLPORT PROJECT

SEMI-VOLATILES/WATER - DATA SUMMARY (cont.)

CASE NO. 0897

SDG NO. GP1

All results reported in ug/L

Parameters - SemiVolatiles	GP1	Q	GP10	Q	GP11	Q	GP2001	Q	GP3001	Q	GP3001 RE	Q	GP4001	Q	GP5001	Q
Acenaphthene												R				
2,4-Dinitrophenol		UJ								UJ		R				
4-Nitrophenol		UJ								UJ		R				
Dibenzofuran												R				
2,4-Dinitrotoluene												R				
Diethylphthalate												R				
4-chlorophenyl-phenylether												R				
Fluorene												R				
4-Nitroaniline		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
4,6-Dinitro-2-methylphenol										UJ		R				
N-Nitrosodiphenylamine												R				
4-Bromophenyl-phenylether												R				
Hexachlorobenzene												R				
Pentachlorophenol										UJ		R				
Phenanthrene												R				
Anthracene												R				
Carbazole		UJ										R				
Di-n-butylphthalate	41	U	10	U	51	U			46	U		R				
Fluoranthene												R				
Pyrene												R				
Butylbenzylphthalate												R				
3,3'-Dichlorobenzidine		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Benzo(a)anthracene												R				
Chrysene												R				
bis(2-ethylhexyl)phthalate			10	U			10	U				R				
Di-n-octyl phthalate												R				
Benzo(b)flouranthene												R				
Benzo(k)flouranthene				UJ		UJ		UJ		UJ		R		UJ		UJ
Benzo(a)pyrene												R				
Indeno(1,2,3-cd)pyrene												R				
Dibenz(a,h)anthracene												R				
Benzo(g,h,i)perylene												R				





BELLPORT PROJECT

SEMI-VOLATILES/WATER - DATA SUMMARY (cont.)

CASE NO. 0897

SDG NO. GP1

All results reported in ug/L

Parameters - SemiVolatiles	WS1226SB1	Q	GP1 MS	Q	GP1 MSD	Q
Phenol	37		39		37	
bis(2-chloroethyl) ether		UJ		UJ		UJ
2-Chlorophenol	40		36		41	
1,3-Dichlorobenzene						
1,4-Dichlorobenzene	29		30		30	
1,2-Dichlorobenzene						
2-Methylphenol						
bis(2-Chloroisopropyl)ether		UJ		UJ		UJ
4-methylphenol						
N-Nitroso-di-n-propylamine	33		33		32	
Hexachloroethane						
Nitrobenzene						
Isophorone						
2-Nitrophenol						
2,4-Dimethylphenol						
bis(2-chloroethoxy)methane						
2,4-Dichlorophenol						
1,2,4-Trichlorobenzene	28		29		29	
Naphthalene						
4-chloroaniline						
Hexachlorobutadiene						
4-chloro-3-methylphenol	48		49		49	
2-methylnaphthalene						
Hexachlorocyclopentadiene						
2,4,6-Trichlorophenol						
2,4,5-Trichlorophenol						
2-Chloronaphthalene						
2-Nitroaniline						
Dimethylphthalate						
Acenaphthylene						
2,6-Dinitrotoluene						
3-Nitroaniline						

BELLPORT PROJECT

SEMI-VOLATILES/WATER - DATA SUMMARY (cont.)

CASE NO. 0897

SDG NO. GP1

All results reported in ug/L

Parameters - SemiVolatiles	WS1226SB1	Q	GP1 MS	Q	GP1 MSD	Q
Acenaphthene	34		33		33	
2,4-Dinitrophenol		UJ		UJ		UJ
4-Nitrophenol	59	J	54	J	54	J
Dibenzofuran						
2,4-Dinitrotoluene	38		36		36	
Diethylphthalate						
4-chlorophenyl-phenylether						
Fluorene						
4-Nitroaniline		UJ		UJ		UJ
4,6-Dinitro-2-methylphenol						
N-Nitrosodiphenylamine						
4-Bromophenyl-phenylether						
Hexachlorobenzene						
Pentachlorophenol	63		59		56	
Phenanthrene						
Anthracene						
Carbazole		UJ		UJ		UJ
Di-n-butylphthalate	44	U	39	U	36	U
Fluoranthene						
Pyrene	32		32		32	
Butylbenzylphthalate	10	U				
3,3'-Dichlorobenzidine		UJ		UJ		UJ
Benzo(a)anthracene						
Chrysene						
bis(2-ethylhexyl)phthalate			10	U		
Di-n-octyl phthalate						
Benzo(b)fluoranthene						
Benzo(k)fluoranthene						
Benzo(a)pyrene						
Indeno(1,2,3-cd)pyrene						
Dibenz(a,h)anthracene						
Benzo(g,h,i)perylene						

BELLPORT PROJECT

SEMI-VOLATILES/SOIL - DATA SUMMARY

CASE NO. 0897

SDG NO. GP1

All results reported in ug/Kg

Parameters - SemiVolatiles	SSGP4	Q	SSGP5	Q	SBLKS271	Q	SS1227SB1	Q	SSGP4MS	Q	SSGP4MSD	Q
Phenol						UJ	1200		1300		1100	
bis (2-chloroethyl) ether		UJ		UJ				UJ		UJ		UJ
2-Chlorophenol							1200		1300		1100	
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
1,2-Dichlorobenzene							980		1000		1000	
2-Methylphenol												
bis(2-Chloroisopropyl) ether		UJ		UJ								
4-methylphenol						UJ		UJ		UJ		UJ
N-Nitroso-di-n-propylamine												
Hexachloroethane							1100		1200		1400	
Nitrobenzene												
Isophorone												
2-Nitrophenol												
2,4-Dimethylphenol												
bis(2-chloroethoxy)methane												
2,4-Dichlorophenol												
1,2,4-Trichlorobenzene												
Naphthalene							970		1000		1100	
4-chloroaniline												
Hexachlorobutadiene												
4-chloro-3-methylphenol		UJ		UJ			1400	J	1500	J	1700	J
2-methylnaphthalene												
Hexachlorocyclopentadiene												
2,4,6-Trichlorophenol												
2,4,5-Trichlorophenol												
2-Chloronaphthalene												
2-Nitroaniline												
Dimethylphthalate												
Acenaphthylene												
2,6-Dinitrotoluene												
3-Nitroaniline						UJ						



APPENDIX C

DATA SUMMARY TABLES

PESTICIDES and PCBs

BELLPORT PROJECT

PESTICIDES and PCBs/WATER - DATA SUMMARY

CASE NO. 0897

SDG NO. GP1

All results reported in ug/L

Parameters-Pesticides/PCBs	GP1	Q	GP2001	Q	GP3001	Q	GP4001	Q	GP5001	Q	GP5001RE	Q	GP6001	Q	GP7001	Q
alpha-BHC		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
beta-BHC		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
delta-BHC		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
gamma-BHC(Lindane)		UJ		UJ		UJ	0.014	JN		UJ		R		UJ		UJ
Heptachlor		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aldrin		UJ	0.014	JN		UJ	0.012	JN	0.0079	JN		R		UJ		UJ
Heptachlor Epoxide		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Endosulfan I		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Dieldrin		UJ	0.012	JN		UJ	0.017	J	0.11	J	0.11	R		UJ	0.15	J
4,4'-DDE		UJ	0.011	J		UJ		UJ		UJ	0.0065	R		UJ	0.13	J
Endrin		UJ		UJ		UJ		UJ		UJ		R		UJ	0.018	JN
Endosulfan II		UJ		UJ		UJ		UJ		UJ		R		UJ	0.040	JN
4,4'-DDD		UJ	0.16	J		UJ		UJ		UJ		R		UJ	0.20	J
Endosulfan Sulfate		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
4,4'-DDT		UJ		UJ		UJ		UJ		UJ		R		UJ	0.24	JN
Methoxychlor		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Endrin Ketone		UJ		UJ		UJ		UJ		UJ	0.064	R		UJ		UJ
Endrin Aldehyde		UJ		UJ		UJ		UJ		UJ		R		UJ	0.018	JN
alpha-chlordane		UJ		UJ		UJ		UJ		UJ		R		UJ	0.078	J
gamma-chlordane		UJ		UJ		UJ		UJ		UJ		R		UJ	0.036	JN
Toxaphene		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aroclor-1016		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aroclor-1221		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aroclor-1232		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aroclor-1242		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aroclor-1248		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ
Aroclor-1254		UJ		UJ		UJ		UJ		UJ		R		UJ	0.69	JN
Aroclor-1260		UJ		UJ		UJ		UJ		UJ		R		UJ		UJ

BELLPORT PROJECT

PESTICIDES and PCBs/WATER - DATA SUMMARY (cont.)

CASE NO. 0897  
SDG NO. GP1

0% Recovery All results reported in ug/L

Parameters-Pesticides/PCBs	GP8001	Q	GP9001	Q	GP10	Q	GP11	Q	GP11 RE	Q	PBLK1222	Q	PBLK1227	Q
alpha-BHC		UJ		UJ		UJ		R		R		UJ		UJ
beta-BHC		UJ		UJ		UJ		R		R		UJ		
delta-BHC		UJ		UJ		UJ		R		R		UJ		
gamma-BHC(Lindane)		UJ	0.013	J		UJ		R		R		UJ		
Heptachlor		UJ		UJ		UJ		R		R		UJ		
Aldrin		UJ		UJ		UJ		R		R		UJ		
Heptachlor Epoxide		UJ		UJ		UJ		R		R		UJ		
Endosulfan I		UJ		UJ		UJ		R		R		UJ		
Dieldrin		UJ	0.061	J		UJ		R		R		UJ		
4,4'-DDE	0.0065	J	0.088	J	0.0088	JN		R	0.0070	R		UJ		
Endrin		R		UJ		UJ		R		R		UJ		UJ
Endosulfan II		UJ		UJ		UJ		R		R		UJ		
4,4'-DDD		UJ	1.6	E	0.12	J		R	0.028	R		UJ		
Endosulfan Sulfate		UJ		UJ		UJ		R		R		UJ		
4,4'-DDT		UJ	0.12	J		UJ	0.43	JN		R		UJ		UJ
Methoxychlor		UJ		UJ		UJ	1.2	JN		R		UJ		
Endrin Ketone	0.023	JN		UJ		UJ	2.1	E		R		UJ		
Endrin Aldehyde		UJ		UJ		UJ		R		R		UJ		
alpha-chlordane		UJ	0.022	JN		UJ		R		R		UJ		
gamma-chlordane		UJ	0.020	JN		UJ		R		R		UJ		
Toxaphene		UJ		UJ		UJ		R		R		UJ		
Aroclor-1016		UJ		UJ		UJ		R		R		UJ		
Aroclor-1221		UJ		UJ		UJ		R		R		UJ		
Aroclor-1232		UJ		UJ		UJ		R		R		UJ		
Aroclor-1242		UJ		UJ		UJ		R		R		UJ		
Aroclor-1248		UJ		UJ		UJ		R		R		UJ		
Aroclor-1254		UJ	0.65	J		UJ		R		R		UJ		
Aroclor-1260		UJ		UJ		UJ		R		R		UJ		

BELLPORT PROJECT

PESTICIDES and PCBs/WATER - DATA SUMMARY (cont.)

CASE NO. 0897  
SDG NO. GP1

All results reported in ug/L

Parameters-Pesticides/PCBs	PBLK0220	Q	PBLK0214	Q	W1222MSB	Q	GP1 MS	Q	GP1 MSD	Q
alpha-BHC		UJ		UJ		UJ		UJ		UJ
beta-BHC		UJ		UJ		UJ		UJ		UJ
delta-BHC		UJ				UJ		UJ		UJ
gamma-BHC(Lindane)		UJ		UJ	0.42	J	0.48	J	0.46	J
Heptachlor		UJ			0.32	J	0.39	J	0.39	J
Aldrin		UJ			0.34	J	0.36	J	0.34	J
Heptachlor Epoxide		UJ				UJ		UJ		UJ
Endosulfan I		UJ				UJ		UJ		UJ
Dieldrin		UJ			0.93	J	1.0	J	1.0	J
4,4'-DDE		UJ				UJ		UJ		UJ
Endrin		UJ		UJ	0.69	J	1.0	J	1.2	J
Endosulfan II		UJ				UJ		UJ		UJ
4,4'-DDD		UJ				UJ	0.025	JN		UJ
Endosulfan Sulfate		UJ				UJ		UJ		UJ
4,4'-DDT		UJ		UJ	0.76	J	0.82	J	1.0	J
Methoxychlor		UJ		UJ		UJ		UJ		UJ
Endrin Ketone		UJ		UJ		UJ		UJ		UJ
Endrin Aldehyde		UJ				UJ		UJ		UJ
alpha-chlordane		UJ				UJ		UJ		UJ
gamma-chlordane		UJ				UJ		UJ		UJ
Toxaphene		UJ				UJ		UJ		UJ
Aroclor-1016		UJ				UJ		UJ		UJ
Aroclor-1221		UJ				UJ		UJ		UJ
Aroclor-1232		UJ				UJ		UJ		UJ
Aroclor-1242		UJ				UJ		UJ		UJ
Aroclor-1248		UJ				UJ		UJ		UJ
Aroclor-1254		UJ				UJ		UJ		UJ
Aroclor-1260		UJ				UJ		UJ		UJ

BELLPORT PROJECT

PESTICIDES and PCBs/SOIL - DATA SUMMARY

CASE NO. 0897

All results reported in ug/Kg

SDG NO. GP1

Parameters-Pesticides/PCBs	SSGP4	Q	SSGP5	Q	PBLKS1227	Q	SSGP4MS	Q	SSGP4MSD	Q
alpha-BHC		UJ		UJ		UJ		UJ		UJ
beta-BHC		UJ		UJ				UJ		UJ
delta-BHC		UJ		UJ				UJ		UJ
gamma-BHC(Lindane)		UJ		UJ		UJ	15	J	14	J
Heptachlor		UJ		UJ			15	J	13	J
Aldrin		UJ		UJ			18	JN	14	JN
Heptachlor Epoxide		UJ		UJ				UJ		UJ
Endosulfan I		UJ		UJ				UJ		UJ
Dieldrin	0.68	J		UJ			36	J	34	J
4,4'-DDE	0.78	J		UJ			0.83	J	0.60	J
Endrin		UJ		UJ		UJ	40	J	39	J
Endosulfan II		UJ		UJ				UJ		UJ
4,4'-DDD	0.98	J	0.73	J			2.5	J	1.6	J
Endosulfan Sulfate		UJ		UJ				UJ		UJ
4,4'-DDT		UJ		UJ		UJ	28	JN	26	J
Methoxychlor		UJ		UJ		UJ		UJ		UJ
Endrin Ketone		UJ		UJ			0.76	JN	0.42	JN
Endrin Aldehyde		UJ		UJ				UJ		UJ
alpha-chlordane	0.74	JN		UJ				UJ		UJ
gamma-chlordane	0.96	J		UJ				UJ		UJ
Toxaphene		UJ		UJ				UJ		UJ
Aroclor-1016		UJ		UJ				UJ		UJ
Aroclor-1221		UJ		UJ				UJ		UJ
Aroclor-1232		UJ		UJ				UJ		UJ
Aroclor-1242		UJ		UJ				UJ		UJ
Aroclor-1248		UJ		UJ				UJ		UJ
Aroclor-1254		UJ		UJ				UJ		UJ
Aroclor-1260		UJ		UJ				UJ		UJ

APPENDIX D

DATA SUMMARY TABLES

INORGANICS

BELLPORT PROJECT

INORGANICS/WATER - DATA SUMMARY

SDG NO. GP1

All results reported in ug/L

Parameters - Inorganics	GP1	Q	GP10	Q	GP11	Q	GP2001	Q	GP3001	Q	GP4001	Q	GP5001	Q	GP6001	Q
Aluminum	2120		991		2510		4070		4910		1760		1940		2960	
Antimony		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
Arsenic	2.8	B	2	B	4.1	B	4.4	B	7.6	B					1.8	B
Barium	35	B	11	B	33	B	39	B	48	B	42	B	28	B	56	B
Beryllium																
Cadmium																
Calcium	11200		9000		11600		8470		7630		11000		9040		68500	
Chromium	1700		481		1400		857		4360		518		930		336	
Cobalt	21.4	B	9.8	B	27.7	B			48.6	B			15.5	B	10.2	B
Copper	54.6		51.2		47.2		107		172		26.5		36.9		20.1	B
Iron	43500		30100		41300		73900		146000		16600		25500		17900	
Lead	5.8		3.1		7.2		7.8				2.5	B	3.5		4.3	
Magnesium	2430	B	1950	B	2560	B	2700	B	2040	B	2140	B	1990	B	17200	
Manganese	692		356		937		710		1620		386		391		543	
Mercury	0.37	J	0.24	J	0.28	J	0.62	J	4	J	0.28	J	1.5	J	0.49	J
Nickel	666		144		535		215		1450		246		364		118	
Potassium	4190	B	2370	B	3950	B	2320	B	2990	B	3510	B	2270	B	4410	B
Selenium											1.2	B				
Silver																
Sodium	8410		8900		8950		8280		5970		9530		10700		5080	
Thallium									2.3	B						
Vanadium	23.2	B			18.7	B			48.4	B						
Zinc	198		121		352		1330		1460		195		220		152	

BELLPORT PROJECT

INORGANICS/WATER - DATA SUMMARY (cont.)

SDG NO. GP1

All results reported in ug/L

Parameters - Inorganics	GP7001	Q	GP8001	Q	GP9001	Q
Aluminum	3340		6990		5290	
Antimony		UJ		UJ		UJ
Arsenic	2.9	B	3.5	B	5.5	B
Barium	34	B	43	B	30	B
Beryllium						
Cadmium						
Calcium	13800		11000		19600	
Chromium	802		423		1120	
Cobalt	11.9	B			19.4	B
Copper	82.8		77.2		98.1	
Iron	78900		39500		68400	
Lead	10.6		4.8		12.4	
Magnesium	2960	B	2680	B	3970	B
Manganese	434		247		990	
Mercury	0.27	J	0.25	J		
Nickel	205		111		329	
Potassium	1570	B	3840	B	2820	B
Selenium					2	B
Silver						
Sodium	8530		6000		10800	
Thallium						
Vanadium	18.3	B	31.8	B	20.5	B
Zinc	918		248		853	

## BELLPORT PROJECT

### INORGANICS/SOIL - DATA SUMMARY

SDG NO. GP1

All results reported in mg/Kg

Parameters - Inorganics	SSGP4	Q	SSGP5	Q
Aluminum	548		395	
Antimony		UJ		UJ
Arsenic			0.48	B
Barium	0.92	B		
Beryllium				
Cadmium				
Calcium	116	B	56.1	B
Chromium	2.8		2.8	
Cobalt				
Copper			1.5	B
Iron	1250		1980	
Lead	2.2		1.4	
Magnesium	89	B	68.5	B
Manganese	12.7		14.9	
Mercury	0.1	J		
Nickel	54.4		8.1	
Potassium				
Selenium				
Silver				
Sodium				
Thallium		UJ		UJ
Vanadium				
Zinc	5.9		4.1	

APPENDIX E

DATA SUMMARY FORMS  
TENTATIVELY IDENTIFIED COMPOUNDS

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP1

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-1

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4029

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\*\* Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
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7.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP10

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-6

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4056

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\* Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
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033

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP11

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-2

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4032

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
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11.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP2001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-7

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4057

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP4001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-1

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4051

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	24.87	5.	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP5001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-2

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4052

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP6001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-3

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4033

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\*\*  
Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP7001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-3

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4053

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP8001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-4

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4054

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP9001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-5

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4055

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\*\* Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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16.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SSGP4

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) SOIL

Lab Sample ID: 950579-9

Sample wt/vol: 5.000 (g/mL) G

Lab File ID: H5815

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. 11.

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dmlution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\* Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	23.76	100.	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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16.				
17.				
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19.				
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22.				
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27.				
28.				
29.				
30.				

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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SSGP5

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) SOIL

Lab Sample ID: 950579-10

Sample wt/vol: 5.000 (g/mL) G

Lab File ID: H5818

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. 2.

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- - UNKNOWN	23.70	<del>55-60.</del> 10/11/95	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB
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Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-8

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4050

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- - UNKNOWN	24.89	9.	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKW281

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: WV1228BK1

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4021

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\*\*  
Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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24.				
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27.				
28.				
29.				
30.				

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKS28A

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) SOIL

Lab Sample ID: SV1228BKA

Sample wt/vol: 5.000 (g/mL) G

Lab File ID: H5812

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: not dec. 0.

Date Analyzed: 12/28/94

GC Column: CAP / ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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22.				
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24.				
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27.				
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29.				
30.				

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKW291

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: WV1229BK1

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4044

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

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

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	24.89	14.10. <i>12-10/95</i>	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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16.				
17.				
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24.				
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27.				
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29.				
30.				

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VSPKW281

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: WV1228S81

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L4022

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

\*\* Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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16.				
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25.				
26.				
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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VSPKS28A

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) SOIL

Lab Sample ID: SV1228SBA

Sample wt/vol: 5.000 (g/mL) G

Lab File ID: H5813

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: not dec. 0.

Date Analyzed: 12/28/94

GC Column: CAP ID: .53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

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

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

EPA SAMPLE NO.

GP1

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-1

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2053

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/26/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/01/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.0

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

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.60	7	BJ N
2. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.89	2	J N
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP10

Lab Name: E3I Contract: \_\_\_\_\_  
 Lab Code: E3I Case No.: 0897 SAS No.: \_\_\_\_\_ SDG No.: GP1  
 Matrix: (soil/water) WATER Lab Sample ID: 950579-6  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: K2073  
 Level: (low/med) LOW Date Received: 12/22/94  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 12/27/94  
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/02/95  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: 5.0

Number TICs found: 5 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.51	5	5. BJ N
2. 541-05-9	Cyclotrisiloxane, hexamethyl	3.31	13	10. J N
3. 541-02-6	Cyclopentasiloxane, decameth	8.49	5	5. J N
4. - -	UNKNOWN	11.03	2	2. J N
5. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.76	3	3. BJ N
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP11

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-2

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2065

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/26/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.0

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

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.49	2 <del>2.49</del> 2/13/95	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP2001

Lab Name: E3I Contract: \_\_\_\_\_  
 Lab Code: E3I Case No.: 0897 SAS No.: \_\_\_\_\_ SDG No.: GP1  
 Matrix: (soil/water) WATER Lab Sample ID: 950579-7  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: K2074  
 Level: (low/med) LOW Date Received: 12/22/94  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 12/27/94  
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/02/95  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: 5.0

Number TICs found: 4 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.51	5	BJ N R
2. 541-05-9	Cyclotrisiloxane, hexamethyl	3.28	6	J N
3. 541-02-6	Cyclopentasiloxane, decameth	8.46	2	J N
4. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.74	2	BJ N R
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP3001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-4

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2067

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/26/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.73	3 <sup>AM</sup> 2/13/95	J-N R
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP3001 RE

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-4RE

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2206

Level: (low/med) LOW

Date Received: 12/21/94

Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/15/95

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/20/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	12.91	32. R2/2/195	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP4001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-1

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2068

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/27/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-02-6	Cyclopentasiloxane, decameth	8.46	2	J N
2. - - -	UNKNOWN	10.19	3	J N
3. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.73	4	J N
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP5001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-2

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2069

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/27/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 5.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	3.27	4 6	J N
2. - -	UNKNOWN	8.47		J N
3. - -	UNKNOWN	19.20		J N
4. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.72		J N
5. - -	UNKNOWN AMIDE	25.90		J N
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 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP6001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950570-3

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2066

Level: (low/med) LOW

Date Received: 12/21/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/26/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.0

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

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.50	2	JN
2.	74381-40-1 Propanoic acid, 2-methyl-, 1	14.74	4	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP7001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-3

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2070

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/27/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- - UNKNOWN	2.44	2	J N
2.	541-02-6 Cyclopentasiloxane, decameth	8.45	6	J N
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP8001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-4

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2071

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/27/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.72	3 <del>8.0</del> 2/95	BJ N <del>R</del>
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 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP9001

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: 950579-5

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2072

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/27/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	3.32	2 p. 2145	J M
2. - - -	UNKNOWN	14.77	2 2.2145	J N
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SSGP4

Lab Name: E3I Contract: \_\_\_\_\_  
 Lab Code: E3I Case No.: 0897 SAS No.: \_\_\_\_\_ SDG No.: GP1  
 Matrix: (soil/water) SOIL Lab Sample ID: 950579-9  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: K2081  
 Level: (low/med) LOW Date Received: 12/22/94  
 % Moisture: 11. decanted: (Y/N) N Date Extracted: 12/27/94  
 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/03/95  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) Y pH: 5.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.59	700 700.	XJ N
2. 123-42-2	2-Pentanone, 4-hydroxy-4-met	3.75	6700 7000.	<del>BJ N</del>
3. 74381-40-1	Propanoic acid, 2-methyl-, 1	14.69	130 100.	J N
4. - -	UNKNOWN ALKANE	25.12	160 100.	J N
5. - -	UNKNOWN ALKANE	26.61	610 1000.	J J
6. - -	UNKNOWN ALKANE	28.40	270 600.	J J
7. - -	UNKNOWN	31.40	160 300.	J J
8. - -	UNKNOWN	31.61	77 100.	J J
9. - -	UNKNOWN	31.94	180 400.	J J
10. - -	UNKNOWN	32.08	110 200.	J J
11. - -	UNKNOWN	32.18	280 600.	J J
12. - -	UNKNOWN	32.49	150 300.	J J
13. - -	UNKNOWN	32.84	260 600.	J J
14. - -	UNKNOWN	33.01	450 1000.	J J
15. - -	UNKNOWN HYDROCARBON	33.83	140 300.	J J
16. - -	UNKNOWN	34.40	240 500.	J J
17. - -	UNKNOWN ALKENE	34.84	290 600.	J J
18. - -	UNKNOWN KETONE	35.04	300 600.	J J
19. - -	UNKNOWN	36.23	270 600.	J J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SSGP5

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) SOIL

Lab Sample ID: 950579-10

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: K2082

Level: (low/med) LOW

Date Received: 12/22/94

% Moisture: 2. decanted: (Y/N) N

Date Extracted: 12/27/94

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 02/03/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.		Q
1.	UNKNOWN	2.58	340	300.	JN
2.	123-42-2 2-Pentanone, 4-hydroxy-4-met	3.76	7400	7000.	BJ A R
3.	74381-40-1 Propanoic acid, 2-methyl-, 1	14.71	68	70.	JN
4.	UNKNOWN	22.21	91	100.	JN
5.	UNKNOWN	22.72	72	70.	JN
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7.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW262

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: WS1226BK2

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2061

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/26/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N      pH: 5.0

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.49	4.	J N
2. - -	UNKNOWN BENZOTHAZOLE	18.98	2.	J N
3. - -	UNKNOWN	20.23	3.	J N
4. - -	UNKNOWN ALKANE	22.78	3.	J N
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW271

Lab Name: E3I Contract: \_\_\_\_\_  
 Lab Code: E3I Case No.: 0897 SAS No.: \_\_\_\_\_ SDG No.: GP1  
 Matrix: (soil/water) WATER Lab Sample ID: WS1227BK1  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: K2062  
 Level: (low/med) LOW Date Received: 00/00/00  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 12/27/94  
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/02/95  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: 5.0

Number TICs found: 2 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.52	9	J N
2. 74381-40-1	Propanoic acid, 2-methyl-, I	14.77	3	J N
3.				
4.				
5.				
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1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW151

Lab Name: E3I Contract: \_\_\_\_\_  
 Lab Code: E3I Case No.: 0897 SAS No.: \_\_\_\_\_ SDG No.: GP1  
 Matrix: (soil/water) WATER Lab Sample ID: WS0215BK1  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: K2205  
 Level: (low/med) LOW Date Received: 00/00/00  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/15/95  
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/20/95  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 PC Cleanup: (Y/N) N pH: 6.0

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
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1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKS271

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) SOIL

Lab Sample ID: SS1227BK1

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: K2064

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: 0. decanted: (Y/N) N

Date Extracted: 12/27/94

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 02/02/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 57-55-6	1,2-Propanediol	2.51	110 100. <del>1000</del>	J N
2. 123-42-2	2-Pentanone, 4-hydroxy-4-met	3.73	5200 5000. <del>2100</del>	J NA
3.				
4.				
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1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS1226SB1

Lab Name: E3I

Contract:

Lab Code: E3I

Case No.: 0897

SAS No.:

SDG No.: GP1

Matrix: (soil/water) WATER

Lab Sample ID: WS1226SB1

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: K2048

Level: (low/med) LOW

Date Received: 00/00/00

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 12/26/94

Concentrated Extract Volume: 1000.0 (uL)

Date Analyzed: 02/01/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 5.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- - UNKNOWN	2.57	4.	J N
2.	105-60-2 2H-Azepin-2-one, hexahydro-	10.78	3.	J N
3.			<i>5/2/95</i>	<i>5</i>
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1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS1227SB1

Lab Name: E3I Contract: \_\_\_\_\_

Lab Code: E3I Case No.: 0897 SAS No.: \_\_\_\_\_ SDG No.: GP1

Matrix: (soil/water) SOIL Lab Sample ID: SS1227SB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: K2080

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

% Moisture: 0. decanted: (Y/N) N Date Extracted: 12/27/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/03/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: \_\_\_\_\_

WUC  
2/13

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.55	85 100.	JM
2.	123-42-2 2-Pentanone, 4-hydroxy-4-met	3.75	2100 2000.	35 NA
3.	74381-40-1 Propanoic acid, 2-methyl-,1-	14.72	77 70.	JM
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7/2/2/95

APPENDIX F

DATA QUALIFIERS

## ORGANIC DATA QUALIFIERS

- U - Indicates that the compound was analyzed for but not detected at or above the Contract Required Quantitation Limit (CRQL), or the compound is not detected due to qualification through the method or field blank.
- J - The associated numerical value is an estimated quantity.
- JN - Tentatively identified with approximated concentrations (Volatile and Semi-Volatile Organics).  
  
Presumptively present at an approximated quantity (Pesticides/PCBs).
- UJ - The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance in quality control limits.
- C - Applies to pesticide results where the identification has been confirmed by GC/MS.
- X - The mass spectrum does not meet USEPA CLP criteria for confirmation, however, compound presence is strongly suspected.
- E - Reported value is estimated due to quantitation above the calibration range.
- D - Reported result taken from diluted sample analysis.
- A - Aldol condensation product.
- R - Reported value is unusable and rejected due to variance from quality control limits.
- NA - Not Analyzed.

## INORGANIC DATA QUALIFIERS

- U - Indicates analyte was not detected at or above the Contract Required Detection Limit (CRDL), or the compound is not detected due to qualification through the method or field blank.
- B - Indicates analyte result is between Instrument Detection Limit (IDL) and CRDL.
- J - Reported value is estimated due to variance from quality control limits.
- UJ - The element was analyzed for, but not detected. The sample quantitation limit is an estimate due to variance in quality control limits.
- E - Reported value is estimated because of the presence of interference.
- R - Reported value is unusable and rejected due to variance from quality control limits.
- N.A. Not Analyzed.

APPENDIX G

NYSDEC ASP SUMMARY SHEETS

*Deupont*

To be included with all lab data and with each workplan

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method	*BNA GC/MS Method	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
GP1	956570-1	✓	✓				
GP11	-2	✓	✓				
GP1001	-3	✓	✓				
GP3001	-4	✓	✓				
GP4001	950579-1	✓	✓				
GPS001	-2	✓	✓				
GP7001	-3	✓	✓				
GP8001	-4	✓	✓				
GP9001	-5	✓	✓				
GP10	-6	✓	✓				
GP2001	-7	✓	✓				
TB	-8	✓	✓				
SSGP	-9	✓	✓				
SSGPS	-10	✓	✓				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE (VOA)  
ANALYSES

Laboratory Sample ID	Matrx	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
950570-1	water	12-20-94	12-21-94	N/A	12-28-94
-2		↓	↓		12-28-94
-3					12-28-94
-4		↓	↓		12-28-94
950579-1		12-21-94	12-22-94		12-28-94
-2					12-29-94
-3					12-29-94
-4					12-29-94
-5	-				12-29-94
-6					12-29-94
-7					12-29-94
-8	↓				12-29-94
-9	soil				12-28-94
-10	SOIL			↓	12-28-94



Be report

To be included with all lab data and with each workplan

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method # 61# 3	*Metals	*Other
GP1	950570-1	✓	✓				
GP11	-2	✓	✓				
GP1001	-3	✓	✓				
GP3001	-4	✓	✓				
GP401	950579-1	✓	✓				
GPS001	-2	✓	✓				
GP7001	-3	✓	✓				
GP8001	-4	✓	✓				
GP9001	-5	✓	✓				
GP10	-6	✓	✓				
GP2001	-7	✓	✓				
TB	-8	✓	✓				
SSGP	-9	✓	✓				
SSGP5	-10	✓	✓				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
SEMIVOLATILE (BNA)  
ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Div/Conc Factor
950570-1	Water	91-2	lig-1ig	None	1.0
-2					
-3					
-4					
950579-1					
-2					
-3					
-4					
-5					
-6					
-7					
-9	Soil		Sonication	G PL	
-10	Soil		"	G PL	8

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
SEMIVOLATILE (BNA)  
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
950570-1	Water	12-20-94	12-21-94	12-26-94	2-1-95
-2				12-26-94	2-2-95
-3				12-26-94	2-2-95
-4				12-26-94	2-2-95
950571-1		12-21-94	12-22-94	12-27-95	2-2-95
-2				12-27-95	2-2-95
-3				12-27-95	2-2-95
-4				12-27-95	2-2-95
-5				12-27-95	2-2-95
-6				12-27-95	2-2-95
-7				12-27-95	2-2-95
-9	Soil			12-27-95	2-3-95
-11	Soil			12-27-95	2-3-95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
PESTICIDE/PCB  
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
950570-1	Water	12-20-94	12-21-94	12-22-94	2-1-95
-2				12-22 + 2-14	2-1-95 + 2
-3				12-22-94	2-4-95
-4				12-22-94	<del>2-01-95</del>
950579-1		12-21-94	12-22-94	12-27-94	2-11-95
-2				12-27 + 2-20	2-11-95 +
-3				12-27-94	2-11-95
-4				12-27-94	2-11-95
-5				12-27-94	2-11-95
-6				12-27-94	2-11-95
-7				12-27-94	2-11-95
-9	Soil			12-27-94	2-11-95
-10	Soil			12-27-94	2-11-95

25-95

2-26-95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
 PESTICIDE/PCB  
 ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
950570-1	Water	91-3	Sep Funnel	Florisil, Hg	1.0
-2					
-3					
-4					
950571-1					
-2					
-3					
-4					
-5					
-6					
-7	↓		↓	↓	
-9	Soil		↓	↓	
-10	Soil	↓			

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals TAL	*Other
GP1	95057001						
GP10	95057906						
GP11	95057002						
GP2001	95057907						
GP3001	95057004						
GP4001	95057901						
GP5001	02						
GP6001	95057003						
GP7001	95057903						
GP8001	04						
GP9001	05						
SSGP4	09						
SSGP5	10						↓

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	AL	12/21/94	12/30/94	01/10/95
95057002	WATER	AL	12/21/94	12/30/94	01/10/95
95057003	WATER	AL	12/21/94	12/30/94	01/10/95
95057004	WATER	AL	12/21/94	12/30/94	01/10/95
95057901	WATER	AL	12/22/94	01/06/95	01/10/95
95057902	WATER	AL	12/22/94	01/06/95	01/10/95
95057903	WATER	AL	12/22/94	01/06/95	01/10/95
95057904	WATER	AL	12/22/94	01/06/95	01/10/95
95057905	WATER	AL	12/22/94	01/06/95	01/10/95
95057906	WATER	AL	12/22/94	01/06/95	01/10/95
95057907	WATER	AL	12/22/94	01/06/95	01/10/95
95057909	SOIL	AL	12/22/94	12/29/94	01/07/95
95057910	SOIL	AL	12/22/94	12/29/94	01/07/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	SB	12/21/94	12/30/94	01/10/95
95057002	WATER	SB	12/21/94	12/30/94	01/10/95
95057003	WATER	SB	12/21/94	12/30/94	01/10/95
95057004	WATER	SB	12/21/94	12/30/94	01/10/95
95057901	WATER	SB	12/22/94	01/06/95	01/10/95
95057902	WATER	SB	12/22/94	01/06/95	01/10/95
95057903	WATER	SB	12/22/94	01/06/95	01/10/95
95057904	WATER	SB	12/22/94	01/06/95	01/10/95
95057905	WATER	SB	12/22/94	01/06/95	01/10/95
95057906	WATER	SB	12/22/94	01/06/95	01/10/95
95057907	WATER	SB	12/22/94	01/06/95	01/10/95
95057909	SOIL	SB	12/22/94	12/29/94	01/09/95
95057910	SOIL	SB	12/22/94	12/29/94	01/09/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	AS	12/21/94	12/30/94	01/20/95
95057002	WATER	AS	12/21/94	12/30/94	01/20/95
95057003	WATER	AS	12/21/94	12/30/94	01/20/95
95057004	WATER	AS	12/21/94	12/30/94	01/20/95
95057901	WATER	AS	12/22/94	01/06/95	01/20/95
95057902	WATER	AS	12/22/94	01/06/95	01/20/95
95057903	WATER	AS	12/22/94	01/06/95	01/20/95
95057904	WATER	AS	12/22/94	01/06/95	01/20/95
95057905	WATER	AS	12/22/94	01/06/95	01/23/95
95057906	WATER	AS	12/22/94	01/06/95	01/23/95
95057907	WATER	AS	12/22/94	01/06/95	01/23/95
95057909	SOIL	AS	12/22/94	12/29/94	01/23/95
95057910	SOIL	AS	12/22/94	12/29/94	01/23/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	BA	12/21/94	12/30/94	01/10/95
95057002	WATER	BA	12/21/94	12/30/94	01/10/95
95057003	WATER	BA	12/21/94	12/30/94	01/10/95
95057004	WATER	BA	12/21/94	12/30/94	01/10/95
95057901	WATER	BA	12/22/94	01/06/95	01/10/95
95057902	WATER	BA	12/22/94	01/06/95	01/10/95
95057903	WATER	BA	12/22/94	01/06/95	01/10/95
95057904	WATER	BA	12/22/94	01/06/95	01/10/95
95057905	WATER	BA	12/22/94	01/06/95	01/10/95
95057906	WATER	BA	12/22/94	01/06/95	01/10/95
95057907	WATER	BA	12/22/94	01/06/95	01/10/95
95057909	SOIL	BA	12/22/94	12/29/94	01/07/95
95057910	SOIL	BA	12/22/94	12/29/94	01/07/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	CD	12/21/94	12/30/94	01/10/95
95057002	WATER	CD	12/21/94	12/30/94	01/10/95
95057003	WATER	CD	12/21/94	12/30/94	01/10/95
95057004	WATER	CD	12/21/94	12/30/94	01/10/95
95057901	WATER	CD	12/22/94	01/06/95	01/10/95
95057902	WATER	CD	12/22/94	01/06/95	01/10/95
95057903	WATER	CD	12/22/94	01/06/95	01/10/95
95057904	WATER	CD	12/22/94	01/06/95	01/10/95
95057905	WATER	CD	12/22/94	01/06/95	01/10/95
95057906	WATER	CD	12/22/94	01/06/95	01/10/95
95057907	WATER	CD	12/22/94	01/06/95	01/10/95
95057909	SOIL	CD	12/22/94	12/29/94	01/07/95
95057910	SOIL	CD	12/22/94	12/29/94	01/07/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	CR	12/21/94	12/30/94	01/10/95
95057002	WATER	CR	12/21/94	12/30/94	01/10/95
95057003	WATER	CR	12/21/94	12/30/94	01/10/95
95057004	WATER	CR	12/21/94	12/30/94	01/10/95
95057901	WATER	CR	12/22/94	01/06/95	01/10/95
95057902	WATER	CR	12/22/94	01/06/95	01/10/95
95057903	WATER	CR	12/22/94	01/06/95	01/10/95
95057904	WATER	CR	12/22/94	01/06/95	01/10/95
95057905	WATER	CR	12/22/94	01/06/95	01/10/95
95057906	WATER	CR	12/22/94	01/06/95	01/10/95
95057907	WATER	CR	12/22/94	01/06/95	01/10/95
95057909	SOIL	CR	12/22/94	12/29/94	01/07/95
95057910	SOIL	CR	12/22/94	12/29/94	01/07/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	PB	12/21/94	12/30/94	01/14/95
95057002	WATER	PB	12/21/94	12/30/94	01/14/95
95057003	WATER	PB	12/21/94	12/30/94	01/14/95
95057004	WATER	PB	12/21/94	12/30/94	01/14/95
95057901	WATER	PB	12/22/94	01/06/95	01/18/95
95057902	WATER	PB	12/22/94	01/06/95	01/18/95
95057903	WATER	PB	12/22/94	01/06/95	01/18/95
95057904	WATER	PB	12/22/94	01/06/95	01/18/95
95057905	WATER	PB	12/22/94	01/06/95	01/18/95
95057906	WATER	PB	12/22/94	01/06/95	01/18/95
95057907	WATER	PB	12/22/94	01/06/95	01/18/95
95057909	SOIL	PB	12/22/94	12/29/94	01/18/95
95057910	SOIL	PB	12/22/94	12/29/94	01/18/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	MG	12/21/94	12/30/94	01/10/95
95057002	WATER	MG	12/21/94	12/30/94	01/10/95
95057003	WATER	MG	12/21/94	12/30/94	01/10/95
95057004	WATER	MG	12/21/94	12/30/94	01/10/95
95057901	WATER	MG	12/22/94	01/06/95	01/10/95
95057902	WATER	MG	12/22/94	01/06/95	01/10/95
95057903	WATER	MG	12/22/94	01/06/95	01/10/95
95057904	WATER	MG	12/22/94	01/06/95	01/10/95
95057905	WATER	MG	12/22/94	01/06/95	01/10/95
95057906	WATER	MG	12/22/94	01/06/95	01/10/95
95057907	WATER	MG	12/22/94	01/06/95	01/10/95
95057909	SOIL	MG	12/22/94	12/29/94	01/07/95
95057910	SOIL	MG	12/22/94	12/29/94	01/07/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	HG	12/21/94	01/12/95	01/12/95
95057002	WATER	HG	12/21/94	01/12/95	01/12/95
95057003	WATER	HG	12/21/94	01/12/95	01/12/95
95057004	WATER	HG	12/21/94	01/12/95	01/12/95
95057901	WATER	HG	12/22/94	01/12/95	01/12/95
95057902	WATER	HG	12/22/94	01/12/95	01/12/95
95057903	WATER	HG	12/22/94	01/12/95	01/12/95
95057904	WATER	HG	12/22/94	01/12/95	01/12/95
95057905	WATER	HG	12/22/94	01/12/95	01/12/95
95057906	WATER	HG	12/22/94	01/12/95	01/12/95
95057907	WATER	HG	12/22/94	01/12/95	01/12/95
95057909	SOIL	HG	12/22/94	01/12/95	01/12/95
95057910	SOIL	HG	12/22/94	01/12/95	01/12/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
95057001	WATER	NI	12/21/94	12/30/94	01/10/95
95057002	WATER	NI	12/21/94	12/30/94	01/10/95
95057003	WATER	NI	12/21/94	12/30/94	01/10/95
95057004	WATER	NI	12/21/94	12/30/94	01/10/95
95057901	WATER	NI	12/22/94	01/06/95	01/10/95
95057902	WATER	NI	12/22/94	01/06/95	01/10/95
95057903	WATER	NI	12/22/94	01/06/95	01/10/95
95057904	WATER	NI	12/22/94	01/06/95	01/10/95
95057905	WATER	NI	12/22/94	01/06/95	01/10/95
95057906	WATER	NI	12/22/94	01/06/95	01/10/95
95057907	WATER	NI	12/22/94	01/06/95	01/10/95
95057909	SOIL	NI	12/22/94	12/29/94	01/07/95
95057910	SOIL	NI	12/22/94	12/29/94	01/07/95



APPENDIX H

CASE NARRATIVES

CASE NARRATIVE

LAB NAME: Energy & Environmental Engineering, Inc. (E3I)

E3I PROJECT: 950570 & 950579

CASE NO.: 0897 (Bellport)

SDG: GP1

SAMPLE NO.: GP1, GP10, GP11, GP2001, GP3001, GP4001, GP5001,  
GP6001, GP7001, GP8001, GP9001, SSGP4, SSGP5, TB.

VOLATILE ORGANICS: The percent recovery of 1,1-dichloroethene is slightly below the QC limit for the soil MSD, SSGP4MSD.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."



Charline Driscoll  
Project Manager

January 27, 1995

## CASE NARRATIVE

LAB NAME: Energy & Environmental Engineering, Inc. (E3I)  
E3I PROJECT: 950570 & 950579  
CASE NO.: 0897 (Bellport)  
SDG: GP1  
SAMPLE NO.: GP1, GP10, GP11, GP2001, GP3001, GP4001, GP5001,  
GP6001, GP7001, GP8001, GP9001, SSGP4, SSGP5.

**SEMIVOLATILE ORGANICS:** It is acknowledged that the water method blank SBLKW271 contains two nontarget compounds.

It is acknowledged that the soil method blank SBLKS271 contains the aldol condensation product and two additional nontarget compounds.

It is acknowledged that the water method blank SBLKW262 contains four nontarget compounds. This blank also contains Di-N-Butylphthalate >50 ppb.

It is acknowledged that the water MSB contains two nontarget compounds.

It is acknowledged that the soil MSB contains the aldol condensation product and two additional nontarget compounds.

The results of two analyses are reported for sample GP3001. The initial analysis had low recovery of some surrogates. The sample was reextracted out of holding time and had acceptable surrogate recoveries.

**PESTICIDES/PCBs:** Recovery of the surrogate TCX was below the advisory limit on DB608 for the following: GP11, GP11RE, GP5001RE, PBLK0220 and PBLK0214.

Recovery of the surrogate DCB was below the advisory limit on DB608 for the following: GP1MS, GP11 and PBLK0220.

Recovery of the surrogate DCB was below the advisory limit on RTX1701 for the following: GP8001, GP11 and PBLK0220.

For the sequence beginning 1/12/95 on DB608:

- PEMB6: There was an instrument malfunction resulting in a misinjection. When this was discovered, PIBLKB7 and PEMB7 were analyzed and were acceptable.
- INDAMB5: This standard is acceptable. The associated INDB was not analyzed due to an analyst error (The INDA standard was mistakenly analyzed twice).

For the sequence beginning 1/29/95 on DB608:

- PEMN6: Endrin breakdown is >20%.
- PIBLKN1: The concentration of the surrogate is 2.0 ug/mL rather than 0.02 ug/mL.

For the sequence beginning 1/30/95 on DB608:

- PEMY: Endrin breakdown is >20%; combined breakdown is >30%.
- PEMY1: Endrin breakdown is >20%; combined breakdown is >30%.
- PEMY5: Endrin has %D >25.
- INDAMY5: Dieldrin, endrin, methoxychlor, TCX and DCB have %D >25.

For the sequence beginning 2/8/95 on DB608:

- RESCE: There was a retention time shift for this standard. The retention times were consistent for the rest of the ICAL, so this does not affect the data.
- PEME1: Endrin breakdown is >20%.
- PEME7: Endrin breakdown is >20%. There was a retention time shift for DCB 0.03 minute outside the RTW. The associated PIBLK also had a DCB retention time shift 0.02 minute outside the RTW. The sample bracketed by these standards had acceptable retention times for the surrogates.
- INDAME6/INDBME6: TCX and DCB had %D >25. There was a retention time shift for all compounds. The only sample affected is GP7001. For this sample, RTWs and CFs based on this INDA/INDB were established to identify and quantitate compounds in the sample. Form 6s are included in the data package.
- INDAME6A/INDBME6A: TCX and DCB had %D >25.
- TOXAPHE: The concentration is 5.0 ug/mL instead of 0.15 ug/mL (analyst error).

For the sequence beginning 2/13/95 on DB608:

- PEMU1: Alpha-BHC, beta-BHC, gamma-BHC and endrin have %D >25.
- PEMU20: 4,4'-DDT and methoxychlor have %D >25. Endrin breakdown is >20 %; combined breakdown is >30%.
- INDAMU21: 4,4'-DDT, methoxychlor, TCX and DCB have %D >25.
- INDBMU21: Endrin ketone, TCX and DCB have %D >25.

For the sequence beginning 1/12/95 on RTX1701:

- PEMG: Endrin has %D >25.
- PEMG1: Endrin has %D >25 for 4,4'-DDT. Endrin breakdown is >20%; combined breakdown is >30%.
- PEMG2: Endrin breakdown is >20%.
- PEMG6: There was an instrument malfunction resulting in a misinjection. When this was discovered, PIBLKG7 and PEMG7 were analyzed.
- PEMG7: Endrin has %D >25. Endrin breakdown is >20%; combined breakdown is >30%.
- INDAMG5: This standard is acceptable. The associated INDB was not analyzed due to an analyst error (The INDA standard was mistakenly analyzed twice).

For the sequence beginning 1/29/95 on TRX1701:

- PEMS6: Endrin has %D >25. Endrin breakdown is >20%; combined breakdown is >30%.
- INDAMS7: Endrin has %D >25.
- PIBLKS1: The surrogate concentration is 2.0 mg/mL rather than 0.02 ug/mL.

For the sequence beginning 1/30/95 on RTX1701:

- There was a retention time shift for the RESCR, PEMR and INDALR (first three injections). The retention times were consistent for the rest of the ICAL. The INDAL standard was reanalyzed at the end of the ICAL in order to use consistent retention times.
- PEMR: Endrin breakdown is >20%.
- PEMR1: Endrin breakdown is >20%; combined breakdown is >30%.
- PEMR5: Endrin and methoxychlor have %D >25.
- INDAMR5: Endrin and methoxychlor have %D >25.

For the sequence beginning 2/8/95 on RTX1701:

- INDAMJ6: Endrin has %D >25.
- INDBMJ6: TCX and DCB have %D >25.
- TOXAPHJ: The concentration is 5.0 ug/mL instead of 0.5 ug/mL (analyst error).

For the sequence beginning 2/13/95 on RTX1701:

- Linearity: 4,4'-DDT has >30 %RSD.
- PEMV1: 4,4'-DDT has %D >25; combined breakdown is >30%.
- PEMV20: Endrin breakdown is >20%; combined breakdown is >30%.

There is no soil MSB associated with these samples. The soil MS/MSD had acceptable recoveries. A water MS/MSD and MSB were also analyzed. The water MSB uses the same spiking solution as the soil MSB, and it demonstrates that the spiking solution is acceptable.

Samples GP11 and GP5001 were contaminated in the prep lab during the initial extraction. They were reextracted outside of holding time. The results of both the initial extractions and reextractions are reported.

All sample were analyzed outside of holding time. In addition, PBLK1222 was analyzed two days out of holding time.

For sample GP9001, the concentration of 4,4'-DDD is at the calibration limit; it is flagged with an "E".

The results of two analyses are reported for sample GP11. The initial analysis had endrin ketone at a concentration that was greater than the highest calibration standard; it is flagged with an "E". It was not analyzed at a dilution because it was believed to be due to lab contamination. This is supported by the reextraction.

Florisil checks:

Lot 953062: 2,4,5-TCP has >5 % recovery.

Lot SP0650G3: Recoveries of alpha-BHC, gamma-BHC, 4,4'-DDT, methoxychlor and TCX are outside QC limits.

GPC check:

12/28/94 - For GPCMIX1, % recoveries are outside QC limits for all compounds.

There are peaks present at >1/2 CRQL which are caused by the autosampler vial septum. These peaks sometimes appear in the second analysis of a sample if the punctured septum is not replaced immediately after the initial analysis.

1/17/95 - No GPC chromatograms are available for GPCMIX1, GPCMIX2, GPCBLK and SSGP4.

For GPCMIX1, %recoveries are outside QC limits for heptachlor and endrin.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."



Charline Driscoll  
Project Manager

March 10, 1995

3.A

## NARRATIVE

### Description of Instrumentation:

#### 1. ICP:

Perkin-Elmer 6500XR

Meinhard Model TR-30-C2 Nebulizer

No other significant modifications.

#### Operating conditions:

RF Power: 1200W

Coolant gas: 16lpm

Auxiliary gas: 0.4lpm

Nebulizer gas: 1.0lpm (indicated)

Observation height: 17mm

#### Wavelengths used:

Al 237.3nm	Pb 220.3
Sb 206.8	Fe 240.5
Ba 233.5	Mg 279.1
Be 313.0	Mn 294.9
Cd 214.4	Ni 231.6
Ca 317.9	K 766.4
Cr 267.7	Ag 328.1
Co 228.6	Na 589.0
Cu 324.7	V 292.4
	Zn 231.6

#### Explanation of error messages for ICP raw data:

**Peak offset:** The system did not find a peak at the analytical wavelength. When the concentration is below the detection limit this is not an error, since it merely states that the element was not found. At higher concentrations it indicates that the peak wavelength has drifted unacceptably (this did not happen during the gathering of this data), or that the concentration is too high for the system to measure. In this case the sample was diluted appropriately to bring those elements into range.

**Over calibration:** The concentration determined was more than 10% above the highest standard. This is not an error condition, until the reading approaches the limit of the system's measuring capabilities. In this case the sample was diluted, as above.

**2. Graphite Furnace AA:**

Perkin-Elmer 5100 Zeeman AA with an AS-60 Autosampler. No significant modifications or changes.

**Operating conditions:**

In accordance with CLP procedures and following manufacturer's recommendations. The instrument was used for the analysis of As, Pb, Se, and Tl. The integration time used for all elements was 5.0 seconds.

**3. Cold Vapor Mercury:**

Buck Scientific Model 400 Mercury Analyzer with Hewlett-Packard 3392A Integrator.

**Calibration Standards:**

Mixed (for ICP) and single element calibration standards were made up as described in our Standards Logs from 1000ppm stock solutions. Specific sources are given in tables at the end of this narrative.

Initial and continuing calibration verification standards used were produced in-house from stock standards other than those used to prepare the standardization solutions.

**Laboratory Control Samples:**

The above ICV standards were used as Laboratory Control Samples for all aqueous samples. The soil Laboratory Control Sample was from ERA.

**Interference Check Sample:**

The Interference Check Samples A and AB were made up by us and tested in accordance with SOW ILM02.0.

## Comments to the Data Package:

**Serial Dilutions:** ICP serial dilutions were made by diluting 10ml of sample into a total volume of 50ml.

**Statement of Work:** These results are in accordance with EPA-CLP SOW ILM02.0 and NYSDEC ASP 12/91.

**AA Analysis Times:** Form 14 uses times which are stored by the AA computer, which are the time when the analysis starts. The time printed out on the raw data, however, is when the analysis of each replicate is completed, which is about 2½ minutes later for the first replicate. Thus the time on the raw data for the first replicate will always be two or three minutes after the time specified for that sample on Form 14.

**Exceptions to ASP Methods:** None.

**ICP Interelement Corrections:** The ICP instrument used, a Perkin-Elmer 6500XR, cannot perform interelement corrections. Therefore they must be done off-line after the raw data is generated. For this reason the raw data will not agree with the forms where interelement corrections have been applied. The data may be checked by applying the correction factor on Form 11 to the raw data. This is done by multiplying an experimentally determined factor (the value on Form 11) times the interferant concentration and then subtracting this product from the analyte concentration. This is done before any conversions to mg/kg for soil samples. This formula can be expressed as:

$$CA_{\text{corr}} = CA_{\text{raw}} - (CI * F),$$

where  $CA_{\text{corr}}$  is the concentration of the analyte corrected for the interference;  $CA_{\text{raw}}$  is the analyte concentration as it appears in the raw data (i. e., before correction);  $CI$  is the interferant concentration in that sample (from the raw data); and  $F$  is the factor for that interference, from Form 11. For the interference of Fe on Zn, for example, Fe is the interferant and Zn is the analyte. Multiple IEC's (e. g., Fe and Al on Cd) are assumed to be simply additive. Once the decision to do a particular IEC is made, a computer routine is used which performs the above calculation on all samples where the correction (the product of the IEC factor and the interferant concentration) is both larger than the analyte IDL and larger than 0.5% of the analyte concentration.

The corrections applied and the samples involved are:

Correction	Samples Correction Applied To:
Fe on Mn	all aqueous samples LCSS; ICS stds.
Fe on Cd	GP2001, GP3001, GP7001, GP9001; ICS stds.
Fe on Sb	GP3001; ICS stds.
Fe on Zn	GP3001, GP7001, GP9001; ICS stds.
Al on Cd	ICS stds.

## ICP STANDARDS

Element	Source	Concentration
Standard 1:		Prepared: 25 Jan. 1994
Ba	Baker lot F22626	9.98
Be	Leeman lot 817931	1.00
Cd	VWR lot I2-11	1.00
Co	VWR lot L2-28	2.00
Cr	Baker lot G23620	1.996
Cu	Leeman lot 817931	2.00
Mn	PlasmaChem lot D3J25N1P71	5.00
Ni	VWR lot I2-11	2.00
Pb	VWR lot D3-09	10.00
Sb	Baker lot G12610	2.00
V	Baker lot F13651	2.002
Zn	VWR lot L2-09	5.00
Ag	Plasma Chem lot J4J47N1P209	2.00
Standard 2:		Prepared: 25 Jan. 1994
Al	VWR lot A3-14	100.0 mg/L
Ca	VWR lot D3-28	100.0
Fe	Baker lot G05633	100.0
Mg	VWR lot C3-30	100.0
Standard 0:		Prepared: 25 Jan. 1994
Blank		
NAK Standard 1:		Prepared: 27 Jan. 1994
Na	Baker lot G09632	100.7 mg/L
K	PlasmaChem lot D3J1901P176	100.0

All standards were made up in 1% nitric acid and 5% hydrochloric acid

## AA STANDARDS

Element	Source	Concentrations	Date(s)
As	Env. Express lot 390602	10, 30, 60 ug/L	1/18, 1/20
Pb	VWR lot D3-09	3, 25, 50 ug/L	1/13, 1/14, 1/18
Se	Fisher 931473-18	5, 25, 45	1/17, 1/22
Tl	Env. Express lot 390303	10, 30, 60	1/11, 1/13, 1/18

Integration time 5.0 secs. for all elements.

APPENDIX I

CHAIN - OF - CUSTODY FORMS

Bellport



Energy & Environmental Engineering, Inc.  
Phone: (617) 666-5500 FAX: (617) 666-5802

35 Medford St.  
Somerville, MA 02143

P.O. Box 215  
E. Cambridge, MA 02143

CHAIN OF CUSTODY RECORD

Page L of L

Client Name: C/Om/Grant Hardware Project #: 0897 Project Name: Bellport P.O. # \_\_\_\_\_  
 Client Address: 100 Crossway Park West Woodbury NY 11797 Telephone #: (516) 486-8200  
 Report to: Dave Keil Date Results Required: \_\_\_\_\_ Invoice To: \_\_\_\_\_

Sample Identification	Date / Time Sampled	Sample type	Analyses										Total # of cont.	Comments		
			VOA	ASW	Pet RB	metals										
BPT-GW-GP1-001	12/21/94/1235	Water	6	9	3										18	Plus MS/MSD
BPT-GW-GP11-001	↓ 1345	↓	2	3	1										6	
BPT-GW-GP6-001	↓ 1510	↓	2	3	1										6	
BPT-GW-GP3-001	↓ 1645	↓	2	3	1										6	
/																

Relinquished by (Signature) <i>Grade/Mr (COM)</i>	Date / Time 12/21/94/1730	Received by (Signature)
Relinquished by (Signature)	Date / Time 12/21/94/10:30	Received by (Signature) <i>Lin/h tong le</i>

Remarks: oh OK  
cooler 10°C



Energy & Environmental Engineering, Inc.  
 Phone: (617) 666-3500 FAX: (617) 666-5802

35 Medford St.  
 Somerville, MA 02143

P.O. Box 215  
 E. Cambridge, MA 02141

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client Name: COM / Grant Hardware Project #: 0897 Project Name: Bellport P.O. # \_\_\_\_\_  
 Client Address: 100 Crossways Park West Woodbury NY 11797 Telephone # (516) 496-8200  
 Report To: Dave Keil Date Results Required: \_\_\_\_\_ Invoice To: \_\_\_\_\_

Sample Identification	Date / Time Sampled	Sample Type	Analyses										Total # of cont.	Comments	
			Volat	Asb	Pest	PCB	metals								
BPT-GW-6P4-001	12/24/94	Water	2	3	1									6	
BPT-GW-6P5-001	1010		2	3	1									6	
BPT-GW-6P7-001	1110		2	3	1									6	
BPT-GW-6P8-001	1250		2	3	1									6	
BPT-GW-6P9-001	1345		2	3	1									6	
BPT-GW-6P10-001	1440		2	3	1									6	
BPT-GW-6P2-001	1600		2	3	1									6	
Trip Blank		↓	2											2	
BPT-SS-6P4-001	12/24/94 0845	Soil	3	3	3									9	Plus ms/msd
BPT-SS-6P5-001	12/24/94 0915	Soil	1	1	1									3	

Relinquished by (Signature): Frank Ma (COM) Date / Time: 12/24/94 / 1700 Received by (Signature): \_\_\_\_\_ Remarks: \_\_\_\_\_  
 Relinquished by (Signature): \_\_\_\_\_ Date / Time: 12/22/94 10:40 Received by (Signature): Wah Ma / TONG



SUFFOLK COUNTY  
DEPARTMENT OF HEALTH

SUFFOLK COUNTY CENTER  
RIVERHEAD, NEW YORK 11901

GEORGE E. LEVINE, M.D., M.P.H.  
COMMISSIONER

MAX B. BACKER, M.D., M.P.H.  
COMMUNICABLE DISEASE CONTROL

MICHAEL D. EUSKEMI, M.D.  
ADULT HEALTH AND GERIATRICS

November 30, 1965

Bellport Sanitary Laundry  
Neck Road  
Bellport, New York

Gentlemen:

Our records indicate that you are still operating a laundromat at Neck Road, Bellport, New York in violation of the Sanitary Code of the County of Suffolk and the Public Health Law of the State of New York, in that you are permitting waste material from your laundromat or plant to be discharged into the ground waters of the county, without first treating same by methods and facilities approved by this Department and in accordance with the standards of this Department.

You were directed to submit plans for treatment of waste from your plant to this Department for approval by November 1, 1965. These plans are to be prepared and signed by a professional engineer duly licensed by the State of New York.

The November 1, 1965, date has been extended to January 30, 1966. This extension is granted in accordance with the request made by the Suffolk County Automatic Laundry Association to allow their engineer to prepare a report, which is to be submitted to the Department of Health no later than January 20, 1966.

Failure to submit plans by you by January 30, 1966, and to obtain approval for such plans from this Department will result in legal proceedings to enjoin the operation of the plant and penalties that may be assessed.

Very truly yours,

H. W. Davids, P.E.  
Director  
Environmental Health Services

HWD:dej

CERTIFIED LETTER - RETURN RECEIPT REQUESTED

INTER-OFFICE MEMORANDUM  
DEPARTMENT OF ENVIRONMENTAL CONTROL

TO: James H. Pim, P. E.  
FROM: Gordon Watt, Sr. San.  
SUBJECT: Bellport Laundry

DATE: Aug. 13, 1971

---

Bellport Laundry  
Head of Neck Road  
Bellport, N. Y.  
Mr. Bardiner Hulse  
Te. AT6-0347

An inspection was made by the writer of the above facility on Aug. 12, 1971 at approximately 2:30 P. M. A description of the process is as follows:

Waste water flows by gravity from a tank located just outside the building to two leaching basins which are dosed alternately. As per enclosed engineering report, basin #1 has a capacity of 410,000 gallons and basin #2 240,000 gallons. At the time of inspection basin #1 had approximately a depth of three to four feet of water. The estimated flow is approximately 4,000 gallons per day. A sample of the plant effluent was collected and taken to the Dept. of Health Laboratory at Smithtown. There have been no changes of the waste water disposal system submitted by the plant engineer dated July 1966.

Gordon Watt  
GW/rt  
Enc.

September 8, 1971

Bellport Laundry  
Head of Neck Road  
Bellport, N.Y. 11713

Gentlemen:

A recent inspection by a representative of this office on September 3, 1971 disclosed that you are producing a liquid industrial waste discharge without a permit; this is in violation of the New York State Standards of Ground Water Quality.

It will be necessary for you to correct this condition and obtain a permit to discharge industrial waste. Instructions for obtaining such a permit are enclosed.

It is of utmost importance that you retain the services of a professional engineer registered in New York as soon as possible. We expect to receive information to this effect before November 8, 1971 in the form of a letter from you stating whom you have retained and a letter from the engineer stating he has been retained by you.

If you have any questions regarding the above please contact me at 234-2622.

Very truly yours,

John M. Flynn, P. E.  
Commissioner

By: James H. Pim, P. E.  
Enforcement Section  
JHP/rt  
Enc.

Call Bob for file  
Mr. Dolger  
286-0576

Rec. \_\_\_\_\_  
Date: \_\_\_\_\_  
Request: \_\_\_\_\_  
Address: \_\_\_\_\_

Jan. 23, 1974

Bellport Laundry

Mr. William Dolger  
Bellport Cleaners  
136 Main St.  
Bellport, N.Y. 11713

109A/WG

Dear Mr. Dolger:

An inspection of your premises on Jan. 22, 1974 by Mr. Sander Sternig, a representative of this office revealed that liquid dry-cleaning material, per-chlor ethylene, was accidentally spilled onto the surface of the ground. In addition to being a safety hazard, the dumping of this material is in violation of New York State Classification and Standards Governing Groundwater Discharge.

As explained to you by Mr. Sternig, it is imperative that all solvents be stored in air-tight drums and removed by an approved scavenger service. A list of the scavengers for your review is enclosed.

Your cooperation in this matter will be appreciated. A reinspection shall be conducted on or about Feb. 1, 1974.

Very truly yours,

Gordon Watt  
Enforcement Section  
GW/rt  
enc.  
cc: A. Waldron  
Village Hall  
Bellport, N.Y. 11713

WATER POLLUTION CASE REPORT

Dates of Inspections: 10/3/66, 8/21/71,  
10/5/71, 5/8/72, 4/28/75

Date of Report: 4/28/75

Dates of violation (s): 8/21/71, 10/5/71,  
5/8/75, 10/3/66, 4/28/75

NAME OF POLLUTER: Operating Bellport - Islip Launderers and Cleaners, Inc.  
Owner \_\_\_\_\_

1. Commonly used: same
2. Exact corporate, partnership or proprietorship:

3.	<u>Persons</u>	<u>Addresses</u>	<u>Phone</u>
	President Partner or Owner	Bardiner Hulse Bellport-Islip Launderers and Cleaners, Inc. Head of Neck Rd. Bellport	AT 6-0347

~~Vice President or  
Chief Municipal Officer~~ ARE NOW HANDLING BUSINESS OF ISLIP SANITARY  
LAUNDRY, WHICH HAD A FIRE IN 1973.

Plant Manager or  
Operator

4. LOCATION OF POLLUTER

	<u>Office</u>	<u>Operation</u>
Street:	Head of Neck Rd.	S
City, Town or Village:	Bellport (V) Brookhaven (T)	A
County:	Suffolk	M
Phone No.:	AT 6-0347	E

5. INTERVIEWS: (All persons present at investigation)

<u>Names</u>	<u>Addresses</u>	<u>Titles</u>
Gordon Watt	S.C.D.E.C.	Environ. IV
Bardiner Hulse	Bellport Laundry	Owner
Arthur J. Koerber	former NYSDEC (now SCDEC)	Sr. San. Engineer
James H. Pim	S.C.D.E.C.	Chief, Water Pollu- tion Control Sect

Admissions made or schedules agreed upon:

6. OWNERSHIP OF PROPERTY AND FACILITIES:  
Breakdown of who owns property and facilities:

7. TYPE OF OPERATION:  
SIC. NO. 7211

8. TYPE OF WASTE:

Sanitary ( )

Population:

Treatment:

No. and type of  
Outlets and Load:

Industrial (X)

Type of Waste: Laundry - pH, fluorides, COD and  
others

Treatment: NONE

No. and type of 1 outlet to GA waters  
Outlets and Load:

9. RECEIVING AND DOWNSTREAM WATERS:

Drainage Basin: Long Island

Common name of water: groundwater

Classification: GA

Standard:

Date of Classification: 1967

Waters Index No:

Mileage:

Item No:

CHARACTERISTICS:

	<u>Effluent</u>	<u>Upstream</u> (Indicate distance from Discharge)	<u>Downstream</u>
VISUAL: Floating Solid	( )	( ) ←	( ) →
Settleable Solids	( )	( ) →	( ) →
Sludge Deposits	( )	( ) →	( ) →
Scum	(x)	( ) →	( ) →
Gassing	( )	( ) →	( ) →
Odor	(x)	( ) →	( ) →
Color	( )	( ) →	( ) →
Oil	( )	( ) →	( ) →
Turbidity	(x)	( ) →	( ) →
Foam	( )	( ) →	( ) →
Misc.	( )	( ) →	( ) →

Description of Solids, Scum or Turbidity in stream:

<u>Observers:</u>	<u>Name</u>	<u>Time</u>	<u>Exact Place</u>
	Gordon Watt	8/12/71 - 2:30 p.m.	leaching basins

Flow Measurements or estimates:

<u>Method Used</u>	<u>Influent</u>	<u>Effluent</u>	<u>Stream</u>
Interview with owner		4,000 gpd	

11. ANALYTICAL RESULTS:

ATTACH CHEMICAL AND LABORATORY TEST RESULTS FOR:

	<u>Influent</u>	<u>Effluent</u>	<u>Upstream</u>	<u>Downstream</u>
BOD	( )	( )	( )_____	( )_____
DO	( )	( )	( )_____	( )_____
PH	( )	(X)	( ) <u>NA</u>	( ) <u>NA</u>
Other	( )	(X)	( )_____	( )_____

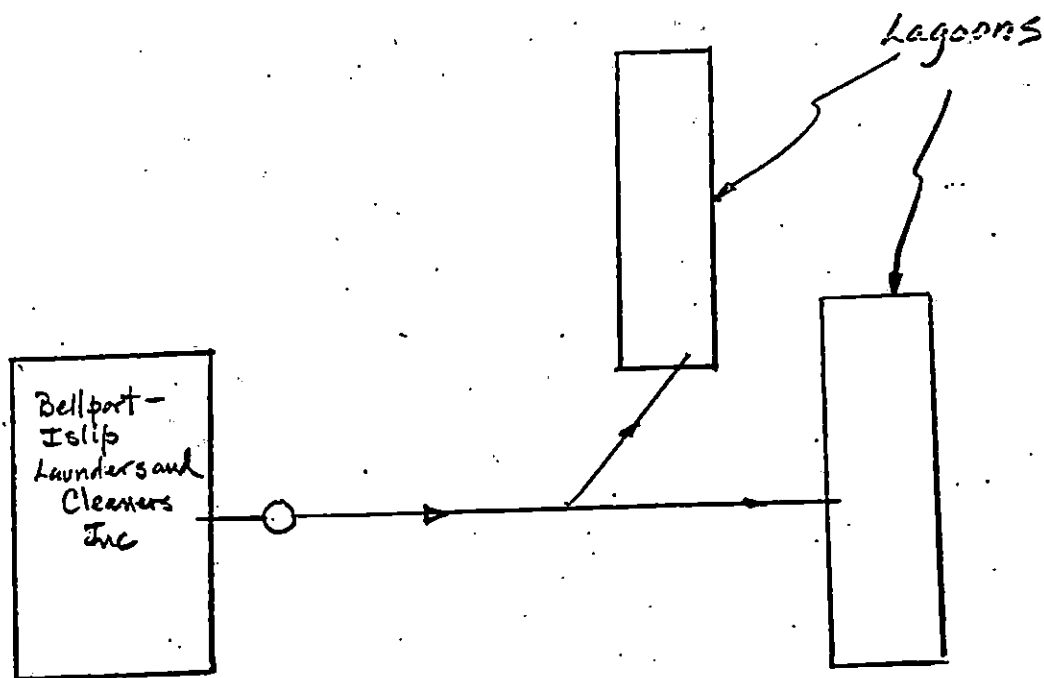
Indicate exact points of sampling on diagram on following page.

NOTE: Analysis of effluent sample without analysis of receiving waters samples.

SEE APPENDIX "A"

12. DRAW DIAGRAM

1. Show how effluent reaches receiving waters
2. Sampling points
3. Indicate distances
4. Reference point on USGC map
5. Indicate North
6. Show flow direction and quantity



Head of the Neck Rd.

13. Effects which may be argued with reasonable certainty constituting contravention of standards on waters to which receiving waters are tributary.

14. Attempts to obtain voluntary compliance and history. Attach pertinent correspondence.

SEE APPENDIX "B"

Complaints Registered

<u>Name</u>	<u>Date</u>	<u>Address</u>	<u>Phone</u>
-------------	-------------	----------------	--------------

Fishkills -- Number of Fish NA  
 Date \_\_\_\_\_

\* Photographs taken should be attached with description, date taken, and name of photographer.

15. Other Article <sup>17</sup> ~~12~~ violations.

Construction or operation without permit (Section ~~17-0701~~ 17-0701)

Ineffective primary treatment (Sanitary Sewage) 1225

Industrial waste discharging to municipal system contributing to pollution of receiving water (Section 1242)

Violation of Permit Conditions

Prohibits construction or operation of new outlet without proper permit as indicated in 17-0701. (Section 17-0505)   
 Failure to monitor outfall and send data to NYSDEC and/or its agent (Section 17-0511)   
 Discharge of wastes in contravention of GA standards. (Section 17-0501)

16. Suggested schedule of abatement steps:

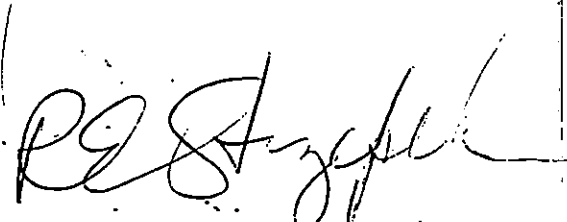
1. Immediate retention of professional engineer to design a system to result in discharge meeting groundwater standards.
2. Present lagoon system to be made as sound as possible to prevent direct leakage to stream.

17. Comments:

SPDES sent 9/17/74 - no response to date

Consent orders sent - 3/28/72, 12/10/74. Both never signed.

Due to previous lack of cooperation a hearing should be scheduled without delay.

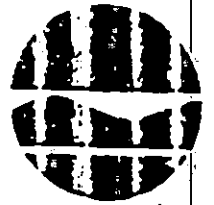


RICHARD E. STRZEPEK  
(Signed)

DATE: April 28/1975

New York State Department of Environmental Conservation

Building 40 - S. U. N. Y.  
Stony Brook, New York 11794



Ogden Reid,  
Commissioner

July 21, 1975

Bellport-Islip Cleaners & Launderers, Inc.  
Head of Neck Road  
Bellport, New York 11713

Attention: Mr. Bardiner Hulse, President

Re: Alleged Violation of Sections  
17-0501, 17-0505, 17-0511 and  
17-0701, of the Environmental  
Conservation Law

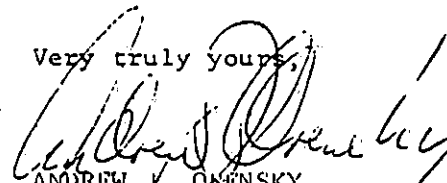
Dear Mr. Hulse:

Records of this Department indicate that your firm is in violation of the above captioned sections of the Environmental Conservation Law, in that you have been discharging untreated laundry waste into the groundwaters of the State of New York without the requisite permit.

In view of the foregoing, you are hereby requested to appear at this office on Monday, July 28, 1975 at ten-thirty in the morning in order to discuss the remedial action to be taken to bring your firm into compliance with the Environmental Conservation Law.

We would appreciate confirmation either by mail or telephone call at your very earliest convenience.

Very truly yours,

  
ANDREW J. ORZENSKY  
Regional Attorney

AJO:cm

cc: J. Pim - SCDEC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM  
APPLICATION FOR PERMIT TO DISCHARGE - SHORT FORM C

To be filed only by persons engaged in manufacturing and mining

Do not attempt to complete this form before reading accompanying instructions

Please print or type

1. Name, address, location, and telephone number of facility producing discharge

A. Name Bellport - Islip Launderers & Cleaners, Inc.

B. Mailing address

1. Street address NEAR OF NECK ROAD

2. Post Office BELLPORT

3. State NEW YORK

4. County SUFFOLK

5. ZIP 11713

C. Location:

1. Street Same as Above

2. (C, T, V) \_\_\_\_\_

3. County \_\_\_\_\_

4. State \_\_\_\_\_

D. Telephone No. 516 / AT - 6-0347

Area  
Code

2. SIC

(Leave Blank)

3. Number of employees 30 (varies)

If all your waste is discharged to a publicly owned waste treatment facility and to the best of your knowledge you are not required to obtain a discharge permit, proceed to item 4. Otherwise proceed directly to item 5.

4. If you meet the condition stated above, check here  and supply the information asked for below. After completing these items, please complete the date, title, and signature blocks below and return this form to the proper reviewing office without completing the remainder of the form.

A. Name of municipality responsible for receiving waste \_\_\_\_\_  
 B. Municipal facility receiving waste: \_\_\_\_\_  
 Private Waste System

1. Name \_\_\_\_\_  
 2. Street address \_\_\_\_\_  
 3. (C, T, V) \_\_\_\_\_  
 4. County \_\_\_\_\_  
 5. State \_\_\_\_\_  
 6. ZIP \_\_\_\_\_

5.  Principal product,  raw material (Check one) \_\_\_\_\_  
 6. Principal process \_\_\_\_\_  
 Commercial Chemicals of Linens, Hospital Wear, etc.

7. Maximum amount of principal product produced or raw material consumed per (Check one)

Basis	Amount							
	1-99	100-199	200-499	500-999	1000-4999	5000-9999	10,000-49,999	50,000 or more
A. Day								50,000 Spd
B. Month								
C. Year								

8. Maximum amount of principal product produced or raw material consumed, reported in item 7, above, is measured in (Check one):

- A.  pounds
- B.  tons
- C.  barrels
- D.  bushels
- E.  square feet
- F.  gallons
- G.  pieces or units
- H.  other, specify \_\_\_\_\_

9. (a) Check here if discharge occurs all year  , or

(b) Check the month(s) discharge occurs:

1.  January    2.  February    3.  March    4.  April    5.  May  
 6.  June    7.  July    8.  August    9.  September    10.  October  
 11.  November    12.  December

(c) Check how many days per week:

1.  1    2.  2-3    3.  4-5    4.  6-7

10. Types of waste water discharged to surface waters only (check as applicable)

Discharge per operating day	Flow, gallons per operating day					Volume treated before discharging (percent)				
	0.1-999 (1)	1000-4999 (2)	5000-9999 (3)	10,000-49,999 (4)	50,000- or more (5)	None (6)	0.1-29.9 (7)	30-64.9 (8)	65-94.9 (9)	95-100 (10)
A. Sanitary, daily average	400					0				
B. Cooling water, etc. daily average										
C. Process water, daily average					50,000	0				
D. Maximum per operating day for total discharge (all types)	400				50,000					

11. If any of the three types of waste identified in item 10, either treated or untreated, are discharged to places other than surface waters, check below as applicable.

Waste water is discharged to:	Average flow, gallons per operating day				
	0.1-999 (1)	1000-4999 (2)	5000-9999 (3)	10,000-49,999 (4)	50,000 or more (5)
A. Municipal sewer system					
B. Underground well					
C. Septic tank	400				
D. <del>Underground</del> lagoon or pond					50,000
E. Other; specify					

12. Number of separate discharge points:

A.  1    B.  2-3    C.  4-5    D.  6 or more

13. Surface Discharge

Name and classification  
of Receiving Waters

\_\_\_\_\_ (name)

\_\_\_\_\_ (class)

Ground Discharge

Depth of groundwater & discharge

4'

(Depth of Dis.)

10'

(Depth to G.W.)

Subsurface Soil Conditions

Sandy, Well Draining soils

14. Does your discharge contain or is it possible for your discharge to contain one or more of the following substances added as a result of your operations, activities, or processes: ammonia, cyanide, aluminum, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, zinc, phenols, oil and grease, and chlorine (residual).    A.  yes    B.  no

I certify that I am familiar with the information contained in the application and that to the best of my knowledge and belief such information is true, complete, and accurate.

WARDNER HULSE

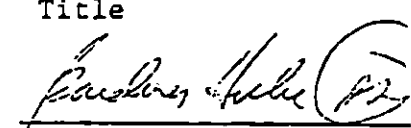
\_\_\_\_\_  
Printed Name of Person Signing

PRESIDENT

\_\_\_\_\_  
Title

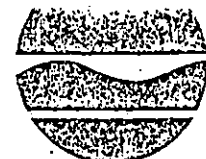
JUN 29, 1976

\_\_\_\_\_  
Date Application Signed

  
\_\_\_\_\_  
Signature of Applicant

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233



PSB

September 22, 1976

Peter A. A. Berle  
Commissioner

Bellport-Islip Launderers & Cleaners, Inc.  
Head of The Neck Road  
Bellport, New York 11713  
Attn: Bardiner Hulse, President

Re: Application for Permit to  
Discharge Under New York State  
State Pollutant Discharge  
Elimination System  
Application No. NY-0098698 (GWI)  
Brookhaven (X)(T)(K)  
Suffolk County

Dear Sir:

Enclosed is a "Notice of Application" which you are to have published in its entirety for one day during the week(s) of October 4-8 & 11-15, 1976, in the LONG ISLAND ADVANCE, Patchogue, New York newspaper. Please publish on the same day in each week, if more than one week is specified.

Read over the enclosed "Notice of Application" carefully before submitting it to the newspaper for publication, and contact this office immediately if there are any errors.

Please request the newspaper publisher to provide you with a "proof of publication" for this notice. Upon receipt of the "proof of publication" promptly forward it to this office (Room 201, 50 Wolf Road, Albany, New York) for filing with your application. You are to pay for the cost of the publication directly to the newspaper.

Please be advised that any delay or failure to comply with requirements for publication may result in the delay in the processing or granting of your New York State Pollutant Discharge Elimination System permit.

A copy of the draft SPDES permit is also enclosed for your review and comments (if any) to this office prior to the date shown on the enclosed "Notice". Do not send the draft permit to the newspaper for publication.

If you have any questions, please call Mr. Man Szeto at Area Code 518, 457-4125, 457-4126.

Very truly yours,

George K. Hansen, P.E.  
Chief, P.D.E.s. Permit Section  
Division of Pure Waters

Enclosures (w/copy of draft permit)

cc: OEA  
SPDES File  
Region #1(47-0974)  
Ms. Magee  
Suffolk Co. DEC ✓

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
NOTICE OF APPLICATION FOR PERMIT TO DISCHARGE UNDER  
PROVISIONS OF NEW YORK STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM  
APPLICATION NO. NY- 0098698 (GWI)

BELLPORT-ISLIP LAUNDERERS & CLEANERS, INC.  
Brookhaven (T), Suffolk Co.

Notice is hereby given that, pursuant to Titles 7 & 8 of Article 17 of the Environmental Conservation Law of New York State for the administration of and the issuance of permits under said Law,

Bellport-Islip Launderers & Cleaners, Inc.  
Head of the Neck Road  
Bellport, New York 11713  
Attn: Mr. Bardiner Hulse, Pres.

has filed a permit application with the New York State Department of Environmental Conservation at its office at 50 Wolf Road, Albany, New York 12233, where the application and related documents are available for public inspection.

The applicant discharges industrial wastes and a maximum of 1000 gallons per day of sanitary wastes into groundwaters from the applicant's facility located at the Head of the Neck Road, Bellport, N.Y., Brookhaven (T), Suffolk Co., where the applicant operates a commercial laundry.

The New York State Department of Environmental Conservation tentatively intends to issue a State Pollutant Discharge Elimination System (SPDES) permit for the subject discharge(s). A final issuance will follow; (1) review of the application to assure compliance with all applicable provisions of Article 17 of the Environmental Conservation Law of New York State and all applicable provisions of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500); (2) development of special conditions setting forth specific effluent limitations and other controls applicable to the discharge(s) described above including schedules of compliance; (3) development of monitoring and reporting requirements for the applicants performance; (4) consideration of all written comments from persons who qualify, as described below, as interested parties on this notice of application.

Any person interested in this application who wishes to comment thereon or become an interested party in any proceeding regarding this application must notify the undersigned in writing stating specific areas of interest on or before November 8, 1976.

All such written comments will be retained by the Department and considered in the formulation of the final determination. Any such interested party will be eligible to be heard if a public hearing is ultimately held in connection with this application.

Further information may be obtained from the New York State Department of Environmental Conservation, Division of Pure Waters, Room 201, 50 Wolf Road, Albany, New York 12233, (A.C. 518, 457-4125, 457-4126).

*George K. Hansen*  
George K. Hansen, P.E.  
Chief, P.D.E.S. Permit Section  
Division of Pure Waters

9/22/76

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM  
APPLICATION FOR PERMIT TO DISCHARGE - SHORT FORM C

To be filed only by persons engaged in manufacturing and mining

Do not attempt to complete this form before reading accompanying instructions

Please print or type

1. Name, address, location, and telephone number of facility producing discharge

A. Name Bellport - Islip Launderers & Cleaners, Inc.

B. Mailing address

1. Street address HEAD OF NECK ROAD

2. Post Office BELLPORT

3. State NEW YORK

4. County SUFFOLK

5. ZIP 11713

C. Location:

1. Street Same as Above

2. (C, T, V) \_\_\_\_\_

3. County \_\_\_\_\_

4. State \_\_\_\_\_

D. Telephone No. 516 / AT - 6-0347

Area  
Code

2. SIC   
(Leave Blank)

3. Number of employees 30 (varies)

If all your waste is discharged to a publicly owned waste treatment facility and to the best of your knowledge you are not required to obtain a discharge permit, proceed to item 4. Otherwise proceed directly to item 5.

4. If you meet the condition stated above, check here  and supply the information asked for below. After completing these items, please complete the date, title, and signature blocks below and return this form to the proper reviewing office without completing the remainder of the form.

A. Name of municipality responsible for receiving waste Private Disposal System

B. Municipal facility receiving waste:

1. Name \_\_\_\_\_

2. Street address \_\_\_\_\_

3. (C, T, V) \_\_\_\_\_ 4. County \_\_\_\_\_

5. State \_\_\_\_\_ 6. ZIP \_\_\_\_\_

5.  Principal product,  raw material (Check one) \_\_\_\_\_

6. Principal process Commercial Cleaning of Linens, Hospital Wear, etc.

7. Maximum amount of principal product produced or raw material consumed per (Check one)

Basis	Amount							
	1-99 (1)	100-199 (2)	200-499 (3)	500-999 (4)	1000-4999 (5)	5000-9999 (6)	10,000-49,999 (7)	50,000 or more (8)
A. Day								50,000 gpd
B. Month								
C. Year								

8. Maximum amount of principal product produced or raw material consumed, reported in item 7, above, is measured in (Check one):

A.  pounds    B.  tons    C.  barrels    D.  bushels    E.  square feet

F.  gallons    G.  pieces or units    H.  other, specify \_\_\_\_\_

9. (a) Check here if discharge occurs all year  , or

(b) Check the month(s) discharge occurs:

1.  January    2.  February    3.  March    4.  April    5.  May  
 6.  June    7.  July    8.  August    9.  September    10.  October  
 11.  November    12.  December

(c) Check how many days per week:

1.  1    2.  2-3    3.  4-5    4.  6-7

10. Types of waste water discharged to surface waters only (check as applicable)

Discharge per operating day	Flow, gallons per operating day					Volume treated before discharging (percent)				
	0.1-999 (1)	1000-4999 (2)	5000-9999 (3)	10,000-49,999 (4)	50,000- or more (5)	None (6)	0.1-29.9 (7)	30-64.9 (8)	65-94.9 (9)	95-100 (10)
A. Sanitary, daily average	400					0				
B. Cooling water, etc. daily average										
C. Process water, daily average					50,000	0				
D. Maximum per operating day for total discharge (all types)	400				50,000					

11. If any of the three types of waste identified in item 10, either treated or untreated, are discharged to places other than surface waters, check below as applicable.

Waste water is discharged to:	Average flow, gallons per operating day				
	0.1-999 (1)	1000-4999 (2)	5000-9999 (3)	10,000-49,999 (4)	50,000 or more (5)
A. Municipal sewer system					
B. Underground well					
C. Septic tank	400				
D. <del>Evaporation</del> lagoon or pond					50,000
E. Other, specify					

12. Number of separate discharge points:

A.  1 B.  2-3 C.  4-5 D.  6 or more

13. Surface Discharge

Name and classification  
of Receiving Waters

(name)

(class)

Ground Discharge

Depth of groundwater & discharge

4'

(Depth of Dis.)

10'

(Depth to G.W.)

Subsurface Soil Conditions

Sandy, Well Draining soils

14. Does your discharge contain or is it possible for your discharge to contain one or more of the following substances added as a result of your operations, activities, or processes: ammonia, cyanide, aluminum, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, zinc, phenols, oil and grease, and chlorine (residual). A.  yes B.  no

I certify that I am familiar with the information contained in the application and that to the best of my knowledge and belief such information is true, complete, and accurate.

BARDINER HULSE

Printed Name of Person Signing

PRESIDENT

Title

JAN 29, 1976

Date Application Signed

Signature of Applicant

Copies: SPDES File  
Region #1  
Suffolk Co. DEC ✓  
Mr. Crandall  
Mr. Pagano

Facility ID No. : NY 009 8698  
Effective Date : July 1, 1977  
Expiration Date : July 1, 1982

Atch: Part II-Gen'l Cond.  
Schedule A

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)  
DISCHARGE PERMIT

Special Conditions  
(Part I)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. §1251 et. seq.) (hereinafter referred to as "the Act").

Bellport - Islip Launderers & Cleaners, Inc.

is authorized to discharge from the facility described below:

Head of Neck Road  
Bellport (V), Brookhaven (T)  
Suffolk (C), New York 11713

into receiving waters known as:

Groundwater - Class GA

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department of Environmental Conservation no later than 180 days prior to the expiration date.

By Authority of George K. Hansen, P.E., Chief, PDES Permit Section  
Designated Representative of Commissioner of the  
Department of Environmental Conservation

6-7-77  
Date

George K. Hansen  
Signature

INITIAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning July 1, 1977 and lasting until September 1, 1978, the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number	Effluent Parameter	Discharge Limitations				Monitoring Reqmts.	
		(kg/day Daily Avg.)	(lbs/day Daily Max.)	Other Units (Specify) Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
001*	COD					Monthly	Grab
	Fecal Coliform					Monthly	Grab
	TDS					Monthly	Grab
	TSS					Monthly	Grab
	F					Monthly	Grab
	Flow					Cont	Recorded
002	Sanitary Waste Only - No Monitoring Required						

\*Monitoring Requirement Only

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored as follows: daily using a properly calibrated pH meter for 001. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

**FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning September 1, 1978 and lasting until July 1, 1982, the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number	Effluent Parameter	Discharge Limitations				Monitoring Recmts.	
		(kg/day Daily Avg.)	(lbs/day Daily Max.)	Other Units (Specify Daily Avg.)	(Specify Daily Max.)	Measurement Frequency	Sample Type & Hour
001	COD				150 mg/l	Bi-weekly	comp
	Fecal Coliform			200/100 ml	400/100 ml	"	Grab
	TDS				1000 mg/l	"	"
	TSS			30 mg/l	45 mg/l	"	"
	F				3.0 mg/l	"	"
	Cl <sub>2</sub> Residual				*0.5 mg/l min.	Daily	Grab
	Flow				Δ	Contin. Recor	
002	Sanitary Waste Only - No Monitoring required - Max Flow - 1000 gpd						

\* After 15 min contact time.

Δ Flow to be determined by approved engineering report  
 Permittee also subject to attached Schedule A

The pH shall not be less than 6.5 standard units nor greater than 8.5 standard units and shall be monitored as follows: 3 times daily using a properly calibrated pH meter for 001

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein during any calendar day.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

<u>Action Code</u>	<u>Outfall Number(s)</u>	<u>Compliance Action</u>	<u>Due Date</u>
01	001	Submit Approvable Engineering Report:	August 1, 1977
02		Submit Approvable Final Plans:	November 1, 1977
04		Commencement of Construction:	January 1, 1978
06		Report of Construction Progress:	April 1, 1978
08		Completion of Construction:	August 1, 1978
09		Attainment of Operational Level:	September 1, 1978

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or non-compliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS  
(Continued)

c) The permittee shall submit copies of the written notice of compliance or noncompliance required in section (b) to the following offices:

Chief, Compliance Section  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, New York 12233

Regional Engineer- Region #1  
New York State Department of Environmental Conservation  
Building 40 - SUNY  
Stony Brook, New York 11794

Suffolk County Dept. of Environmental Control  
1324 Motor Parkway  
Hauppauge, New York 11787

d) The permittee shall submit copies of any engineering reports, plans of study, final plans, as-built plans, infiltration-inflow studies, etc. required by this permit to the following offices, unless otherwise specified in this permit or in writing by the Department or its designated field office:

Regional Office - 3 copies

MONITORING, RECORDING AND REPORTING

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized and reported by submitting a completed and signed Discharge Monitoring Report form once every 3 months to the Department of Environmental Conservation and other appropriate regulatory agencies at the offices specified below. The first report will be due no later than Nov. 28, 1977. Thereafter, reports shall be submitted no later than the 28th of the following month(s): Feb., May, Aug., November.

Chief, Waste Source Monitoring Section  
New York State Department of Environmental Conservation  
Room 300 - 50 Wolf Road - Albany, New York . 12233

Regional Engineer - Region #1  
New York State Department of Environmental Conservation  
Building 40 - SUNY  
Stony Brook, New York 11794

Suffolk County Dept. of Environmental Control  
1324 Motor Parkway  
Hauppauge, New York 11787

c) If so directed by this permit or by previous request, Monthly Wastewater Treatment Plant Operator's Reports shall be submitted to the DEC Regional Office and county health department or county environmental control agency specified above.

d) Each submitted Discharge Monitoring Report shall be signed as follows:

1. If submitted by a corporation, by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the Discharge Monitoring Report originates;

2. If submitted by a partnership, by a general partner;

3. If submitted by a sole proprietor, by the proprietor;

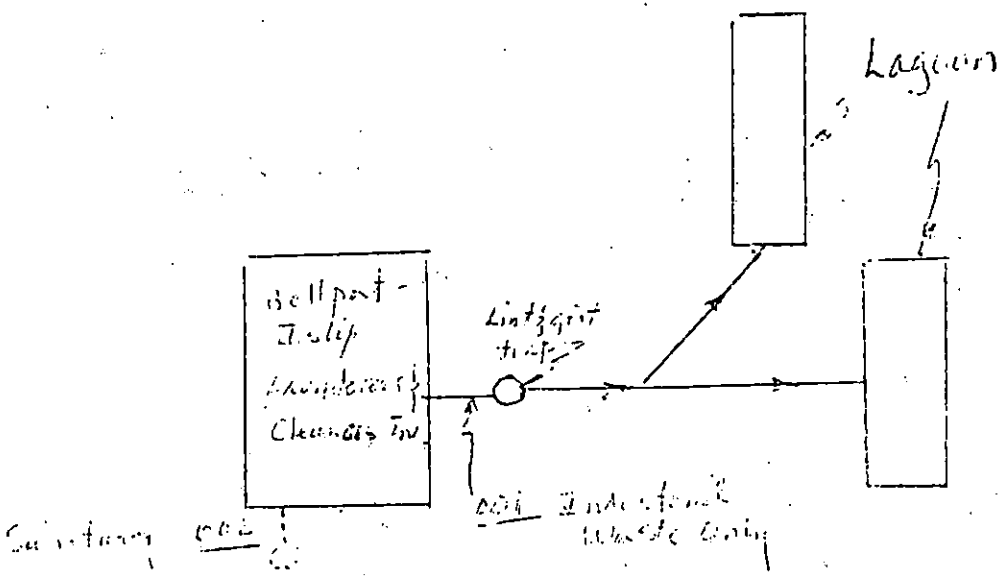
4. If submitted by a municipality, State or Federal agency, or other public entity; by a principal executive officer, ranking elected official, commanding officer, or other duly authorized employee.

e) Unless otherwise specified, all information submitted on the Discharge Monitoring Form shall be based upon measurements and sampling carried out during the most recently completed reporting period.

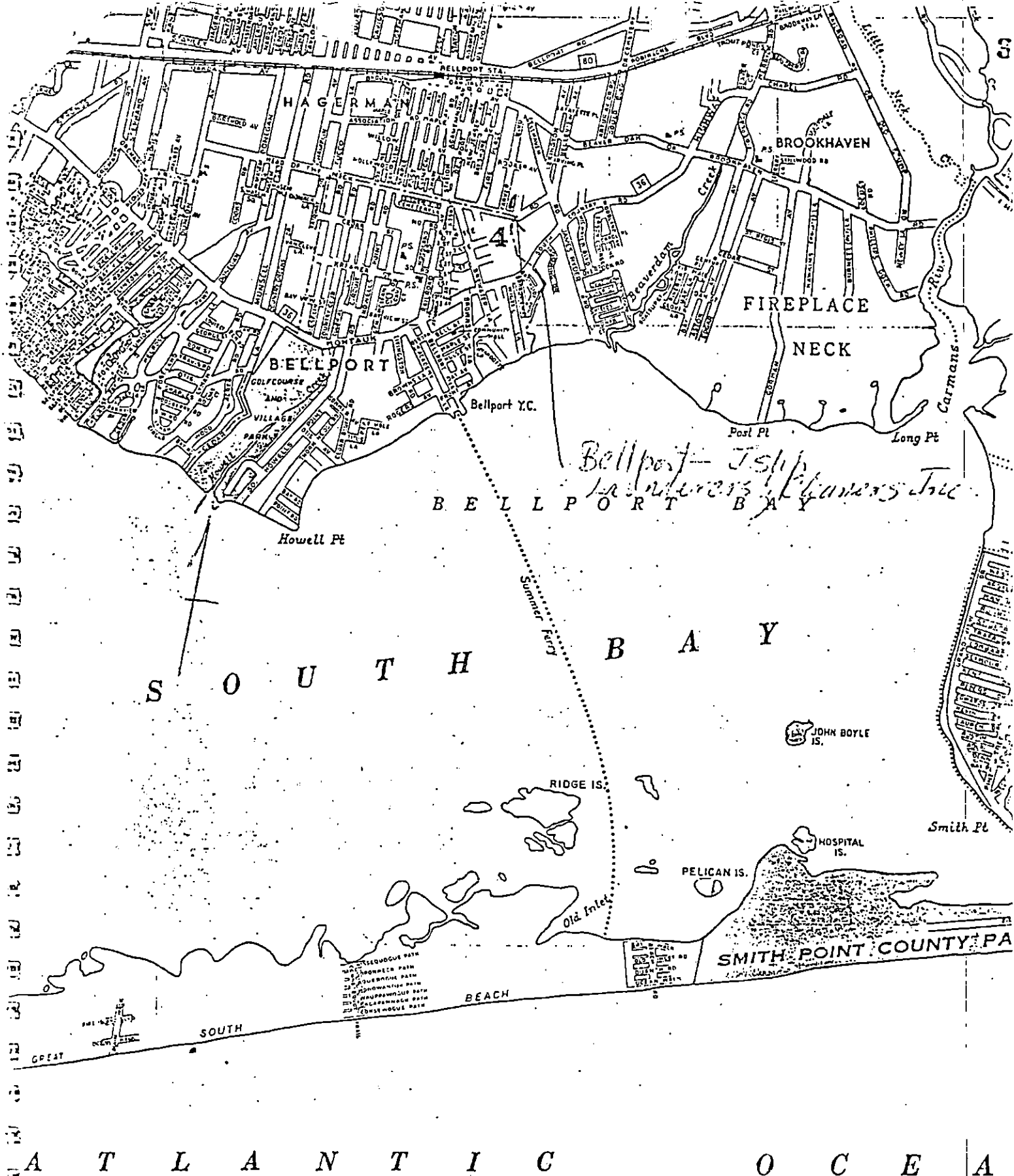
f) Blank Discharge Monitoring Report Forms are available at the above addresses.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location indicated below: (Show locations of outfalls with U.T.M. Coordinates and sketch or flow diagram as appropriate).



Head of Neck Road



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
BUILDING 4C, STATE UNIVERSITY OF NEW YORK  
STONY BROOK, NEW YORK 11794

BELLPORT ISLIP LAUNDERERS AND CLEANERS, INC  
HEAD OF NECK ROAD  
BELLPORT  
NEW YORK 11713

6/23/77

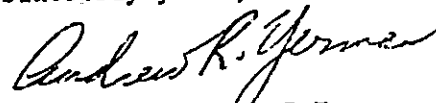
RE: SPDES Permit No. NY 009 8698  
Reference NO. 47-0944

Dear Sir:

Enclosed please find the State Pollutant Discharge Elimination System Permit for the discharge from BELLPORT ISLIP LAUNDERERS AND CLEANERS, INC  
at BELLPORT, SUFFOLK COUNTY

Please carefully read the general and other conditions and the schedule contained in the permit to insure compliance during the term of the permit. This permit should be kept available on the premises of the discharging facility at all times.

Sincerely yours,



Andrew R. Yerman, P.E.  
Regional Water Quality Engineer

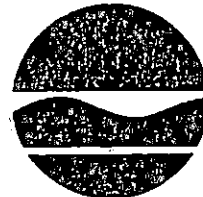
ARY:rb

Enclosures

cc: W. Garvey  
A. Machlin  
Agency

New York State Department of Environmental Conservation

Building 40 - State University of New York  
Stony Brook, New York 11794



Peter A. A. Berle,  
Commissioner

September 1, 1977

Bellport-Islip Launderers & Cleaners, Inc.  
Head of Neck Road  
Bellport, New York 11713

Attention: Mr. Bardiner Hulse, President

Dear Mr. Hulse:

You have failed to comply with our request to sign the Consent Order agreed upon by you at this office and the records indicate that you are discharging untreated laundry waste in the ground waters of the State of New York.

I am therefore scheduling a Compliance Conference for September 28, 1977 at 2:30 p.m. at this office. Upon your failure to execute the Consent Order, it will be necessary to institute proceedings under the Environmental Conservation Law against you.

Very truly yours,

  
JOAN B. SCHERB  
Regional Attorney

JBS:sp

cc James H. Pim, P.E., Chief  
Water Pollution Control Section, SCDEC ✓

Albert Machlin - NYSDEC - Region I

John M. Flynn, P.E.  
Commissioner



SUFFOLK COUNTY  
DEPARTMENT OF ENVIRONMENTAL CONTROL

~~1324 Motor Parkway~~  
65 Jetson Lane

Hauppauge N. Y. 11787  
(516) 234-2622

NOTIFICATION OF UNSATISFACTORY INDUSTRIAL WASTE SAMPLING

Date Nov. 7, 1977

Bellport-Islip Laundry  
Head of Neck Rd.  
Bellport, N.Y. 11713

Gentlemen:

On Sept. 19, 1977 samples of your industrial waste were taken from your lagoon in vicinity of discharge pipe. Upon analysis, the following parameters were found to be unsatisfactory:

- |                                   |     |
|-----------------------------------|-----|
| 1. pH - 10.4                      | 6.  |
| 2. C.O.D. - 2170 mg/l             | 7.  |
| 3. Susp. Solids - 640 mg/l        | 8.  |
| 4. Total Diss. Solids - 2106 mg/l | 9.  |
| 5.                                | 10. |

The acceptable limits on each of these parameters according to New York State Groundwater Standards are as follows:

- |                                   |     |
|-----------------------------------|-----|
| 1. pH - 6.5 - 8.5                 | 6.  |
| 2. C.O.D. - 150 mg/l              | 7.  |
| 3. Susp. Solids - 30 mg/l         | 8.  |
| 4. Total Diss. Solids - 1000 mg/l | 9.  |
| 5.                                | 10. |

You should be aware that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law. Please see that they are corrected as soon as possible. If you have any questions or need any assistance, please do not hesitate to contact this office.

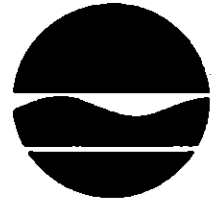
Very truly yours,

*Roy Gilbert*

Roy Gilbert  
Water Pollution Control Section  
RG/nt

CC: TED SNYDER - NYSDEC

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233-0001



Robert F. Flacke  
Commissioner

February 18, 1982

Bellport-Islip Launderers & Cleaners, Inc.  
Head of Neck Road  
Bellport, New York 11713

Attention: Gardiner Hulse, President

Dear Mr. Hulse:

Re: Deletion of Pollutant Discharge  
Elimination System PDES Permit  
No. NY-0098698  
Bellport-Islip Launderers & Cleaners, Inc.  
Brookhaven (T), Suffolk County

A determination has been made by this Department to delete your referenced PDES permit because the facility is out of business (i.e. All discharge has ceased).

You are also hereby notified that it shall be unlawful for any person to cause a discharge of pollutants from this facility to either surface or groundwaters unless a permit to do so has been issued by this Department and if applicable, any subsequent owner(s) of this facility should be advised of the requirement to obtain a permit if they intend to cause such a discharge.

Please direct any inquiries you may have to this office (Room 315) for reply.

Very truly yours,

William L. Garvey, P.E.  
Chief, Permit Administration Section  
Division of Water

cc: Region #1  
J. Pulaski - BWFD-Technical Section  
Mr. Adamczyk - BWFD  
Suffolk Co. DHS  
Mr. Cronin - Compliance Section  
(1)

RECEIVED  
JAN 2 1982

SUFFOLK COUNTY  
JOB NO. \_\_\_\_\_



Town of  
Brookhaven  
New York

DEPARTMENT OF PLANNING, ENVIRONMENT  
& DEVELOPMENT  
VINCENT G. DONNELLY, P.E., Commissioner

DIVISION OF ENVIRONMENTAL PROTECTION  
CHARLES J. VOORHIS, DIRECTOR

1987  
DEPARTMENT  
REG. REGION I  
March 3, 1987

TO: John Conover, Assistant Sanitary Engineer  
Division of Solid and Hazardous Waste  
NYS Department of Environmental Conservation  
Building 40  
Stony Brook, NY 11794

RE: Violation at Head-of-the-Neck Road, North Bellport

PROPERTY OWNER: Gardiner H. Hulse  
Box 624  
Shelter Island Heights, NY 11965

S.C. Tax # 200-978.10-3- lot 29

Dear John:

This letter is a follow-up to the February 13 meeting in regard to the above-referenced violation. As stated in the meeting, the Town of Brookhaven requests the following remedial action be taken on the site after hazardous wastes have been tested for and if present, removed safely:

1. All fill, refuse and other buried materials must be removed from the site and disposed of safely in accordance with all Town, County and State regulations.
2. All former wetlands must be restored and re-vegetated with indigenous species.
3. The site must be graded down to its former contours with maximum 1:3 grade. Uplands which were disturbed and denuded must be restored and re-vegetated with indigenous species.

If you have any questions or need further information, please feel free to call. We would appreciate your keeping us apprised of your progress with this violation.

Thank you for your cooperation in this matter.

Very Truly Yours,

*John W. Pavacic*  
John W. Pavacic  
Environmental Planner

JP/jp  
Encl.

3233 ROUTE 112, MEDFORD, NEW YORK 11763 (516) 698-5400

COUNTY OF SUFFOLK



PATRICK G. HALPIN  
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

DAVID HARRIS, M.D., M.P.H.  
COMMISSIONER

September 21, 1988

John Licata  
New York State  
Department of Environmental Conservation  
SUNY Building 40  
Stony Brook, New York 11794

Dear John:

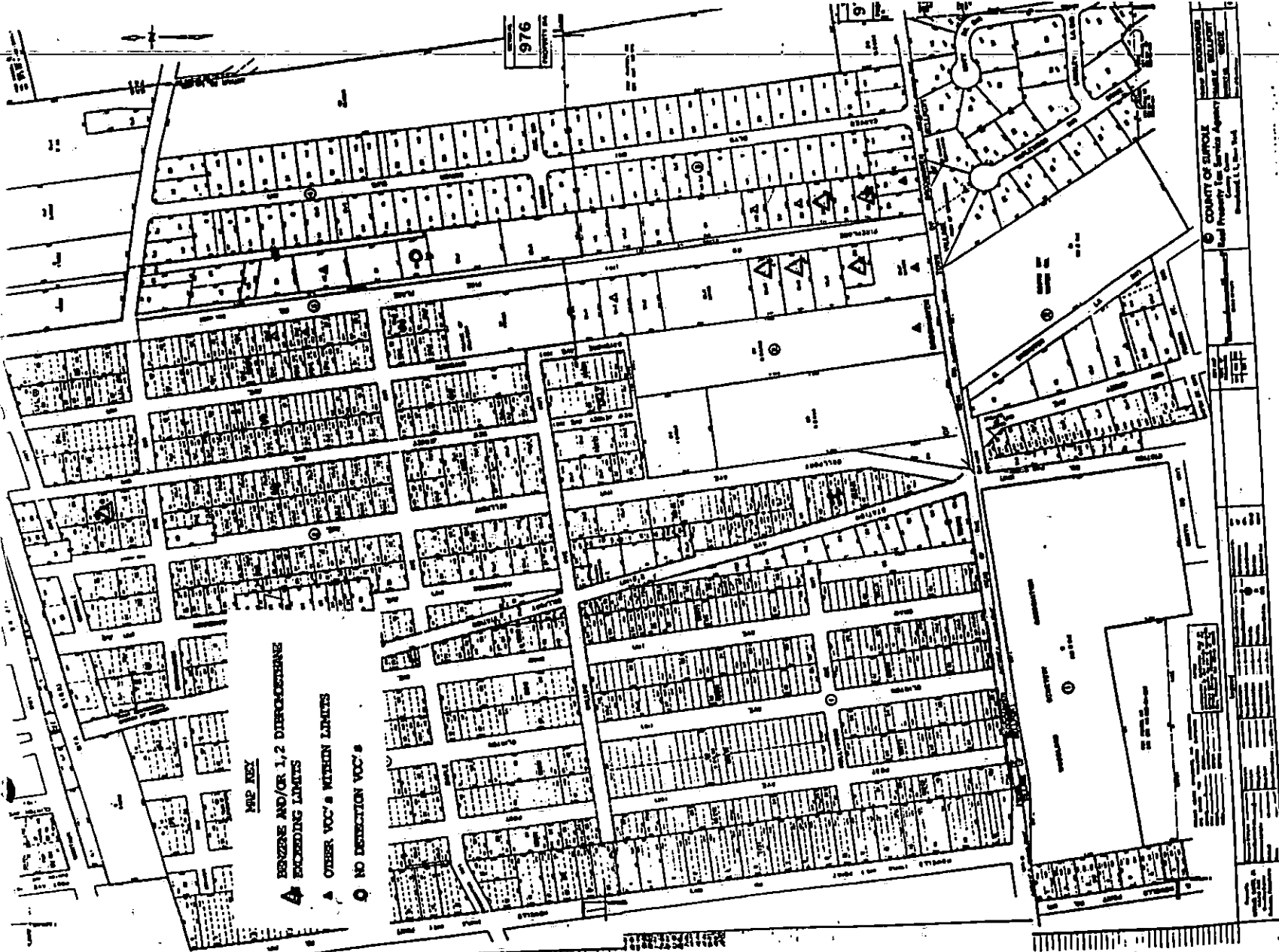
Attached for your information are results of private well analyses near Wards Lane, Bellport. A dissolved plume of petroleum product containing benzene, toluene, xylene and the gasoline additives 1,2 dichloroethane and 1,2 dibromoethane has been identified.

The plume appears to be an extension of the contamination first discovered in December, 1985 at the Cruz residence on New Jersey Avenue. The SCWA wellfield on Head of Neck Road contains two shallow glacial wells which may be threatened by this contamination. The affected residents and the SCWA have been notified of the contamination.

Sincerely,

Martin Trent  
Associate Public Health Sanitarian  
Bureau of Drinking Water

cc: Assemblyman W. Bianchi  
James Pim SCDHS  
Sarah Meyland SCWA  
Thomas Gallager Brookhaven Community Development



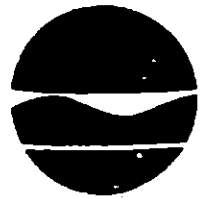
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MARKED FOR DESTRUCTION



New York State Department of Environmental Conservation  
Building 40—SUNY, Stony Brook, New York 11794

(516) 751-7725



January 2, 1988

Thomas C. Jorling  
Commissioner

Mr. Richard Denton  
Fenley and Nicol Co. Inc.  
445 Brook Ave.  
Deer Park, New York 11729

Re: Zitro-Spill #83-0526  
MONitoring Wells

RECEIVED

JAN 5 1989

Bureau of Drinking Water

Dear Sir:

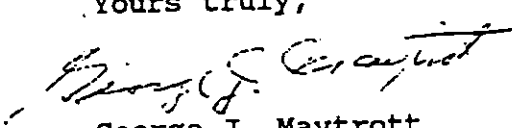
In order to determine if the Zitro Service Station on Montauk Highway Bellport is the source of Petroleum contaminants found in private water wells on Wards Lane, Bellport, a total of eight monitoring wells are to be installed by Fenley and Nicol. Well locations will be determined by this department and will be in Beaverdam Road, Bellport Avenue and Wards Lane.

Construction is to be of 4 inch diameter schedule 40 PVC pipe extending 10 feet below the water table which is approximately 30 feet below grade. The bottom 20 foot length of each is to be slotted with 0.020 inch slots so that the slotted length will extend 10 feet below and 10 feet above the water table. The bottom 22 feet are to be gravel packed and a 2 foot bentonite seal located above the gravel pack. The tops of the wells are to be flush with grade and are to be fitted with a locked cap and protective metal cover. Drilling logs will be required.

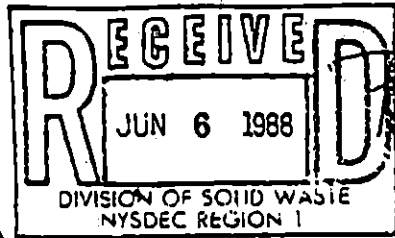
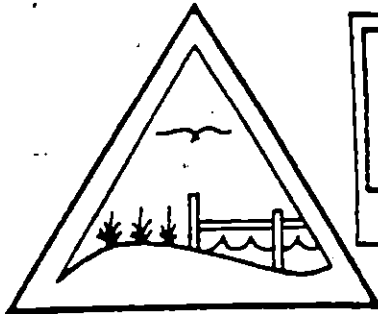
The elevations of the wells and the distances between are to be determined and a groundwater contour map prepared. All wells are to be sampled initially by you and tested using methods EPA-601 EPA-602 and NYS DOH 310-13. Samples from each well are to be tested for metallic lead.

Please use spill #83-0526 and PIN #3115 for all charges.

Yours truly,

  
George J. Maytrott  
Assistant Sanitary Engineer

GJM:ss  
cc: J. Licata  
Dennis Moran/SCDHS



ENVIRONMENTAL SERVICES

*Paul Roth -  
For your info, (P)  
files  
Lori*

# EN-CONSULTANTS, INC.

1329 NORTH SEA ROAD, SOUTHAMPTON, NEW YORK 11968 ..... 516-283-6360

May 24, 1988

HAND DELIVERED

RECEIVED

MAY 26 1988

Lori Riley, Esq.  
Department of Legal Affairs  
New York State Department of  
Environmental Conservation  
Building 40, SUNY  
Stony Brook, New York 11794

JOAN B. SCHEP

Re: Incorporated Village of Bellport & Gardiner Hulse

Dear Ms. Riley:

Program staff recently requested a history of usage of the site to assist in their evaluation of our plan. Accordingly, I have attached a narrative from Mr. Hulse dating back to usage prior to his ownership.

Also attached is a document from the Village Highway Superintendent showing dates and content of dumping of village material.

I trust this material will be helpful.

Yours truly,

*Roy L. Haje*  
Roy L. Haje  
President

RLH:khs  
Enc.

cc: Robert A. Green, Esq.  
Gardiner Hulse

Bellport Laundry Property and Operations

by Gardiner Hulse

Re: Property located on Head Neck Road, Bellport, NY  
Owner - Gardiner Hulse  
Parcel #1-Containing-1-&-4/10 acres

This parcel of land formerly part of the Alfred Read Farm was purchased by Edward J. Weidner and wife in 1911. They erected a house on the property and lived there until about 1928 when they sold the property to Marie and Asen Hamerun (not including the house). The house was moved to Station Road and School Street in the Village of Bellport. After living there many years, the property was sold to Roland Smith.

Re: Parcel 1

The Hameruns constructed a house and a large frame building. The frame building was occupied and used as a family power laundry containing laundry machinery, water pumps, heaters, boilers, etc. and delivery trucks were parked outside of the building. The laundry building and equipment was totally loss due to a fire in early 1930. The home was saved.

During 1930 due to mortgage and other loans, Hazel Hulse acquired the property. A 40' x 80' concrete block building with attached boiler room and shed to house 4 trucks was constructed. The building was equipped with the latest laundry machinery and equipment to process family laundry as well as commercial. This was the beginning of the Bellport Laundry.

The fleet of delivery trucks were never garaged nor serviced on the property. The Wyandotte Garage of Bellport stored and serviced all trucks on their premises, and made necessary repairs.

The business was conducted by Eugene Hulse until his death in 1956, and by Gardiner Hulse until 1973. The Bellport Laundry and Islip Laundry merged in 1973 and was named Bellport Islip Laundry, Inc. and was operated as a corporation until March 16, 1979 when it ended in bankruptcy. The laundry property, buildings, machinery, etc. were leased to the laundry by Gardiner Hulse who became owner in 1946 due to the death of Hazel Hulse, the former owner.

The laundry never used synthetic detergents at any time due to an agreement with the property owner and also the Suffolk County Health Department.

During 1948, the Bellport Laundry entered the dry cleaning business. A Model 6 A.D.C. machine, with totally enclosed cycle including filters, still, storage tanks, etc. was purchased at that time and perchlorethlene was the solvent used. The supplies used in the laundry process was plenty of hot water, sodium orthosilicate P. & G., powder amber soap, sodium hypochloride and bluing. The water source was slightly on the acid side and therefore, very little acidity was used to bring the washed material back to a 7.0 ph reading.

The laundry business expanded during the years, as well as, buildings and property. The original property of 1 & 4/10 acres was expanded in 1942 and again in 1958 bringing it to 3 & 4/10 acres. The property purchased was directly east of the original property and had a gentle slope all the way to the east property line, and a very steep slope to the south along most of the south property line.

During 1947, a large sump was constructed on the property acquired in 1942 and was used to contain water from the laundry process. The sump was about 180' long by 30' wide and perhaps 12' deep; all sand for excellent drainage. After using the sump for approximately 10 years, it was decided that another sump was required to alternate water dumping from time to time. Another acre was purchased in 1958, and a larger and deeper sump was built. During excavation of the sumps, as many trees as possible was left because of the root system, as well as, holding the soil is also conducive to good drainage. Unfortunately, fires and hurricanes took their toll on many of the trees.

The Suffolk County Department of Health Services monitored the discharge water flowing into these sumps for many years. Also, the County Health Department Engineer, Robert Villa (?), inspected the sumps perhaps in 1960± and exclaimed that it was the best system for laundries that he had examined.

A few years later, the New York State Department of Environmental Conservation took over the monitoring and testing the discharge water sampling, etc. The sumps were also monitored by the County mosquito control.

Sometime during the mid 1960's, the Village of Bellport started bringing in fill consisting of street sweepings, etc. Most of this fill was used to strengthen and build up the existing berm which had washed down and deteriorated due to wind, weather, etc. On some of the occasions while the NYSDEC inspectors were sampling the discharge water, the Village truck would be dumping a load of fill. On two occasions, I was asked about the fill by the inspector and explained that a load was brought now and then to build up berm.

The laundry property is now occupied by Rollup Industries beginning September 1, 1981. An aluminum fabricating company.



PATRICK G. HALPIN  
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

DAVID HARRIS, M.D., M.P.H.  
COMMISSIONER

January 20, 1989

Mr. Gardiner Hulse  
P.O. Box 624  
Shelter Island, N.Y. 11965

Subject: Bellport Laundry Site  
475 Head of the Neck Road  
Bellport, N.Y.

REF: SCDHS Spill File #1989-020  
NYSDEC Spill File #88-08239

Dear Mr. Hulse,

On January 16, 1989, a representative of the Department of Health Services witnessed the removal of a 12,000 gallon underground fuel oil storage tank.

An inspection of the tank shell and of the soil in the excavation was completed.

The inspector's report indicates that the soil in the excavation was contaminated with oil and had a solvent-like odor associated with it.

Additionally, the report states that approximately 10 cubic yards of soil was removed from the excavation and stockpiled on site.

Since there is evidence of possible contamination of the groundwater aquifer beneath the site of the old Bellport Laundry, the Department of Health Services requires that you initiate a groundwater investigation to determine the extent of any contamination that may be present.

The work must be done in accordance with an approved protocol mandated by Section 760-1217(c) of Article 12 of the Suffolk County Sanitary Code.

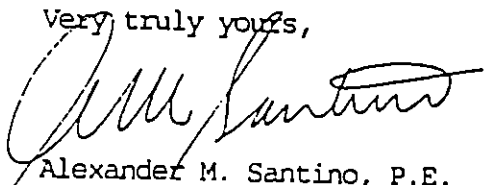
Therefore, you must prepare a written proposal describing the procedures and equipment (such as monitoring well construction, locations of monitoring wells, contaminants for which the groundwater samples will be analysed) that will be employed to evaluate the quality of the groundwater.

Your work plan must be submitted to the Department of Health Services for review and approval within 45 days. Therefore, the due date is Monday, March 6, 1989.

Failure to supply the requested documents by the due date will place you in violation of Article 12 of the Suffolk County Sanitary Code. Notices of Violation of the Sanitary Code are enforceable in administrative hearings convened by the Department of Health at which fines and penalties will be levied.

If you have any questions regarding this matter, please contact this office at 451-4640.

Very truly yours,



Alexander M. Santino, P.E.  
Senior Public Health Engineer  
Bureau of Hazardous Materials Management

cc: Chris O'Neill, NYSDEC

March 6, 1989

Sharon A. Miller  
237 South County Rd.  
Bellport, New York 11713

John Powell  
N.Y. State Assemblyman  
646 Route 112  
Patchogue, New York 11772

RE: Illegal Landfill, Head of the Neck Rd., Bellport, N.Y.

Dear Assemblyman:

As per our conversation the other evening, I am writing giving a basic description of this environmental disaster. Enclosed find map which identifies my property and the adjacent illegal landfill. I implore your assistance and hope you can help to remediate this situation before all my land becomes contaminated, along with the neighboring sensitive wetlands of Kotts Creek. Carcinogens found in my ground water are dangerous to my family and our well being. Prior to this discovery, we all drank the water abundantly. To date, my animals have had physical disorders for which we have no answer. Needless to say, my fear and anxiety is great.

Town of Brookhaven and State Department of Conservation began investigating late fall of 1986 and the early part of 1987. Suffolk County Health Services (Bureau of Hazardous Waste) became aware of the situation late 1988 and early 1989, when two underground tanks were removed and contamination of the soil was evident. Enclosed find notifications and tickets sent to Mr. Gardner Hulse, owner of the site. I personally would clean up the site. At that time the DEC and Bellport Village would agree on a cleanup order, and were unwilling to proceed. Time marched on and the problem worsened. Suffolk County Health Services were summoned to test my water. When the testing indicated volatile organic compounds of carcinogenic origin, I immediately called upon Bellport Village, Brookhaven Town, and State DEC to examine the remediation as such.

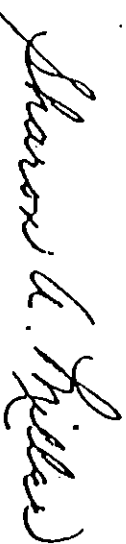
Violations were continued in my ground water in March, 1989. Since this time, the events that have taken place are all downhill. Some are; unsuccessful meetings by the DEC, due to absent members from both sides, inspections proving contaminants that receive little or no results, and most frustrating of all, the continuation of dumping. Although the site is totally

encompassed by a six foot chain link fence, the owners chose to leave the gates open night and day. Underground tanks were removed without knowledge of the proper authorities and permits were not produced when requested by town official. DEC experts who began the investigation were either transferred or passed the project to another. These interruptions enabled a "dragging on" process which has fortified the situation, as well as, assisted the alleged perpetrators to avoid their obligations.

Attached find questions I feel would bring tremendous help in solving my dilemma. This urgent plea for your help, hopefully, will awaken and sensitize our agencies in their efforts to rectify this predicament.

Your participation will be greatly appreciated. Anxiously awaiting your reply, I remain,

Sincerely yours,



Sharon A. Miller

Encs.

cc: Mr. Ronald Goldstein, Esq.  
Councilman Donald Zimmer  
Councilman Anthony Losquadro  
State Senator Caesar Trunzo  
State Senator Kenneth La Valle  
County Legislator Edward Romaine  
Brookhaven Supervisor Henrietta Acampora

- 1.) December, 1988 Meeting with Supervisor Henrietta Acampora: Madam Supervisor indicated the town had funds to clean up the site. Please find out details and pursue any ways or means to do so.
- 2.) The town has records of water tests taken on Carver Blvd. and most recently, Wards Lanes. May I have a copy? I have signed freedom of information forms and have made requests to Town Council.
- 3.) Approximately 1 1/2 months ago I requested the scientific data pertaining to the Brookhaven Landfill's plume direction. Mr. Bryan Flood, Legislative Aid, has not been able to obtain this from Waste Management. Perhaps you could help?
- 4.) Recently I spoke with Councilman Zimmer. I asked if it was possible to receive the dumping records from the town showing the Village of Bellport's activities during 1984 through 1988. I spoke with the town attorney's office and they advised me that I would be denied. To my mind the Brookhaven Landfill should have logs and this would not be a difficult task. Perhaps you could help?
- 5.) The Town Attorney's Office has been made aware by Mr. Bryan Flood, Legislative Aid, of a water test taken on the site by Volumetric Techniques, Inc., 317 Barnier Drive, Bayport, N. Y., in late 1987 or '88. Volumetrics confirmed this to me, as well, on the telephone. Why hasn't the town attorneys office subpoenaed this vital information for their court case? Can you and would you kindly send me a copy?
- 6.) Mr. Gardiner Hulse (owner of site) was sited in December, 1987 for various violations. Please find enclosed. Although Bellport Village has openly admitted (enclosed letter and list of illegal dumpings at site) WHY has Bellport Village never received any violations? Is a Municipality above the law?

- 7.) Mr. John W. Pavacic, Inspector of Town E.P.A., conducted an inspection December 1987. It is my understanding that Mr. Pavacic has compiled a chronological report to date. May I please have a copy ?
- 8.) Through the efforts of Councilman Zimmer, Mr. Frank De-Benedetto, Waste Management Inspector, was assigned to do a full investigation. De Benedetto has officially examined the site and interviewed witnesses for the past 15 months. Several questions come to mind. They are;
- A.) The first inspection was conducted by Mr. Pavacic, E.P.A. I gave Mr. Pavacic pictures showing refrigerators and other appliances at the site. He used them for his report. When requesting them back, they cannot be found. Oddly enough, when I spoke with De Benedetto, he confirmed seeing them. Could you please find them and have them returned ?
  - B.) Mr. De Benedetto spoke with individuals who confirm dumping this past November, 1988. Why hasn't new summonses been issued ?
  - C.) Mr De Benedetto examined, with the fire marshall, the inside of the old laundry building at the site. He indicated to me there were numerous 55 gallon tanks that had liquid or chemicals within. Why haven't these barrels been inspected or have they ? May I know the results ?
  - D.) Mr. De Benedetto spoke with individuals who witnessed an illegal removal of the first tank at the site. What has been done about this ? Has anyone received summonses ?
  - E.) Mr. De Benedetto witnessed the second tank (12,000 gal.) removed. He advised me there were no permits. He called the fire marshall and a test was taken. What are the results ? There was contaminated soil. What was done about it and how was it monitored ? May I have a report copy ? Were any violations issued ? Why wasn't the Town Environmental Department called ?

- F.) Homeowners living in the Maplewood Development requested water testing of the stream (headwaters Motts Creek) which runs parallel with their backyards. While Mr. De Benedetto was interviewing them, he took a water sample of the contaminated stream. What are the results ?
- G.) When the heavy metals were detected by the town officials, why wasn't the E.P.A. called in ? Were any violations served ?
- 9.) Mr. Alex Santino from the Board of Health's Hazardous Waste Bureau has inspected the site and spoke with Mr. Gardiner Hulse. Mr. Santino, prior to his inspection, indicated to me there were several violations, according to the facts.
- 1.) The tanks in the ground required monitoring and if there were no knowledge of these, Mr. Hulse was so called responsible. Later, Mr. Santino told me they had no records. Oddly enough, the tenants of the old laundry building told me they signed affidavits regarding the tanks. Freedom of Information letter was sent to Mr. Santino, as he instructed, but no information has been received. Why hasn't the Bd. of Health issued any summonses regarding the first tank removal ? What about the contaminated soil witnessed by Janet Swords, inspector ? Where are the summonses ? May I have a complete report : what is the status to date ?
- 10.) The Town of Brookhaven Inspector De Benedetto was present. Martin Luther King Day when the 12,000 gallon second tank was removed. He called in the Fire Marshall and kept the filled cleaning tank trucks from leaving without a Bd. of Health inspector present for inspection. He also called a special force of police that deal with environment problems. I would like a copy of Ms. Swords report to the Board of Health. Could you also get a police report as well ?

- 11.) Mr. Stanley Farkas, Engineer, D.E.C. is in charge of this matter. I have been assisting Mr. Farkas with facts as I know them, through the Town's investigation, and I wish to know the following:
- A.) Why hasn't the D.E.C. inspected the Motts Creek area after the heavy metals discovery ?
  - B.) How many meetings have taken place since 1986 ?
  - C.) May we have a copy of the reports written up by the hydrologist, Mr. Daniel Morganelli, D.E.C. ?
  - C.) The hydrologist prior to Mr. Morganelli was aware of the landfill. Did he write a report and may we have a copy ?
  - D.) Could you get a copy of all the meetings reports starting with the first in 1987 ?
  - E.) Why has the hearing for March 1, 2, 3 been cancelled ? When is the next hearing ? What is the procedure and results if the alleged accused do not show ? What legal method or avenue does the D.E.C. have to date, to enforce action ?
  - F.) Why hasn't the D.E.C. called upon the Town of Brookhaven for information ?
  - G.) Has the D.E.C. called upon the Board of Health regarding the contaminated soil? Have they taken samples ? What are the results ? Have any violations been issued ?
  - H.) Could you get a copy of the D.E.C.'s violations sent to Gardiner Hulse and Bellport Village ?
  - I.) Why hasn't the D.E.C. looked into the barrels of chemicals housed in the old laundry building ?
  - J.) Mr. Morganelli requested information from the Hulses as to the size of the site, including depth, etc. How do we know the proper information was obtained ?
  - K.) From information received and meetings at the D.E.C., Mr. Morganelli told me they changed the requirements of test wells and borings. Who checks over Mr. Morganelli evaluation ? Mr. Morganelli and the past specialist gave me two very different opinions. Mr. Morganelli's

version is a much more relaxed method. My concern is one of serious nature. Is there any other authority to double check the testing plans ?

*Goldstein & Rubinton P.C.*  
*Attorneys at Law*

ARTHUR GOLDSTEIN  
PETER D. RUBINTON  
RONALD LEE GOLDSTEIN  
                      
S. RUSS D'FAZIO

*18 West Carver Street, Huntington, N.Y. 11743-2279*

516 421-9051  
TELECOPIER 516-421-9122

September 28, 1989

Ms. Susan Anderson  
NUS Corp.  
1090 King George's Post Road  
Suite 1103  
Edison, New Jersey 00837

RE: Sharon Miller v. Gardiner Hulse, et. al.  
Index No.: CV-88-3848

Dear Ms. Anderson:

As per your request, enclosed please find a copy of John Pavacic's Hulse Violation Inspection Report dated December 9, 1987

If you have any questions, or need additional information, please contact the undersigned.

Very truly yours,

  
RONALD GOLDSTEIN

RG:kmg  
enc.

## HULSE VIOLATION INSPECTION REPORT

On December 9, 1987, I, John W. Pavacic, inspected the property owned by Gardiner H. Hulse which is located on the north side of Head-of-the-Neck Road, approximately 155 feet east of Carver Boulevard in Hagerman. I drove into the site and parked my official Town vehicle on the east side of the main building.

My inspection noted the following:

1. The eastern section of the site has been severely disturbed and is a hazard to human safety and health. Several times I fell through the thin surface soil layer as far as my knees. The surface soil and vegetation conceals numerous holes and gaps formed by the haphazard dumping of many different materials including the remains of trees and tree stumps. The area may become an attractive nuisance to children and also has the potential for becoming a haven for vermin.
2. The northern edge of the material indicates that the fill in that location is approximately 20 feet in thickness. The edge of the material also has a vertical drop from top to bottom, exacerbating further the potentially dangerous situation. Observations of the face of the material buried here found that it included land-clearing debris such as logs, tree stumps and tree branches, construction and demolition debris and scrap metal. The top of the material in this vicinity included piles of construction and demolition debris and road-construction materials such as gravel.
3. The east side of the fill contains large logs and tree stumps and construction and demolition debris. Much of this material is jutting out of the face of the fill. Walking along the top of the fill within 15 feet of the edge is dangerous because of the numerous holes and gaps, formed by the juxtaposition of the debris, which are hidden from view by a thin layer of soil and herbaceous vegetative cover. Again, there is also a nearly vertical drop from the top of the fill to the bottom.
4. The southeast and south edges of the fill material are in freshwater wetlands forming the headwaters of Mott Creek. The wetlands in this vicinity are comprised mostly of Phragmites which is an indicator species in the Town's wetlands ordinance, Chapter 81. It is obvious that because the wetlands are at the edge of the fill that some destruction and filling in of wetlands has occurred. In addition, this filling activity has occurred within 75 feet of wetlands and without a wetlands permit from the Town Board.
5. Illegal tree clearing has occurred at the northern vicinity of the fill area.

**Natural Resources:**

The site is located on the outwash plain south of the Ronkonkoma Moraine. Elevations range from a maximum of 35 feet to 15 feet in the southeastern portion of the site. However, two excavated depressions on the site have bottom elevations of 10 feet and may be in groundwater. Topography is shown on page 5.

Soils found on the site are Carver and Plymouth sands and Plymouth sandy loam. These are deep, excessively-drained, coarse-textured soils. A soil map of the site is shown on page 6.

Groundwater is found at an elevation of 10 feet above sea level. Depths to groundwater range from 25 feet in the western portion of the site to 5 feet at the eastern portion of the property in the vicinity of the violation. In addition, because the bottom elevation of the two excavated depressions (now filled in with debris) is at 10 feet, it may be expected that the fill material is intercepting groundwater. The flow of groundwater is in a south to south-southeast direction towards Great South Bay. The eastern and southeastern sections of the property contain the headwaters of Mott Creek which flows all the way to Great South Bay.

Wetlands are found on the site along the south and southeast borders and are identified on U.S. Fish and Wildlife Service Wetlands Inventory Maps shown in page 7. Those wetlands closest to the site are comprised mostly of Phragmites. Species which enjoy moist habitat, such as Sheep Laurel, are also found in the woods on the eastern border of the property. Much of the eastern half of the site, which contains the violation, has been disturbed. Pioneer vegetation including grasses and wildflowers such as goldenrod, are found in this area. The site is bordered on the east and north by pine-oak association woodlands.

CHRONOLOGY OF HULSE (HEAD-OF THE NECK ROAD) VIOLATION

February 1988

The following is a chronology of the events leading up to the issuing of the summonses:

1. A complaint was received by this Division in the summer of 1986 from .

. . . . . stated that the owner, Gardiner Hulse, had been allowing the dumping of various materials for several years. . . . . stated that after this dumping began, the water in Mott Creek had become foamy at times and the water from . . . well had become brown in color.

2. In September of 1986, John Pavacic visited . . . in person and then inspected the site. He discovered the violations noted above.

3. On October 14, 1986, this Division sent a letter to your office describing this violation and recommending inspection by a Town Investigator.

4. On January 27, 1987, John Conover, an Assistant Sanitary Engineer with the New York State Division of Environmental Conservation sent a letter to Mr. Hulse notifying him that he was in violation of NYCRR Part 360 and scheduling a meeting of all concerned parties on February 13, 1987.

5. On February 13, 1987, a meeting was held at the New York State Department of Environmental Conservation in regard to this matter. In attendance were:

Glenn Pisano, Town Division of Environmental Protection  
Lori J. Riley, Assistant Regional Attorney, NYSDEC  
John Conover, Assistant Sanitary Engineer  
Gardiner Hulse, property owner  
Gail M. Brisson, Bellport Village Clerk & Treasurer  
Louis Cardamone, Bellport Village Highway Department

At this meeting, the Village of Bellport admitted that it had been dumping various materials at the Hulse site since 1978. Mr. Pisano of our Division informed the group as to the Town's requirements for site remediation including removal of all fill, regrading of the site to 3 on 1 slopes and restoration of wetlands. NYSDEC requested a site remediation plan and a consent order which was to include the Town's requirements as conditions.

6. On March 3, 1987, this Division sent a letter to John Conover of NYSDEC reiterating the Town's requirements for the site to comply with Town regulations.

HULSE VIOLATION CHRONOLOGY -- 2.

7. On March 13, 1987, the NYSDEC issued a consent order to both the Village of Bellport and Mr. Hulse. This Division never received a copy of the consent order when it was issued, but acquired a copy at a meeting on January 26, 1988.
8. In July of 1987, this Division received a letter from asking for the status of the violation and requesting a review of all files in regard to this case under the Freedom of Information Act.
9. On August 12, 1987, this Division responded to a letter and requested the Town Attorney's office investigate the matter.
10. On November 13, 1987, Frank DeBenedetto, an inspector with the Department of Waste Management, sent a letter to Mr. Robert Becherer, an engineer with the NYSDEC Department of Solid and Hazardous Waste, requesting the status of the State's investigation of the violation.
11. In early December of 1987, Town Councilman Don Zimmer held a meeting with at with Chic Voorhis, John Pavacic, and Anne Becker-Bennett of the Long Island Advance. An inspection of the Hulse property was performed, again affirming the presence of several violations of the Town Code.
12. On December 9, 1987, John Pavacic of the Division of Environmental Protection again inspected the Hulse parcel and wrote summonses in regard to four distinct violations of the Town Code. Mr. Pavacic personally served Mr. Gardiner Hulse, the property owner, on December 11, 1987.
13. On December 16, 1987, Mr. DeBenedetto sent a follow-up letter to Mr. Becherer.
14. On January 26, 1988, John Pavacic attended a meeting at the New York State Department of Environmental Conservation in regard to the Hulse violation. The meeting was called to develop a new consent order to be signed by both the Village of Bellport and Mr. Hulse. The original consent order issued on March 13, 1987 had been rejected by both the Village of Bellport and Mr. Hulse because they felt it would impose a severe financial hardship and would cause them to go into bankruptcy. In addition to Mr. Pavacic, the meeting was attended by the following:

HULSE VIOLATION CHRONOLOGY -- 3

Lori J. Riley, Assistant Regulatory Attorney, NYSDEC  
Merlange Jean-Louis, Assistant Sanitary Engineer, NYSDEC  
Bryan Flood, Legislative Assistant to Councilman Zimmer  
Roy Haje, Environmental Consultant representing  
both the Village of Bellport and Mr. Hulse  
Robert A. Green, Village of Bellport Attorney  
Jeff Buck, Bay Area Properties, representing a  
buyer of the Hulse property

As part of the NYSDEC consent order, the defendants were required to submit a site investigation plan, involving sampling of the site for hazardous waste, within 45 days. The consent order would require the posting of a performance bond. Mr. Pavacic informed those present that summonses had been issued and asked the State representatives to send copies of the consent order and site investigation plans to the Town for its review. Mr. Pavacic also requested that State apprise the Town of all developments in this case.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

MAR 6 1990

Michael J. O'Toole, Jr., P.E., Director  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, New York 12233

Re: Removal Request - Wards Lane  
Bellport, Town of Brookhaven

Dear Mr. O'Toole:

After reviewing the analysis of the private ground water supply wells in the vicinity of Wards Lane and the information submitted by the New York State and Suffolk County Departments of Health, it has been determined that the Wards Lane site is not currently eligible for a Removal Action under CERCLA.

Although the concentration of benzene found at the tap of four of the residences in this area exceeds the Removal Action Level, the information provided indicates that the contamination is related to a gasoline spill in the area. CERCLA Section 101(33) states that petroleum products are not included in the definition of a hazardous substance. Therefore, EPA does not have the authority to address ground water contamination problems that are attributable to petroleum products under the provisions of CERCLA. I would suggest that your Department re-evaluate use of the New York State Oil Spill Fund or the Leaking Underground Storage Tank Fund to address this contamination problem, as the benzene levels exceed the 10-day Health Advisory level.

The levels of compounds, other than benzene, present in the residential drinking water wells are below the Removal Action Levels that were established for the Removal Program. Removal Action Levels establish the minimum pollutant levels for Federal response. Should conditions change at the site or if further information becomes available, please feel free to refer the site back to us for further evaluation. As you know, EPA is presently funding installation of water supply systems at seven sites in Suffolk County where the contaminant levels exceeded the Removal Action Level and are not attributable to petroleum products.

RECEIVED

MAR - 9 1990

DIVISION OF HAZARDOUS  
WASTE REMEDIATION

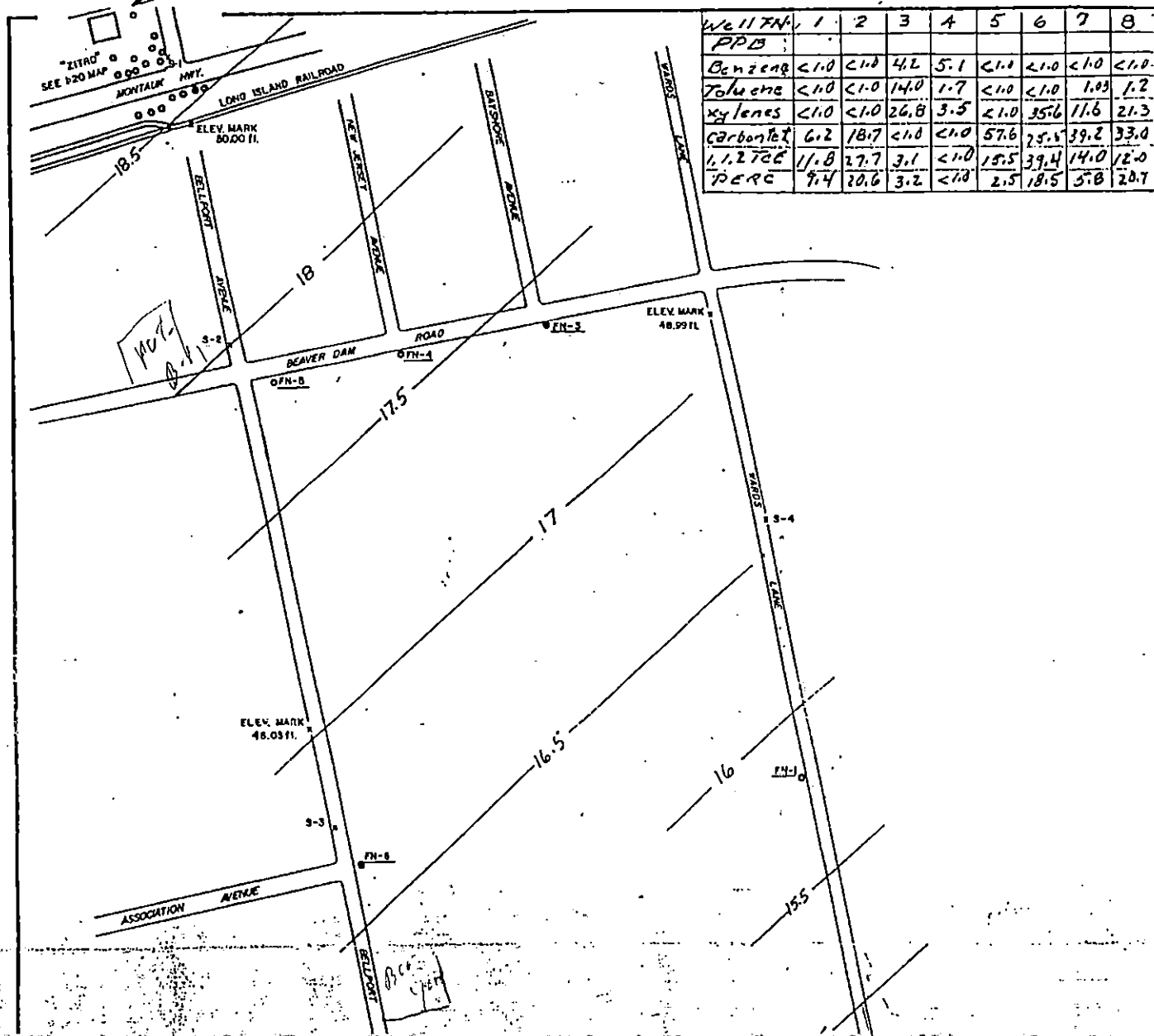
If you should have any questions or require further information, please feel free to contact me. We should discuss removal eligibility of water supply systems, considering current Removal Program funding and EPA policy, at our next meeting.

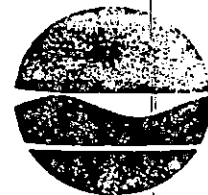
Sincerely yours,

*Steph D. Luftig*

Stephen D. Luftig, Director  
Emergency and Remedial Response Division

Zitro Gas Station





Site Inspection Report

Thomas C. Jorling  
Commissioner

Report by: Robert R. Stewart  
N.Y.S. Department of Environmental Conservation  
Division of Hazardous Waste Remediation  
Telephone No. 516-751-2617 Ext 388

Site: Bellport Laundry  
Head of the Neck Road  
Bellport, N.Y.  
EPA ID No. NJD002372415

Dates of Inspection: 10/22/90; 12:15 PM to 1:40 PM  
10/23/90; 12:45 PM to 1:27 PM

Complaint:

Due to an attempt by a tenant from the Bellport Laundry site to regrade an eroded area on the southern property border, several drums which were formerly buried were uncovered on Saturday, October 20, 1990. This complaint was made to Anthony Candela, NYSDEC/DHWR, on the morning of October 22, 1990.

Property Lot Numbers:

The area of interest where the buried drums were discovered is on the southern border of the lot owned by Gardiner Hulse, known as Bellport Laundry site. This area is near the property borders of 5 different lots. The 5 lots are as follows:

1. Lot 0200/978.10/03/29  
owner: Gardiner Hulse
2. Lot 0202/006/01/2.16  
owners: William and Cynthia Paden
3. Lot 0202/006/01/2.15  
owners: John and Jean Toms
4. Lot 0202/006/01/4  
owner: Village of Bellport
5. Head of the Neck Road H.D. 6  
owner: Town of Brookhaven

A composite map has been constructed from property maps for District 0200 (Sections 978.10 and 978.20) and property maps for District 0202 (Sections 002 and 006). A copy of this composite map is enclosed with this report.

Site Description:

The area of interest in this complaint is on the southern border of the Gardiner Hulse property. This border is also the northern property line for the residence of William and Cynthia Paden. This border area is steeply sloped with the slope

approaching 45 degrees in the steepest portion. The Hulse property is elevated approximately 15 to 20 feet above the Paden property.

The sloped area shows signs of erosion due to the heavy precipitation which has recently affected Long Island. In the area of greatest erosion, an attempt has been made to regrade the slope with excavation equipment.

The origin of Mott's Creek may occur as little as 300 feet east of the area of concern. An area which possibly could be defined as wetlands is approximately 20 feet east of the regraded area.

#### Site Inspection:

10/22/90 - I spoke with Raymond Collins, a tenant on the Hulse property, shortly after arriving on-site. He told me that he has been attempting to clean up the property recently due to the public concern for the property. He told me that on Saturday, October 20, 1990, as part of this clean-up effort, an attempt was made to regrade the southern border. A small bulldozer was used to remove the eroded soils which were deposited on the Paden property. This material was pushed up the slope back on to the Hulse property. His intent was to reduce the slope and, at a later date, bring in clean fill and construct a retaining wall. He told me that he didn't know of any drums that were uncovered during the regrading.

An inspection of the area of concern revealed that an erosion problem exists due to steeply sloping lands. The unusually steep slopes appear to have been caused by previous landfilling on the Hulse Property.

The erosion of the land and the recent regrading effort has exposed fill material which was previously buried on the Hulse property. The exposed fill material included the following: 1) 2 empty drums, 2) an empty 5 gallon container of flashing cement, 3) wood, 4) bricks, 5) concrete, 6) blue stone, 7) 2 tires, and 8) a vacuum.

One of the empty drums was labelled as Staticol 750-11G made by R.R. Street and Co., Chicago, Illinois. Also on the label was "Streets, Chemicals for Dry Cleaning". This drum was found toward the bottom of the slope. It appeared to have been recently buried due to the soils which still adhered to the drum. There was no sign of any residual material in the drum.

The other empty drum was completely rusted on its outside surfaces. It was discovered partially buried beneath a pile of dirt which was apparently a result of the regrading. The drum may have recently split open as a result of its unearthing. The inside of the drum was smooth. It did not have the extensive rusting that the outside surface did. Residual volatile organic vapors were evident. The combination of the lack of significant inside corrosion and the presence of organic vapors suggests that this drum may have recently

contained some volatile organics.

Many local officials arrived on-site. At this time, I met Cynthia Paden and an unidentified resident who had come to talk to the officials. Mrs. Paden owns the property at the bottom of the regraded area. Both of the residents said that they witnessed the regrading on Saturday, October 20, 1990. They said that some drums were uncovered by the bulldozer. One drum was observed to spill some liquid on to the ground. The unidentified resident showed me an area where the liquids were allegedly spilled. The soil was slightly darker at this location and the soil had a slight odor of volatile organics. They reported that the odor was much heavier on Saturday. The odor was said to be similar to that of fuel oil or kerosene.

An inspection of the rest of the Hulse property revealed signs of more disturbed soils on the east side of the property. The disturbed ground is in the general vicinity of 2 former lagoons that were used by Bellport Laundry. The disturbed grounds may have been the result of the site clean-up mentioned previously.

Officials from the Town of Brookhaven were concerned about possible wetlands violations. The Brookhaven officials defined the start of the wetlands as the heavily wooded area that started just east of the property owned by William and Cynthia Paden and also just east of the property owned by John and Jean Toms. The regraded area was approximately 20 feet from Brookhaven's defined wetlands. A permit may have been needed to excavate that close to a wetlands.

10/23/90 - I returned to take soil samples in the area of concern by the southern border of the Hulse property. John Conover, NYSDEC/DHWR, assisted me in the sampling. Sample number RH190 1004 BPL01 was taken a few inches below the surface in the area where the resident had alleged that fluids had spilled from an unearthed drum. The area was near the base of the slope in the regraded area.

Another sample was taken of the soil that was found inside the heavily rusted drum. This sample was numbered RH190 1004 BPL02. This drum was located next to a pile of dirt at the top of the regraded area. Both samples will be analyzed for volatile organic compounds according to Contract Laboratory Protocols.

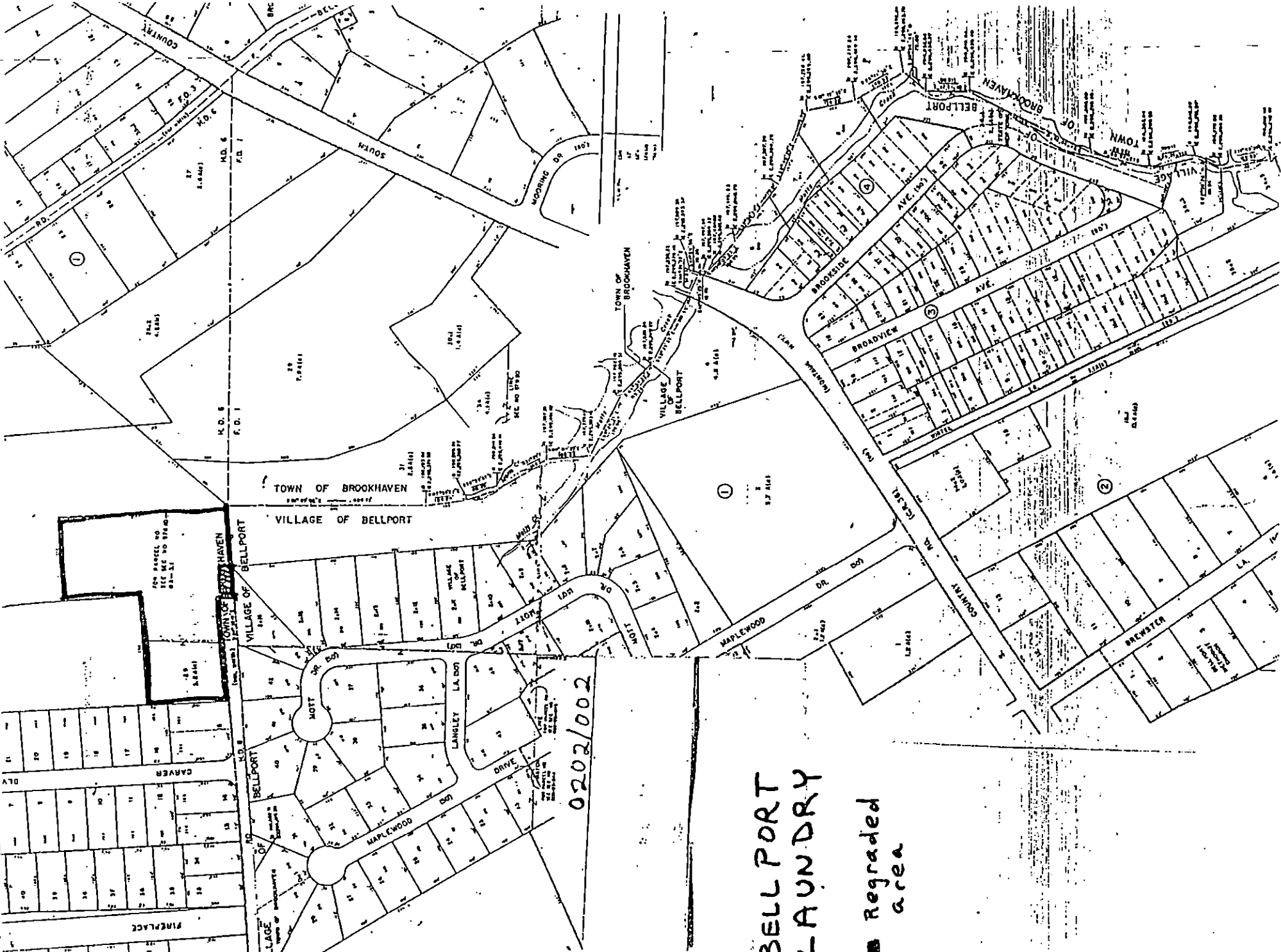
#### Conclusions:

This site investigation has determined that the southern border of the Hulse property has been used for landfilling. The recent regrading of the eroded slope between the Hulse property and the Paden property has exposed some of the materials which were formerly buried.

The most significant finding is that a buried drum which contained an unknown liquid has been discovered. The volatile

organic odors that I found in the soil and in a rusted drum support the reported observations on the buried drum made by the two area residents.

Soil samples from previous investigations do not appear to have tested this area for contamination. ~~The area should be considered a potential hazard to the public and the environment.~~



BELLPORT  
LAUNDRY

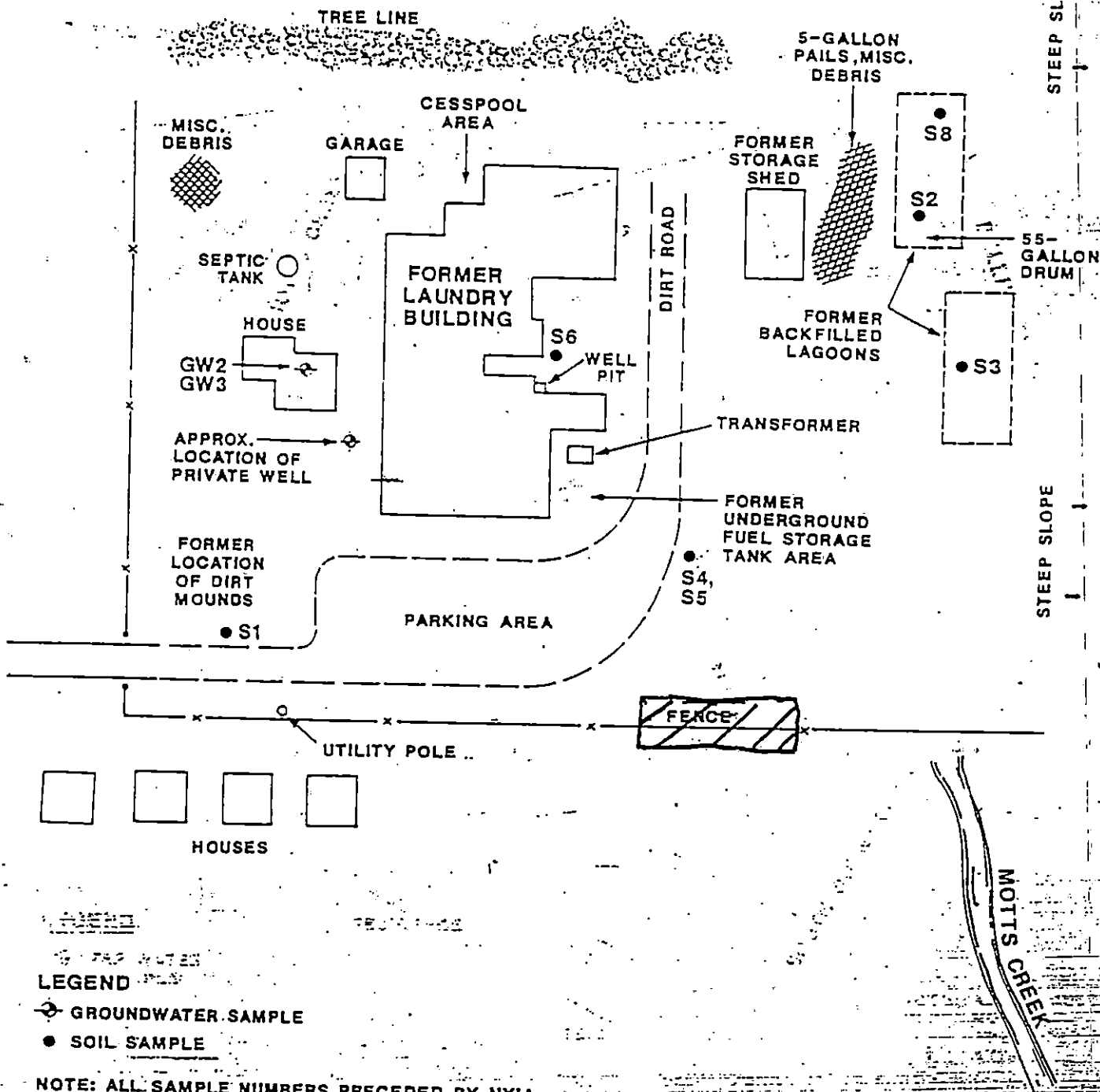
■ Regraded  
area

0202/002



OPEN FIELD AND TREES

S7●

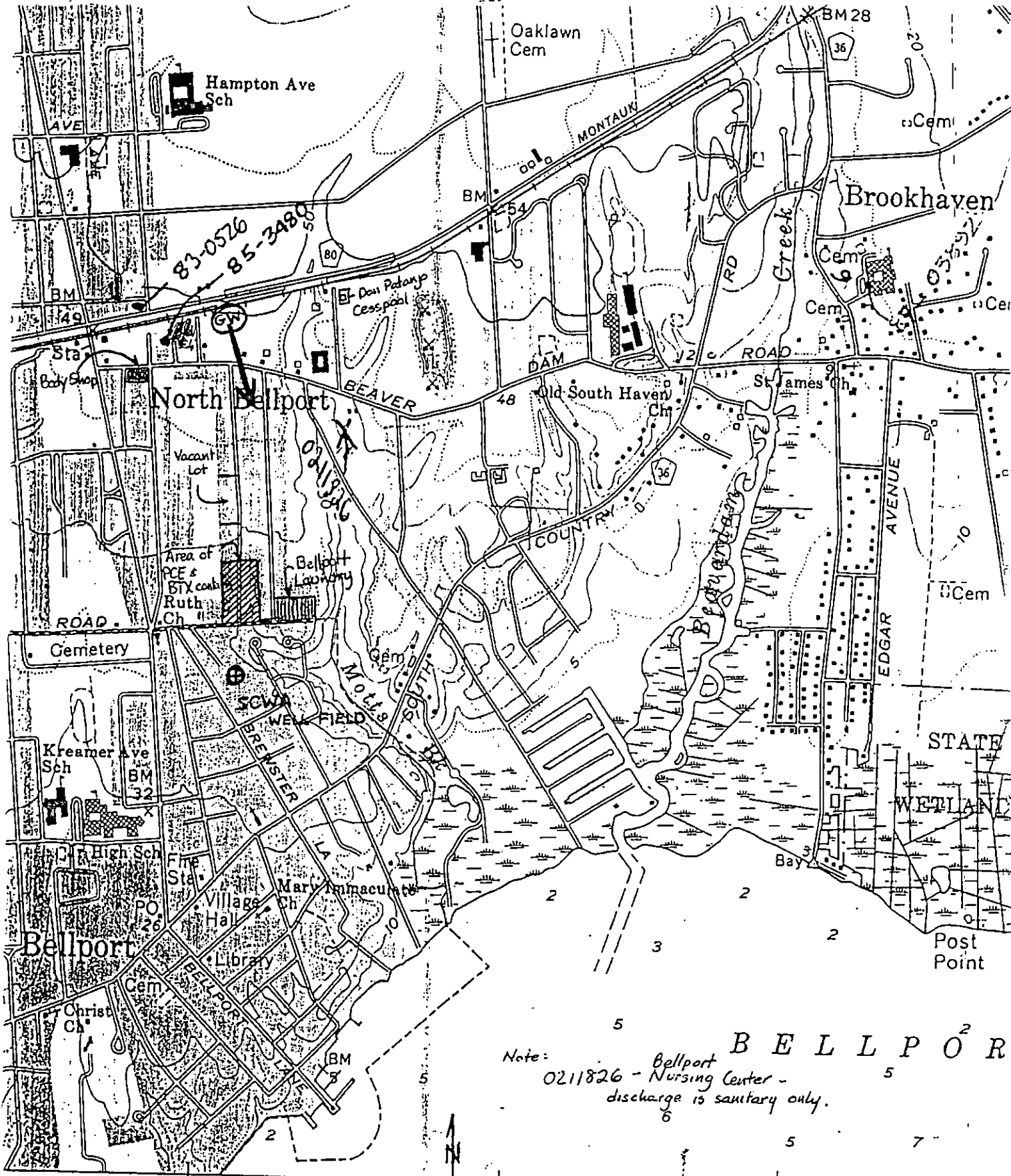


**SAMPLE LOCATION MAP**  
**BELLPORT LAUNDRY. BELLPORT, N.Y.**

NOT TO SCALE

**FIGURE 2**





83-0526  
85-3480

Note: Bellport  
0211826 - Nursing Center -  
discharge is sanitary only.

HOWELLS POINT

675000m. F

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

The Bellport Laundry facility on Head of the Neck Road in Bellport, New York was formerly a commercial laundry and dry cleaning facility. The laundry wastewater flowed to two lagoons on site. The facility had been cited for numerous violations of discharging untreated laundry wastes into the groundwater for many years. Also, it has been alleged that illegal dumping of hazardous waste has occurred on site. The Village of Bellport reported that it disposed of nonhazardous materials on site. Analytical results of well water samples collected in 1988 from an adjacent property located to the east of the site indicated that iron concentrations exceeded drinking water standards. In addition, five volatile organic compounds were detected in the barn well. Water samples were collected by the New York State Health Department (NYSHD) in June 1989 from an adjacent property located to the west of the site. The analyses indicated the presence of four volatile organic compounds. No organic or inorganic contaminants were detected in the downgradient well samples collected by NUS Corporation Region 2 FIT on October 19, 1989 in excess of the concentrations found in the upgradient well. Contaminants were detected in the surface soil samples on site; therefore, there is potential for direct contact since the gate has been left open on numerous occasions. It has been reported that Motts Brook has been sampled; however, the analytical results are unknown.

The site is recommended for a LISTING SITE INSPECTION due to past operating and disposal practices and groundwater contamination in the area. In addition to the private wells on site and in the immediate vicinity, a public supply well field is located approximately 1,500 feet west of the facility. At least 26,700 people within 3 miles of the site receive their potable supply from public or private wells drawing from the aquifer of concern. In order to differentiate the potential impact of the Bellport Laundry Site on local groundwater from that of a nearby gasoline station, monitoring wells should be installed on site upgradient and downgradient of the waste sources. Motts Brook should be sampled to determine whether contamination attributable to this site has occurred therein.



United States  
Environmental Protection Agency  
Region 2: New Jersey, New York  
Puerto Rico, Virgin Islands  
26 Federal Plaza, NY, NY 10278

# FACTS

October 1990

## BELLPORT LAUNDRY SITE IN BELLPORT, LONG ISLAND

### SITE DESCRIPTION

Bellport Laundry is an old commercial laundry and dry cleaning facility that has been shut since 1979. The New York State Department of Environmental Conservation (NYSDEC) issued violations of State wastewater discharge regulations against the facility while it was operating. It is believed that the wastewater consisted only of untreated laundry waste. The property was subsequently operated as a Security Shutter manufacturing plant until 1988. A large oil tank was removed from the property in 1989. The Village of Bellport has used the old lagoon area and other areas of the site for disposal of street clippings, asphalt, concrete and brush.

### EPA ACTIONS

An U.S. Environmental Protection Agency (EPA) Field Investigation Team (FIT) investigated the site in October 1989 in response to citizens' concerns. Their report was prepared in March of 1990. They found no evidence of any threat to human life, the local biota, flora or fire or explosion threats. There was no evidence of chemical releases from the site to ground water. This conclusion was based on sampling at existing wells that were both up and down gradient of the site. However, it was found that the ground water in the area contains concentrations of chlorinated organics above the State's 5 parts per billion (ppb) safe drinking water standard, the strictest in the nation, but well below federal guidelines for safety. EPA sampling also showed that ground water in the area exceeded federal taste and color standards for iron and manganese, a common condition on the eastern portion of Long Island. One sample from a tap in an uninhabited residence exceeded federal drinking water standards for lead. However, lead is a common contaminant in individual home water distribution systems, and EPA does not attribute this contamination to the site.

When the Agency learned of the concerns recently expressed by the community near the site, we asked federal health experts from the Agency for Toxic Substances and Disease Registry (ATSDR) to review analytical results of the FIT investigation and to advise the Regional Office of their opinion. ATSDR has concluded that from the sampling results available to it that a definite linkage to health problems reported by residents could not be made.

## THE ROLE OF EPA

EPA is in charge of administering Superfund, the federal program to address inactive or abandoned hazardous waste sites. EPA Region 2, headquartered in New York City, covers New York, New Jersey, Puerto Rico and the U.S. Virgin Islands. Under the Superfund remedial program, Region 2 has the responsibility to investigate suspected hazardous waste sites, such as the Bellport Laundry site, for possible inclusion on the National Priorities List (NPL) for long-term environmental cleanups. Although EPA was not able to find evidence that any hazardous waste was deposited at the site, the site is scheduled for a reevaluation using a new hazardous site ranking evaluation system under development at EPA headquarters in Washington, D.C. Bellport Laundry will be among the first 40 of 240 sites in Region 2 to be reevaluated using the new system.

The reason for this reevaluation is that low-levels of chlorinated organics were found in the ground water. Since the history of the site indicates that these types of chemicals may have been used in the past, EPA would not eliminate it from consideration for NPL listing without further information on the levels of these contaminants in the ground water of the general area.

## ADDITIONAL INFORMATION

Under Superfund, EPA responds to emergency situations when an uncontrolled release of chemicals poses an immediate and acute risk to public health and the environment. Such problems requiring quick solutions are handled through the Region's Superfund emergency response program.

In recent years, EPA has been active in assisting a number of communities in the Town of Brookhaven where private drinking water wells were found to be contaminated with concentrations of volatile organic chemicals high enough to trigger a Superfund emergency response action. In such incidents EPA uses Superfund to provide affected residents with bottled water, and in the case of Brookhaven communities, works closely with the Suffolk County Water Authority and Town officials to provide a permanent alternate water supply.

While investigating the Bellport Laundry site, FIT was informed by a local resident and the NYSDEC of ground water contamination from a gasoline station roughly 10 blocks upgradient of the site. Wards Lane is a street leading off Montauk Highway NNW of Bellport Laundry. In 1988, sampling at a number of private wells revealed contamination that appeared to be the result of a gasoline or similar petroleum spill. NYDEC requested our assistance under Superfund to provide an alternative water supply.

EPA was unable to assist in the situation because provisions of Superfund prevent the Agency from using emergency response authority when the ground water contaminant involved is petroleum related. EPA recommended that New York State address the problem under their spill authorities. However, the State found no evidence of a spill. EPA has been told that town officials are working with the Suffolk County Water Authority to bring relief to affected residents.

COUNTY OF SUFFOLK



PATRICK G. HALPIN  
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

DAVID HARRIS, M.D., M.P.H.  
COMMISSIONER

MEMORANDUM

TO: Aldo Andreoli, P.E.  
FROM: James C. Maloney, P.E. *JCM*  
DATE: October 18, 1990  
SUBJECT: Bellport Laundry  
475 Head of the Neck Road  
Bellport, New York  
Public Meeting

\*\*\*\*\*

As per your request, the writer attended an Information Meeting chaired by Councilman John Powell regarding possible groundwater contamination resulting from the illegal disposal of toxic materials at the above reference site.

BACKGROUND

The Bellport Laundry had been operating at its site until 1980. The firm performed both washing and dry cleaning operations at its facility. Laundry wastewater was discharged to the groundwaters of the County after passing through a lint trap via two lagoons, with an estimated capacity of 650,000 gallons. The lagoons were located between the building and Mott Creek to the east. Dry cleaning operations, according to staff of the Bureau of Toxic and Hazardous Materials, were carried on using mineral spirits, rather than chlorinated hydrocarbons.

Departmental involvement with the facility included both periodic sampling of the waste effluent, as well as responding to complaints by neighbors. The firm was found to have been discharging directly to the stream via a one inch (1") diameter pipe, rather than allowing the water to percolate through the ground as required. Department involvement with the facility

Aldo Andreoli, P.E.  
October 18, 1990  
Page Two

terminated with the removal of a 1,000 gallon gasoline tank and a 12,000 gallon fuel oil tank in November of 1988 and January of 1989 respectively. Though a Departmental representative was not present during the removal of the gasoline tank, the oil tank was found to have been leaking requiring the removal of approximately 10 cubic yards of contaminated soil. A review of the files in the matter indicate some ambiguity as to whether all of the contaminated soil was removed from the site.

In response to residents concerns regarding possible toxic dumping, Congressman George Hochbrueckner requested Region 2 of the United States Environmental Protection Agency to investigate the site. The investigation was performed in October of 1989 and a report issued in June of 1990. (A copy of the report was not provided to this Department). According to residents in possession of excerpts of the report, the EPA found low level site contamination existing. A Suffolk County Water Authority Supply Well is located to the west of the site.

#### THE MEETING

In attendance were representatives of the Suffolk County Water Authority, New York State Department of Environmental Conservation, the writer, as well as John Powell, Assemblyman I. William Bianchi, Jr. and Felix Grucci. After a short introduction of the various participants, the past and present roles played by the Departments were identified. Responsibility for investigation of toxic and hazardous material disposed at the site was clearly established to be that of the New York State Department of Environmental Conservation. The writer indicated this Department's involvement with regard to the removal of the two tanks and Mr. Stanley Farkas of New York State Department of Environmental Conservation gave a brief history of that Department's activity with regard to the site, as well as a brief description of the United States Environmental Protection Agency activities. The Suffolk County Water Authority indicated that it was not felt that the site could have any effect on the quality of the Water Supply Well located to the west. In addition, the Well is continuously monitored and the water quality is acceptable.

Aldo Andreoli, P.E.  
October 18, 1990  
Page Three

There are two separate areas of concern according to residents. The first has to do with private well contamination due to a number of sources, not including the laundry site. These water supply wells have been contaminated by chlorinated hydrocarbon solvents. Many of the effected homes are to the north or upgradient of the laundry site or the outside of a possible contamination plume. The homeowners wish to have public water brought into their area, but owing to the sparsity of homes on the affected streets, the cost of doing so is prohibitively high. It is their wish that the various government agencies assist with the cost of public water.

The second group of residents felt that the laundry site has been the recipient of toxic and hazardous materials and that these materials are leaching into the groundwaters effecting the quality of Mott Creek, as well as the quality of private wells. In addition, a number of residents feel that their health has been adversely effected by the presence of said contaminants. A USEPA report has been said to be inconclusive with regard to possible site contamination. Mr. Lawrence Tanenbaum of the U.S. EPA has been contacted (212 264-6697) and a request made for a copy of the Report. The report will be provided, but at a cost of approximately \$30 under the Freedom on Information Law. When the report is received, the writer will review same and attempt to evaluate the environmental significance of the agency's findings.

A second meeting is planned for October 29, 1990 to which representatives of the New York State Environmental Protection Agency and the U.S. Department of Environmental Conservation will be invited to afford same the opportunity to explain their activities with regard to possible toxic materials at this site. The writer will also attend so as to define the Department's roll and to provide health related information where necessary. It would seem that requests for this Department's intervention under Article 12 are to be expected. (Of note was the presence of Kenneth and Gloria Rosenblum who have a residence in close proximity to a small lake fed by Mott Creek. The Rosenblums will probably be of great assistance to the residents in explaining the workings of the various Town, County and State governments and the resources available for performing any investigations.)

JCM:KN  
cc: Joseph Baier, P.E.  
James H. Pim, P.E.



## WRITTEN CONFIRMATION OF VERBAL COMMUNICATION

Project: Bellport Laundry Date: 26 Oct 90 Time: \_\_\_\_\_

Telephone

Meeting

From: Tony Candela Location: \_\_\_\_\_

To: John Swartwout Attendees: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Tony called to get my recommendation on the Bellport Laundry site in Bellport, Long Island (Suffolk County). It is not on the registry but EPA has completed a site investigation (dated March 15, 1990) which recommends a listing site inspection including installation of groundwater monitoring wells and sampling of Motts Brook. Tetrachloroethene is known to have been used and stored at this site by the Laundry for dry cleaning. EPA found it in both samples from one of the on-site soil borings and at the detection limit (5 ppb) in a sample from an on-site well. Previous sampling of water from the well at a barn on an adjacent property in 1988 showed tetrachloroethene contamination there (16 ppb). The creek between the Laundry and the barn location may, however serve as a barrier to groundwater flow and the contamination at the barn may be from another source. Other contaminants were found in the groundwater at and around the laundry, reportedly from a nearby gasoline station. I told Tony I agreed with the reports recommendation and also that I thought the site should be added to the Registry. If EPA doesn't follow through with the LST, we should schedule it for a PSA.

Signature John B. Swartwout

(Note - I have the EPA SI Report)

Page 1 of 1

To: Phil Barabato  
From: Brian Baker  
Re: Groundwater Contamination in vicinity of Bellport Laundry  
Date: 10/31/90

I have reviewed available information from SCDHS, EPA, and NYSDEC Divisions of Hazardous Waste Remediation & Oil Spill Response pertaining to the groundwater contamination and contaminated private wells near the former Bellport Laundry, located at the east end of Head of the Aleck Rd, and find as follows:  
1. The Bellport Laundry does not appear to be a contributing factor to the shallow groundwater contamination present in the area.

Sampling results from private wells at the laundry and at the home immediately downgradient of the laundry, conducted in June 1989 as part of a USEPA Site Investigation Report, showed that while the wells of the laundry and residence had been contaminated by chlorinated solvents (ATCE, 12 ug/l; <sup>max</sup>PCE, 15 ug/l; <sup>max</sup>ADCE, 8 ug/l; ATCA, 29 ug/l), "no organic contaminants were detected in downgradient well samples in excess of the concentrations found in the upgradient well." Private well sampling data obtained from SCDHS shows that 22 of the 26 wells sampled in the vicinity of Wards Lane, just northwest (upgradient) of the former laundry site, have been contaminated by BTX and chlorinated solvents (including the above-mentioned DCE, TCA, TCE & PCE) at concentrations similar to or greater than those in the laundry well. Based on the surveyed data, it appears that the private well contamination in this area is primarily due to source(s) upgradient of the former Bellport Laundry. The USEPA Site Investigation Report is on file in HUR. A copy of the Conclusions and Recommendations page is attached.

2. A Suffolk County Water Authority well field, containing 2 upper glacial wells (S1331, 60', 600 gpm # S14710, 118', 750 gpm) and one Magrath well (S 69364, 529', 1200 gpm) is located downgradient of

the laundry site. SCWA was notified on 12/1/89 of the contaminated wells upgradient of the wellfield (R. Schneck, letter to E. Rosenthal). W. O'Brien has a large file of water quality data on this wellfield obtained from SCWA.

2. Based on a recon of the surrounding area, which revealed few obvious potential contamination sources, and the varied contaminants found in the wells in this area, it is doubtful that a single point source was responsible for the contamination in the Bellport area. Contaminants found in area private wells include metals (lead, iron & manganese in excess of NYS drinking water standards); tetrachloroethylene; chlorinated solvents (tri- and di-chloro ethylene, tri- and di-chloroethane, typically found in cesspool cleaners and as degradation products of tetra- and tri-chloroethylene). Potential sources include:

1. ~~BTX~~ BTX: Zitro 5/3, Montauk Highway: A 1983 ~~BTX~~ tank failure (8300526) has been implicated in contaminating a private well of 172 New Jersey Ave (8503480). BTX has also been detected in wells of #5, 8, 9 & 14 Wards Lane. This appears to be a slug of contamination which, due to the absence of BTX in wells between Zitro/172 New Jersey Ave and the south end of Wards Lane where the BTX contamination is concentrated, cannot be definitely connected to the Zitro spill (per W. O'Brien).

2. Tetrachloroethylene: No definite source. PCE contamination is concentrated in a plume extending from 36 Wards Lane to the well S of Bellport Laundry (Raden property, Moff Drive), generally ~~pointing~~ in direction of groundwater flow.

Upgradient potential sources include a vacant lot owned by the Village of Bellport (potential dumping?) on Wards Lane just north of the plume, or possibly commercial operations along Montauk Highway. (no dry cleaners noted, however).

Ward 2  
the  
the



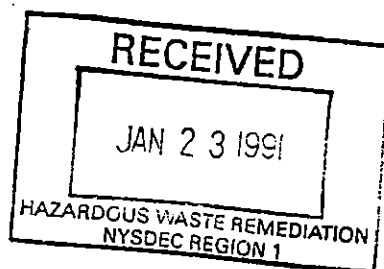
cleaning fluid (perc or PCE) and one containing iuvie oil, the present inside a garage; these containers may have been the buried drums unearthed on 10/20. Soil samples were taken by HWR on 10/23/90 from the area where the fluid spilled and from the soil inside the rusted drum; I will notify you when I find out what the results were. A copy of his site report is attached.

c. A 12000 gallon  $\frac{1}{2}$  tank removal (88 08239) on 1/16/89 from the E side of the building revealed soil contaminated with #6 fuel oil & "solvent". The soil which was contaminated with fuel oil was removed by Rice Tank Cleaning; the solvent contamination was referred to SCDHS and NYSDEC-DSHW for action, with SCDHS contacting the site owner (Gardiner Hulse) to request a groundwater investigation on 1/30/89. I will find out from Alex Santino regarding the status of this <sup>report</sup> ~~case~~ on 11/5/90. The spill was closed by the DEC on 1/26/89.

Based on the information gathered from SCDHS, I will be adding this area to the Private Well Contamination Area listing in CASI, and to the PRIWELL coverage in the GIS system. Further action by the Water Unit at this time does not appear necessary. Please see me if you have any questions.

cc W Spitz  
A. Candela

DEC 17 1990



Mr. Michael J. O'Toole, Jr., P.E., Director  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, N.Y. 12233-7010

Dear Mr. O'Toole:

As you are aware, during the month of October, 1990 staff from your Department met several times with concerned residents of Bellport, Long Island to discuss the Bellport Laundry site, which appears on each of our agencies' registries of potential hazardous waste sites. The Environmental Protection Agency's (EPA) Regional Administrator, Constantine Sidamon-Eristoff met with area residents and state officials on October 24, 1990 to clarify our position on this site with respect to the involvement of the Superfund program.

Mr. Eristoff indicated at that meeting that Bellport is one of the higher priority sites for a re-evaluation of its score using the recently revised Hazard Ranking System (HRS). The revised HRS was signed as a final rule on November 9, 1990. Its effective date will be 90 days after publication in the Federal Register, which is expected by the end of November, 1990. Whatever the outcome of this re-scoring, please bear in mind, though, that the Bellport site is presently in the evaluation stage. If the site is eligible for the National Priorities List (NPL), placement there would not occur until late in 1991 or early in 1992, given the schedule of the HRS revisions and the large queue of sites currently in line for evaluation. Since listing to the NPL (if warranted) may not occur for quite some time, I suggest that the New York State Department of Environmental Conservation (NYSDEC) utilize its available enforcement of regulatory/ administrative authorities to address the site. It is my understanding as per discussions between Mr. Larry Tannenbaum of my staff and NYSDEC's Region I office that your Department is intending to address the site via a Part 360 Closure/Clean-up plan. Invoking this plan would have the responsible party pay for the closure/clean-up, and would make clear to all parties concerned that the issue is being handled and not being left unattended.

Since EPA will continue its assessment for NPL inclusion, I suggest that the State action be as consistent as possible with the requirements of the National Contingency Plan. This will allow for an expeditious remediation of the site should it be placed on the NPL.

Your agency's early attention to this matter would be most welcome at this time. Should you need to discuss any technical issues as regards the Bellport site, you may contact Mr. Dennis Santella, Chief of the Superfund Division's Technical & Pre-remedial Support Section. He can be reached at (212) 264-8677.

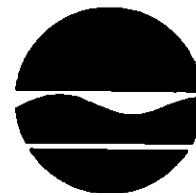
Sincerely yours,

Richard L. Caspe, P.E., Director  
Emergency and Remedial Response Division

cc: Thomas C. Jorling, Commissioner  
New York State Department of Environmental Conservation

bcc: C.S. Eristoff, EPA  
J. Marshall, OEP  
V. Pitruzzello, PSB  
D. Santella, PSB:TPSS  
L. Tannenbaum, PSB:TPSS  
B. Conetta, PSB:TPSS  
A. Candela, NYSDEC ✓

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

JAN 4 1991

Mr. Richard L. Caspe, P.E.  
Director  
Emergency and Remedial Response Division  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza  
New York, New York 10278

Dear Mr. Caspe:

Re: Bellport Laundry

In response to your letter of December 17, 1990 regarding the subject site, please be advised that we will try to expedite matters and initiate action as soon as possible.

The proposed plan is to list the Bellport Laundry site on the State Registry, and then pursue a Phase II site investigation and a Part 360 removal of all the site debris, under an Order on Consent.

It is expected that the owner will cooperate and we will be able to move matters along.

My staff will keep the EPA informed on our progress and forward for review work plans and reports.

If there are any further questions on this subject, your staff can contact Mr. Anthony Candela at (516) 751-4078.

Sincerely,

Michael J. O'Toole, Jr., P.E.  
Director  
Division of Hazardous Waste Remediation

bcc: T. Jorling  
A. Candela  
N. Sullivan  
M. O'Toole (2)  
C. Goddard  
E. Barcomb  
J. Swartwout  
File

JS/ck

MEMORANDUM

To: Anthony Candela  
From: Robert Stewart  
Subject: Summary of Available Data for the Bellport Laundry Site  
Date: January 28, 1991

SITE HISTORY

Bellport Laundry site is located at the east end of Head of the Neck Road, Bellport, N.Y. The site was operated as a commercial laundry from 1928 to 1979. The company entered the dry cleaning business in 1948. Rollup Insulating Security Shutters operated the site from 1981 to 1988. They made aluminum doors and shutters. The property is currently being rented to Bayport Land Development Company. An auto repair facility also operates on the site. Solvent-like odors were noted emanating from the repair shop during a site visit on 10/22/90.

Two lagoons were used on-site for the disposal of waste water. One lagoon was constructed in 1947 with a capacity of 240,000 gallons. The other lagoon was constructed in 1958 with a 410,000 capacity. In August 1971, the estimated flow to the lagoons was estimated at 4,000 gallons per day. Discharges to the lagoons ended in 1979 with the closure of the laundry. The laundry was cited for discharging without a permit to these lagoons on 11/30/65 and 9/3/71. A SPDES permit was first applied for in 1966. Details on earlier SPDES permits were unavailable. A SPDES permit for discharges into the 2 lagoons was in effect from 7/1/77 to 2/18/82. The laundry was in violation of this permit on 11/7/77 for pH, C.O.D., suspended solids, and total dissolved solids.

A 12,000 gallon U.G. tank removed on 1/16/89 from the ground east of the the building used by the former laundry revealed soil contaminated with #6 fuel oil. A solvent-like odor was also noted. Five or six 55 gallon drums of soil were removed. The soil was never sampled. The owner of the property was instructed by SCDHS on 1/20/89 to initiate a groundwater investigation to determine the extent of any contamination that may be present as a result of the tank leak. No wells have been installed to date.

According to Gardiner Hulse, the owner of the site, C & D material was disposed on his property by the Village of Bellport starting in the mid 1960's. Other records indicate

that the Village of Bellport used this site for disposal from 8/76 to 5/83. The village disposed of street sweepings, asphalt, concrete, brush, and sod. John Pavacic from Brookhaven Town noted logs, tree stumps, tree branches, scrap metal, and gravel as part of the fill material during a December 9, 1987 inspection. Mr. Pavacic issued appearance tickets on 3/7/88 for the following violations:

1. operating of a private disposal area without a permit
2. tree clearing without a permit
3. burial of trees and debris
4. destruction of wetlands

Citizens have made several complaints of alleged dumping of drums on the property. A complaint made on 10/22/90 alleged that several formerly buried drums were uncovered on 10/20/90. It was further alleged that at least one drum contained an unknown liquid that spilled on to the ground during the excavation. Robert Stewart, DHWR, investigated the complaint on 10/22/90 and found two empty drums in the vicinity of a regrading effort intended to reduce the slope between the Bellport Laundry site and the residence of William and Cynthia Paden. One drum which was partially buried was heavily rusted. Residual volatile organic vapors were evident inside the empty drum. The condition of the drum supported the allegations made in the citizen's complaint. Two soil samples taken 3 days after the alleged spill detected trace levels of PCE at 8 ppb and 13 ppb. The total of the tentatively identified volatile organic compounds were 157.4 ppb and 1,329 ppb.

#### SOIL SAMPLING RESULTS BY NUS FOR THE EPA

NUS took 8 soil samples of the site on 10/19/89. The only significant detections were 1 ppm of 4 methyl phenol in the northern lagoon and .026 ppm PCE and .4 ppm fluoranthene in a location east south east (ESE) of the former location of the 12,000 gallon U.G. fuel tank.

The 8 soil samples were surface samples with a maximum depth of 2 feet. Three samples were taken in the former location of the 2 lagoons. These samples were taken between 10" and 2' deep. In trying to take sample S2 in the northern lagoon, the auger was rejected 7 times before a spot could be found to take the sample. For sample S8 also taken in the northern lagoon, the auger was rejected 17 times before the sample could be taken. We must realize that the lagoon soil samples are in fact samples of the C & D material used to fill them and should not be interpreted as being representative of any possible sediments remaining in the lagoons.

## REGIONAL GROUNDWATER CONTAMINATION

In 1983, Zitro's Service Station on Montauk Highway had a tank failure which contaminated a private well at 172 New Jersey Ave. and wells at #5, 8, 9, and 14 Wards Lane with BTX contamination. SCDHS sampled 26 wells in the vicinity of Wards Lane as a result of this spill. The plume appears to be passing slightly to the west of the Bellport Laundry site. The wells were also tested for carbon tetrachloride, PCE and TCE. Seven wells where the contaminant levels exceeded the removal action level are scheduled for an EPA funded installation of water supply systems as of 3/90. In these 7 wells, the highest readings for PCE, TCE, and carbon tetrachloride were 20.7 ppb, 39.4 ppb, and 57.6 ppb respectively.

The site lies just west of the headwaters of Mott's Creek. On the eastern side of the creek upgradient of the headwaters, a private well that was sampled by NUS on 10/19/89 detected 1,1,1-TCA at 29 ppb, TCE at 12 ppb and 1,1-DCA at 8 ppb.

Regionally, the groundwater upgradient of the site is contaminated with volatile organic compounds in excess of groundwater standards.

A Suffolk County Water Authority well field, containing 2 upper glacial wells (S1331, 60', 600 gpm and S14710, 118', 750 gpm) and one Magothy well (S69364, 529', 1200 gpm) is located approximately 1000'-1500' west of the laundry site (Brian Baker, NYSDEC, water unit). No contamination has been discovered in any of the wells.

Well logs from these wells revealed a 10' solid hard clay layer starting at 148' below the surface, possibly part of the Gardiner's Clay unit. More clay is experienced between 319'-570' with 3 separate layers of solid clay in this interval.

A resident to the east of Mott's Creek (southeast of the laundry site but not considered downgradient since the resident is on the opposite side of Mott's Creek) has two wells on her property. Both wells are fairly close together. One is approximately 40'-45' deep. The other well is approximately 130'-140' deep and is reported by the resident as being an artesian well. If this is true, one could speculate that the shallow well is screened above the clay layer and the deeper well is screened just below the clay layer. The shallow well was sampled on 3/2/88 and 3/14/88 by SCDHS and found to contain 16 ppb of PCE, 5 ppb of cis DCE, 25 ppb of freon 113, 2860 ppb of iron, and 7800 ppb of zinc. The deep well, sampled on 3/2/88, was free of contamination. One might conclude that the shallow aquifer is significantly more contaminated than the deeper aquifer and that there is good separation via a clay

layer between the two aquifers based on the artesian nature of the deeper well.

#### GROUNDWATER CONTAMINATION RESULTING FROM BELLPORT LAUNDRY SITE

The major areas of concern for the Bellport Laundry site are the 2 former lagoons used to discharge waste water from 1947 to 1979, the leaking 12,000 gallon U.G. fuel oil tank that was removed on 1/16/89 where a solvent-like odor was detected, and the C & D landfill on the site which may have received hazardous wastes. These areas of concern range from the center of the site to the eastern most edge. The 2 lagoons are in the northeastern portion. The C & D landfill starts at the south central portion of the site and extends to the eastern edge forming a steep slope down to a dry bed of Mott's Creek. The former U.G. fuel oil tank was in the south central portion.

Today, the headwaters of the creek start 400' to the south south east (SSE) from the eastern portion of the site. The regional groundwater flow direction is to the south south east (SSE). I will therefore assume that shallow groundwater passing beneath the stated areas of concern flows to Mott's Creek, a natural discharge point for groundwater. Most of the land between the headwaters of the creek and the areas of concern is fresh water wetlands with heavy vegetation and swampy conditions. The extreme eastern edge of the properties on Mott Drive owned by the Paden's and by the Toms' could be considered downgradient of the central portion of the Bellport Laundry site. Enclosed is a composite property map illustrating the location of the site in relation to the creek.

There are no current groundwater wells installed between the areas of concern and headwaters of the creek. The 7 tap water samples that were samples that were collected from the site and neighboring properties are not located in this small corridor. I therefore do not consider any of the wells to be downgradient of the Bellport Laundry site.

The only sample which may relate to the site is the creek water sample taken by Brookhaven Town on 10/31/88. Numerous other upgradient sources may be responsible for the contamination of Mott's Creek other than Bellport Laundry site.

No volatile organic compounds were detected in Mott's Creek. Three metals were detected in elevated concentrations as follows: total chromium at 130 ppb (hexavalent chromium was not detected), lead at 180 ppb, and iron at 260,000 ppb. The northern part of Mott's Creek from the tidewater portion to the headwaters is a class "C" water. Lead and iron are in violation of the standards for class "C" waters. Class "C"

waters are suitable for fishing and fish propagation. The water quality shall be suitable for primary recreation even though other factors may limit the use for that purpose.

#### CITIZEN COMPLAINTS

Numerous complaints have been made concerning the Bellport Laundry site. The following is a summary of some of the complaints:

1. 6/21/55 - allegedly 9 to 10 houses near the laundry have had tasting water that foams.
2. 12/13/55 - allegedly a private well near the laundry had had tasting water from its well.
3. 4/29/75 - a pipe was discharging laundry wastes into Mott's Creek.
4. 7/8/75 - allegedly a lake south of the laundry has an algae build up as a result of the laundry.
5. 3/6/89 - contamination in a well to the southeast of the site was allegedly blamed on the laundry site.
6. 10/20/90 - formerly buried drums were unearthed during an excavation on the laundry site.

Several articles in the newspapers relate various health problems including hormonal and stomach troubles, warts, tumors, and asthma to the Bellport Laundry site.

#### CONCLUSIONS

Public concerns about this site have been blown completely out of proportion. For unknown reasons, most of the areas, health concerns are centered on this site.

The most common complaint is that this site is contaminating the drinking water in the area. Given the flow directions to Mott's Creek assumed in this report, no private or public wells will be impacted by any groundwater contamination from this site. The only possible contamination of drinking water from this site would be if the drawdown from the public water supply wells located 1000' to 1500' was great enough to pull in groundwater beneath the site. The 2 shallow public wells in the well field have a pumping rate of 600 gpm and 750 gpm. It is unlikely that these wells are strong enough to affect the groundwater 1500' away in the areas of concern on the site. Recent tests show there is no contamination in these wells (Brian Baker, NYSDEC, water unit from Martin Trent, SCDHS)

There is some concern about the unknown composition of the C & D material that is eroding into the eastern edges of the 2

properties on Mott Drive. The northern property border on the eastern end between the Bellport Laundry site and the property owned by William and Cynthia Paden is sloped steeply to as great as 45 degrees. This has caused the erosion of the C & D material piled to 20' high on the laundry site to flow onto the Paden property and on to the adjacent lot owned by John and Jean Toms. This area is where 2 formerly buried drums were discovered. Soil tests, however, have not conclusively determined whether hazardous wastes were involved. This area is an environmental problem that should at least be addressed as a case of illegal dumping by the Solid Waste Division.

Another area that may need further consideration is the condition of Mott's Creek. The high iron levels of 260,000 ppb have undoubtedly caused an unsightly appearance which probably has aroused public opinion about the site. The lead in the creek is unlikely to cause a health problem by accidental ingestion of the creek water. It should however be determined whether fish inhabit the creek water where possible health hazards could result from the consumption of the fish. The levels of chromium in the waters do not appear to be significant.

#### SUGGESTIONS

1. As previous studies have not adequately evaluated the possible groundwater contamination, I would suggest the installation of 3 monitoring wells on the site. One well should be north of all the buildings to serve as an upgradient well. One well should be south south east (SSE) of the former location of the 2 lagoons. This well may be difficult to install depending on the extent of the C & D material buried on site. The last monitoring well should be placed on the eastern most border of the Paden property or the Toms property. This well would monitor the former location of the leaking U.G. storage tank and the steeply sloping area where 2 drums were found buried in the C & D material.

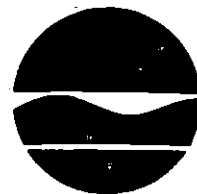
2. I suggest resampling the water from the origin of Mott's Creek at a point closest to a direct line from the site to verify the samples obtained by Brookhaven Town. The actual location for the 10/31/88 creek sample and the sampling techniques used to procure the sample are unknown.

10/24/91

## REGISTRY SITE CLASSIFICATION DECISION

1. SITE NAME Bellport Laundry	2. SITE NO 152137	3. TOWN/CITY/VILLAGE Bellport	4. COUNTY Suffolk
5. REGION 1	6. CLASSIFICATION Current NA Proposed P Modify		
7. LOCATION OF SITE (Attach U.S.G.S Topographic Map showing site location)			
a. Quadrangle Bellport, NY	b. Site Latitude 40° 46' 08" N	Longitude 72° 56' 02" W	c. Tax Map Number Sec. 978.10 B1.3 Lot 29
8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)			
This site is a former commercial laundry and dry cleaners (1930s to 1979) which was later used for manufacturing aluminum rollup doors and security shutters (1981-1988).			
a. Area <u>1</u> acres      b. EPA ID Number <u>NYD986882702</u>			
c. Completed ( ) Phase I ( ) Phase II ( ) PSA ( ) RI/FS (X) PA/SI ( ) Other			
9. HAZARDOUS WASTES DISPOSED			
Disposal of tetrachloroethene is suspected			
10. ANALYTICAL DATA AVAILABLE			
a. ( ) Air (X) Groundwater ( ) Surface Water (X) Soil ( ) Waste ( ) EPTox ( ) TCLP			
b. Contravention of Standards or Guidance Values			
11. JUSTIFICATION FOR CLASSIFICATION DECISION			
A drum of PCE was reportedly found in a storage building onsite. PCE was found in an on-site soil sample at 25 ppb and in an onsite well at the detection limit (5 ppb). Upgradient wells contain some other chlorinated organic compounds but not PCE. NUS recommended a listing site inspection but EPA instead scored it based on the SI and dropped it from further consideration.			
12. SITE IMPACT DATA			
a. Nearest surface water: Distance _____ ft.      Direction _____      Classification _____			
b. Nearest Groundwater: Depth _____ ft.      Flow Direction _____      ( ) Sole Source ( ) Primary ( ) Principal			
c. Nearest water supply: Distance _____ ft.      Direction _____      Active ( ) Yes ( ) No			
d. Nearest building: Distance _____ ft.      Direction _____      Use _____			
e. In State Economic Development Zone?      ( ) Y ( ) N			
f. Crops or livestock on site?      ( ) Y ( ) N			
g. Documented fish or wildlife mortality?      ( ) Y ( ) N			
h. Impact on special status fish or wildlife resource? ( ) Y ( ) N			
i. Controlled site access?      ( ) Y ( ) N			
j. Exposed hazardous waste?      ( ) Y ( ) N			
k. HRS Score _____			
l. For Class 2: Priority Category _____			
13. SITE OWNER'S NAME Gardiner Hulse	14. ADDRESS P.O. Box 624, Shelter Island, NY 11965		15. TELEPHONE NUMBER
16. PREPARER <i>John B. Swartwout</i> Signature		17. APPROVED  Signature	
Date 6/30/92		Date	
John B. Swartwout, Chief, Eastern Investigation Section Name, Title, Organization		Name, Title, Organization	

New York State Department of Environmental Conservation  
60 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

AUG 20 1992

Stephen B. Latham, Esq.  
Twomey, Latham, Shea & Kelley  
33 West Second Street  
P.O. Box 398  
Riverhead, New York 11901

Dear Mr. Latham:

Re: Bellport Laundry, ID #152137

In response to your August 6, 1992 letter, I am enclosing copies of all correspondence in our file between the EPA and DEC since March of 1990. Based on the recommendation of DEC Region 1 and Central Office staff, we designated the site as a potential inactive hazardous waste disposal site. Telephone contact with Mr. Tannenbaum, of the EPA, revealed that they made the decision for no further action based on the data collected from the Site Inspection.

Our independent review of the Site Inspection report led to a contrary position due to the very limited nature of the groundwater sampling program performed by EPA's consultant. While the consultant's sampling points were convenient for them (samples collected from existing drinking water wells), they were by no means collected from the most appropriate locations to monitor the effects, if any, which the Bellport Laundry site had on the groundwater. In other words, we believe the EPA made their decision for no further action based on data from which no conclusion can be drawn.

In addition to the lack of good groundwater data, the Site Inspection report notes numerous instances of permit violations and raises questions about the 12,000-gallon underground tank which was removed in January 1989. Also, data suggests that there is a contaminant source upgradient of the site which may be affecting the groundwater in the region.

For these reasons we have classified the Bellport Laundry as a potential site and will be conducting a site-specific investigation in the future. If you have any new information which clarifies or enhances any of the information we possess, I would welcome the opportunity to review it. If you have any questions or comments, feel free to contact me at (518) 457-0639.

Sincerely,

John B. Swartwout, P.E.  
Chief  
Eastern Investigation Section  
Bureau of Hazardous Site Control  
Division of Hazardous Waste  
Remediation