



**CONTINUED SOIL & GROUNDWATER INVESTIGATION
& REMEDIAL MEASURE**

AT

BAYVILLE VILLAGE CLEANERS

BAYVILLE, NEW YORK

Prepared For: Mr. Thomas Ryan

Prepared By: P.W. Grosser Consulting Engineer & Hydrogeologist, P.C.

DECEMBER 1996



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1.0 INTRODUCTION

Bayville Village Dry Cleaners (the Site) is located at the southeast corner of Bayville Avenue and 17th Street on the Bayville Peninsula, Bayville New York. The portion of the Bayville Peninsula where the Site is located is approximately 2,000 feet wide and is bounded to the north by Long Island Sound, to the southwest by Mill Neck Bay, and to the southeast by Oyster Bay Harbor (see Figure 1). The purpose of this report is to document continued investigation and remedial measures in relation to soil contamination documented at the Site. Remedial activities consisted of the removal of tetrachloroethylene (PCE) contaminated soils delineated beneath the Site as documented in the May 22, 1996 *Soil and Groundwater Investigation Report* prepared for the Site by P. W. Grosser Consulting Engineer & Hydrogeologist, P.C. (PWGC) and is included as Appendix A. Two additional areas of concern were investigated during this phase. The first area investigated was the on site sanitary system to determine if it contributed to soil contamination beneath the Site. The second area of concern was the off site storm drain to document the extent of soil contamination within the structure as well as to determine if the structure is contributing to groundwater contamination documented beneath the Site. These areas of concern were addressed based on a discussion with Mr. Jamie Ascher of the New York State Department of Environmental Conservation (NYSDEC) at a July 23, 1996 meeting regarding the Site. An increased level of quality assurance/quality control (QA/QC) as well as field documentation protocol for the project was also implemented based on this meeting.

1.1 Site Background

The Nassau County Department of Health (NCDH), responding to an anonymous complaint of alleged improper waste disposal, initiated a soil quality investigation on May 26, 1995. The

BAYVILLE VILLAGE CLEANERS

BAYVILLE VILLAGE CLEANERS

GULF SERVICE STATION
NYSDEC SPILL No. 9404015

Mag 14.00

Tue Nov 12 09:08 1996

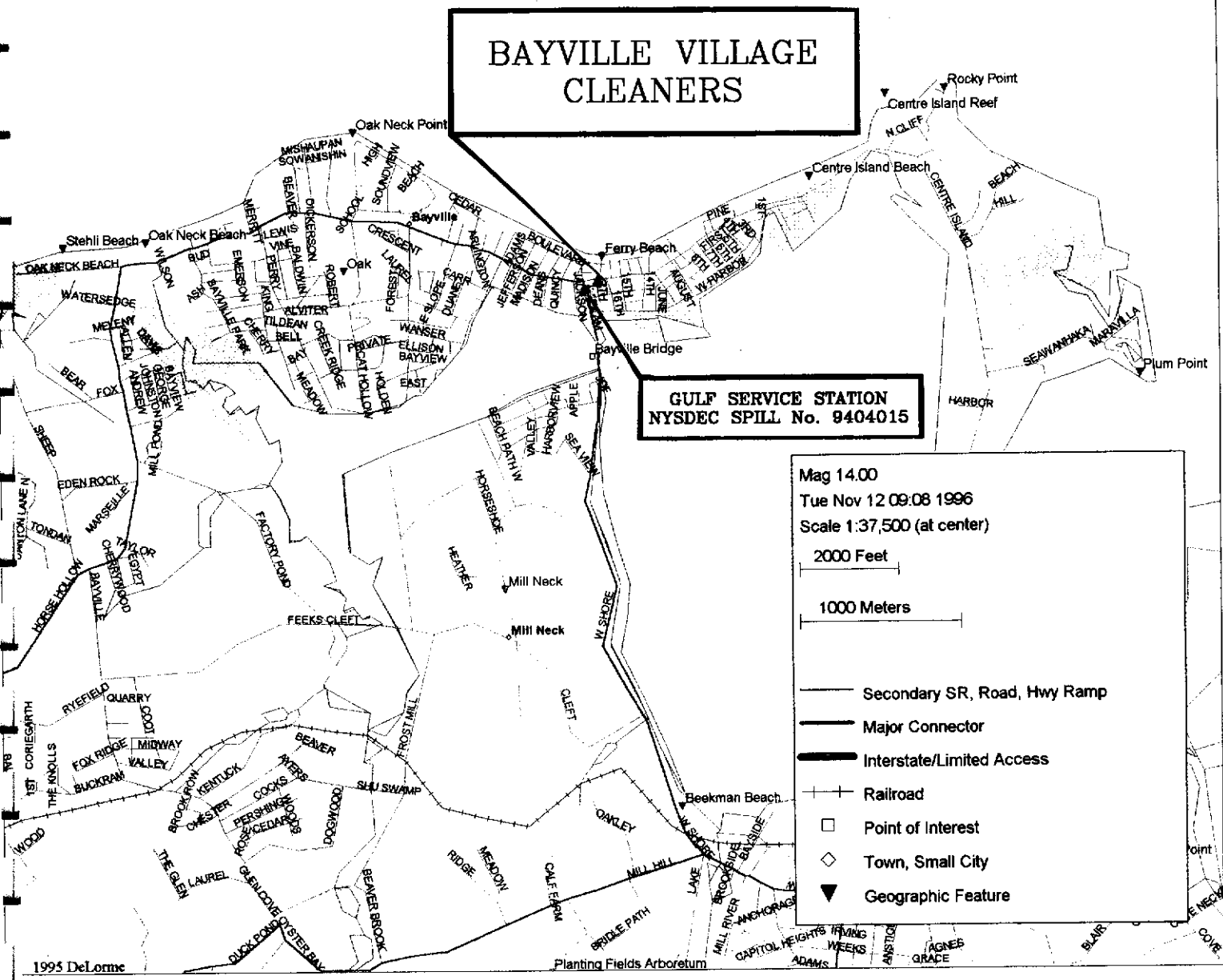
Scale 1:37,500 (at center)

2000 Feet

1000 Meters

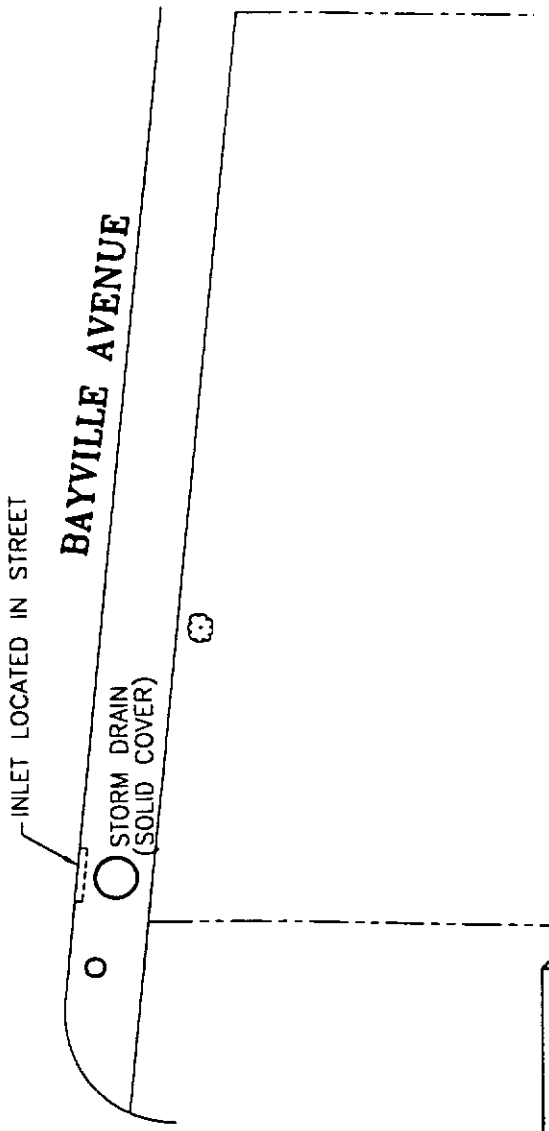
- Secondary SR, Road, Hwy Ramp
- Major Connector
- Interstate/Limited Access
- + + Railroad
- Point of Interest
- ◇ Town, Small City
- ▼ Geographic Feature

FIGURE 1



anonymous complaint alleged that the owner of the Site instructed employees to discharge waste contaminated with tetrachloroethylene (PCE) along the western perimeter of the Site (which includes a flower bed), as well as to an off site storm drain. These unsupported allegations were not confirmed by the owner of the Site. As part of the investigation, NCDH representatives screened shallow soils located around the western perimeter of the Site with a photo-ionization detector (PID). Subsequently, three (3) soil samples, from (2) locations within the flower bed were collected. In addition, the NCDH collected a sediment sample from within the off site storm drain. The NCDH analytical results of the samples collected from the flower bed indicated that concentrations of PCE detected ranged from 36,000,000 parts per billion (ppb) in the surface soil to 24,000 ppb at a depth of 4 feet below grade. The concentration of PCE in the off site storm drain was 880,000 ppb.

Subsequently, PWGC was retained by the owner of Bayville Village Dry Cleaners to delineate the vertical and horizontal extent of on site soil contamination and to determine if groundwater was impacted. A PWGC soil and groundwater investigation work plan dated April 2, 1996 was accepted by the NCDH and work was performed on April 10, 1996 in the presence of Mr. Joe DeFranco of the NCDH. The investigation included the collection of continuous soil samples from grade to the water table (approximately 8.5 feet below grade) at 9 soil boring locations. Two boring locations were chosen to coincide with the approximate locations originally taken by the NCDH. The original NCDH sample locations correspond to the former locations of two pipes exiting the west side of the building, above the flower bed, from two separate unit processes. The first unit process (located over the southern portion of the flower bed) is a vacuum system which captures water vapor during clothes pressing. The second process was an evaporator unit located over the northern portion of the flower bed which was designed to release vapor through a pipe (see Figure 2). The two unit processes are



- LEGEND**
- BORING LOCATION
 - REMEDIATE TO 5'
 - REMEDIATE TO 8' OR UNTIL THE CAPILLARY FRINGE IS ENCOUNTERED

SCALE: 3/32" = 1'-0"

FIGURE No.

2

SITE PLAN
ORIGINAL SOILSAMPLING LOCATIONS & RESULTS
 MAY 22, 1996
 290 BAYVILLE AVE.
 BAYVILLE, N.Y.

P.W. GROSSER CONSULTING / ENGINEERS & HYDROGEOLOGISTS, P.C.

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PREPARED FOR: **THOMAS RYAN**

FILE No. **BVC981-2**

DATE: **12/8/96**

typical dry cleaning equipment designed to recover PCE and therefore, have the potential to be sources of PCE contamination. The owner of the site had the discharge pipes disconnected following the NCDH inspection. In addition, three groundwater samples were collected; one south of the potential source area (flower bed receiving discharges from vacuum and evaporator units), one north of the potential source area, and one within the potential source area. The off site storm drain was not addressed since the allegations of deliberate dumping were not confirmed by the owner of the Site and the contaminated soil identified coincides with discharges that have the potential to be sources of PCE.

Results of the investigation indicated that soils in the vicinity of the vacuum unit discharge were in need of remediation as a result of a PCE concentrations in excess of soil cleanup objectives contained in the NYSDEC's January 24, 1994 Technical and Administrative Guidance Memorandum (TAGM, HWR-94-4046). These soils were subsequently excavated. It was further concluded that no remedial action was necessary in relation to groundwater contamination identified beneath the site. This was based on several factors: the relatively low concentrations detected beneath the site, greatest concentration detected closest to the off site storm drain, the hydrogeologic nature of the area, and fact that contamination is not likely to impact Public Supply Wells. The report, included in Appendix A, documenting sampling procedures, sampling results, and conclusions and recommendations was submitted to the NCDH on May 28, 1996 for their approval. Subsequently, on July 15, 1996, the NCDH referred the Site to the NYSDEC's Office of Hazardous Waste Remediation for regulatory oversight.

2.0 REMEDIAL MEASURES

Based on the limited existence of PCE contaminated soils in excess of soil cleanup objectives

contained in the NYSDEC's TAGM, the decision to excavate soils for off site disposal was made. Excavation services were conducted by Brookside Environmental, Inc. (Brookside), Williston Park, New York. The area excavated included the contaminated soils documented in the vicinity of the former vacuum unit discharge (see Figure 2) as described in the May 22, 1996 investigation report. Additionally, the excavation was extended towards the north to encompass impacted soils documented in the vicinity of the former evaporator unit discharge as well as soils located between the two former discharge locations. The final depth of the excavation ranged from 5 to 8 feet in the vicinity of the former vacuum unit discharge, 5.5 feet in the vicinity of the former evaporator unit discharge, and 2.5 feet in the area in between.

During excavation activities, a representative of PWGC was on site to field screen excavated soils with a PID and to collect endpoint samples. A total of 17 endpoint samples were collected (see Figure 3). Endpoint samples included both sidewall and bottom samples collected at frequent intervals. QA/QC samples collected included trip and field blanks and a blind duplicate sample. Photographs of excavation activities were also taken for documentation purposes and the excavation was enveloped prior to backfilling. Photographs are contained in a section immediately following this report. As mentioned earlier, these procedures were added based on suggestions made by Mr. Jamie Ascher of the NYSDEC during a July 23, 1996 meeting. In addition, based on Mr. Ascher's suggestion, we requested (as well as Mr. Ascher) the presence of the NCDH to observe and document the excavation activities. A copy of the letter requesting NCDH oversight is included in Appendix B. The NCDH, in a July 25, 1996 telephone correspondence, indicated that they were unable to provide oversight services.



-0"	
PARAMETERS	~TAGM
PCE	1,400

EP-13	
PARAMETERS	
PCE	NC. /kg
WERE BDL	

EP-14	
PARAMETERS	
PCE	NC. /kg
1,400	

EP-12	
PARAMETERS	
PCE	CONC. ug/kg
29	
~TAGM 1,400	

EP-10	
PARAMETERS	
PCE	DEPTH 6'-3"
CONC. ug/kg	
33	
~TAGM 1,400	

EP-8(S) DEPTH 6'-2"	
PARAMETERS	
CONC. ug/kg	~TAGM
230	1,400

EP-7(S) DEPTH 3'-1"	
PARAMETERS	
CONC. ug/kg	~TAGM
34	300

COMPOUNDS ANALYZED WERE:

EP-4(S) DEPTH 5'-7"	
PARAMETERS	
CONC. ug/kg	~TAGM
28	1,400
COMPOUNDS ANALYZED WERE BDL	

EP-1(B) DEPTH 5'-0"	
PARAMETERS	
PCE	CONC. ug/kg
9	

EP-2(S) DEPTH 4'-0"	
PARAMETERS	
PCE	CONC. ug/kg
55	

ICAL AND ADMINISTRATIVE
ON DETERMINATION OF SOIL
D CLEANUP LEVELS -
94-4048)

FIGURE No.

3

**SITE PLAN
ENDPOINT SAMPLING LOCATIONS AND RESULTS
290 BAYVILLE AVE.
BAYVILLE N.Y.**

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FILE No. BVC961-2

Date: 12/15/96

2.1 Excavation Activities

Excavation of impacted soils was performed on July 29, 1996. During excavation, contaminated soils were monitored for the presence of VOC's with the an "hnu" PID. The instrument was calibrated at the start of the day using a known concentration of calibration gas and the readings are expressed relative to the calibrant as calibration gas equivalents (cge). The PID was used to assist in the determination of the extent of contaminated soils and the collection of endpoint samples.

The area excavated is along the western side of the Bayville Village Cleaners Building. The area includes a flower bed (which formerly received discharges from the vacuum and evaporator units) extending 2.08 feet off the building and an asphalt paved parking lot (see Photo # 1 contained in the photograph section immediately following the report). As shown in Photo # 1, the flower bed was constructed using railroad ties and contained numerous shrubs. Photos # 2 and # 3, depict the former locations of the vacuum and evaporator unit discharges, respectively.

The final limits of the excavation are depicted on Figure 3. As shown on Figure 3, the eastern limit of the excavation is marked by the building, the southern limit is approximately in line with the southeast corner of the building, the northern limit is approximately 19 feet south of the northwest corner of the building, while the western limit varies depending on the previous soil quality information documented for the Site. Using the existing soil quality, the entire excavation was divided into three distinct areas as follows; the area corresponding to the former vacuum unit discharge, the area corresponding to the former evaporator unit discharge, and the area in between. In addition to the western extent, the depth varied within each distinct area.

The area of the excavation corresponding to the former vacuum unit discharge extended

furthest west and deeper than the other portions of the excavation. In this area, the depth of the excavation was sloped from approximately 5 feet at the building to approximately 8 feet at 6.5 feet west of the building (see Photo # 4). The depth of the excavation was extended in this area to remove PCE contaminated soil in excess of the NYSDEC's TAGM soil cleanup objective in the 6 to 8 foot interval as previously documented. Photo # 5 shows the deepest portion of the excavation and that groundwater was not encountered.

The area in between the two unit discharges was excavated to a depth of 2.5 feet and approximately 2.5 feet west of the building (see Photo # 6). Excavation in this area necessitated the removal of several shrubs to remove potentially impacted surface soils not previously sampled due to limited access.

The excavation in the area of the former evaporator unit discharge was widened to approximately 6 feet and extended to approximately 5.5 feet deep, directly in line with the former discharge pipe (see Photo's # 7 and # 8). Though soil quality in this area was documented as being within NYSDEC TAGM soil cleanup objectives, the excavation was performed in an attempt to remove remaining impacted on site soil. Again, as can be seen in Photo # 8, groundwater was not encountered in the excavation.

Soils encountered in the excavation were characterized as light tan fine to medium grained sands with trace coarse sand and fine gravel. In general, the upper 2 feet consisted of fill material characterized as orange medium to coarse sand and gravel. The upper fill layer and natural formation was separated by a former organic (top soil) layer.

2.2 Endpoint Sampling Procedures and Analyses

As the excavation proceeded from the south towards the north, endpoint samples were

routinely collected from the bottom and sidewalls of the excavation. A total of 17 endpoint samples (8 bottom and 9 sidewall) were collected. Sidewall samples were generally collected approximately 1 to 3 feet above the bottom of the excavation. In the deepest portion of the excavation, multiple sidewall samples were collected to provide a vertical profile of soil quality in the area. Bottom endpoint samples were collected to represent the varying depths and to provide adequate coverage of the excavation. Therefore, in general, the 8 bottom samples represent the vertical extent of the excavation, while the sidewall samples represent the lateral extent of the excavation (see Figure 3).

Endpoint samples were collected using a hand held auger. The auger was decontaminated prior to and between uses, with a non-phosphate detergent scrub, and a distilled water rinse. Upon collection, each endpoint sample was placed in laboratory supplied glassware and properly labeled. A portion of each sample was retained and placed in a plastic bag for headspace analysis. After waiting several minutes, the extension probe of the PID was inserted and a reading obtained. No significant (in excess of 1.5 cge) responses were obtained.

Endpoint samples were delivered to Ecotest Laboratories, Inc. (Ecotest), North Babylon, N.Y., to be analyzed for volatile organic compounds PCE, trichloroethylene (TCE), 1,2-dichloroethylene (DCE), and vinyl chloride by EPA Method 8240. These compounds represent the contaminant of concern along with its potential breakdown products.

2.3 Endpoint Sample Results

The results of the endpoint samples are depicted on Figure 3 and Table 1. As discussed in section 2.2, a total of 17 endpoint samples were collected, including 8 bottom samples and 9 sidewall samples. Bottom endpoint samples were used to represent the vertical extent of contamination, while the sidewall samples represent the lateral extent of contamination within the excavation. Copies of

TABLE 1
ENDPOINT SAMPLE RESULTS
BAYVILLE VILLAGE CLEANERS
JULY 29, 1996

Analytical Parameters	Units	Guidance Value*	EP-1 (B)	EP-2 (S)	EP-3 (B)	EP-4 (S)	EP-5 (B)	EP-6 (S)	EP-7 (S)	EP-8 (B)	EP-9 (B)
Tetrachloroethene	ug/kg	1,400	9	55	28	BDL	230	BDL	BDL	33	29
Trichloroethylene	ug/kg	700	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2 Dichloroethene	ug/kg	300	BDL	BDL	BDL	BDL	34	BDL	BDL	BDL	BDL
Vinyl Chloride	ug/kg	200	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
			EP-10 (S)	EP-11 (S)	EP-12 (B)	EP-13 (B)	EP-14 (S)	EP-15 (B)	EP-16 (S)	EP-17 (S)	
Tetrachloroethene	ug/kg	1,400	75	55	620	34	140	BDL	55	31	
Trichloroethylene	ug/kg	700	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,2 Dichloroethene	ug/kg	300	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
Vinyl Chloride	ug/kg	200	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	

* = NYSDEC Division Technical and Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels. January 24, 1994. HWR-94-4046.

BDL = Below Detectable Levels.

B = Bottom Samples

S = Sidewall Samples



the analytical reports are contained in Appendix C.

As shown on Figure 3 and Table 1, PCE was detected in 7 of the bottom and 5 of the sidewall endpoint samples. In these cases, PCE was detected well below its TAGM soil cleanup objective of 1,400 ug/kg. The results of the bottom endpoint samples ranged from below detectable levels (BDL) to 620 ug/kg in bottom endpoint sample EP-12(B). This area corresponds to the portion of the excavation in between two former unit discharges, where the excavation depth was only approximately 2.5 feet below grade. It is expected, as in the original soil investigation and current endpoint sample results, that PCE concentrations decrease with depth at this location.

The results of the sidewall endpoint samples reported PCE ranging from BDL to 140 ug/kg, with the greatest concentration of PCE detected in the EP-14 (S) sample. In the remaining sidewall samples where PCE was detected, concentrations were below 100 ug/kg.

2.4 Remedial Measure QA/QC Sampling Results

Results of the analysis performed on the trip and field blanks confirm that the decontamination procedures utilized during the soil excavation were effective and cross contamination of samples did not occur. This is based on the non-detection of the contaminants of concern in both trip and field blanks. In addition, a blind duplicate sample was performed on EP-15 (B). There is good correlation between the sample results, as VOC's analysed in both samples were below detectable levels. QA/QC analytical sample results are contained in Appendix C.

2.5 Backfilling of the Excavation

Due to undermining and collapsing of sidewalls, the backfilling of the excavation was performed in two phases. The first phase consisted of the area of the excavation corresponding to the former vacuum unit discharge and was conducted before proceeding with the excavation towards

the north. Some collapsing of the sidewalls occurred in this area after appropriate endpoint samples were collected. Prior to backfilling, a plastic liner was placed at the bottom of the excavation to demarcate the vertical extent of the excavation (see Photos # 9 and #10).

The second phase consisted of the remaining excavation and was completed at the end of the day. A plastic liner was placed along the sidewalls as well as at the bottom of the excavation. A total of 45 tons of fill material was used to backfill the excavation. Photo # 11 depicts the excavation after backfilling was completed. Fill material was supplied by Liotta & Sons Inc., Island Park, N.Y. Copies of the fill receipts are contained in Appendix D.

2.6 Soil Disposal

During excavation, impacted soils were stockpiled on and at the end of the day, covered with plastic. The following day, July 30, 1996, the soils were loaded for off site disposal. Soil disposal was coordinated by Brookside. The soils were transported by Horwith Trucks, Inc. (US EPA ID No. PAD146714878) and delivered to Wayne Disposal, Inc., Belleville, Michigan (US EPA ID No. MID048090633) for disposal. A total of 67.76 tons of impacted soils were trucked off site for disposal. Copies of the appropriate hazardous waste manifests, along with weigh tickets are also contained in Appendix D.

3.0 ON SITE SANITARY SYSTEM

Currently, sanitary waste water generated at the Site discharges to an on site sanitary system. The sanitary system is located on the south side of the building (see Figure 4). It is believed that the system consists of two cesspools in series, including a primary and overflow structure. The primary pool, which is brought up to grade through a riser pipe, was located during this investigation. To determine if the sanitary system is a source of PCE contamination, soils at the bottom of the primary

B-1 (SOIL) 10/4/96			
PARAMETERS	CONC. (ug/kg) 8'-10'	CONC. (ug/kg) 10'-12'	CI (u) 12
PCE	170,000	BDL	E (G.W.)
DCE	11,000	BDL	E /4/96
TCE	6,400	BDL	E
VINYL CHLORIDE	90	BDL	ANALYZED WERE BDL

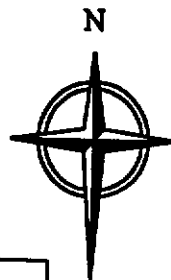


FIGURE No.

4

W-1 (G.W.) 4/10/96		
PARAMETERS	CONC. (ug/L)	NYSDEC STANDARD
PCE	200	5

C-18 (SOIL) 7/29/96		
ug/kg	CONC. (ug/kg)	TAGM
	90	1,400
	27	300

SITE PLAN WITH STORM DRAIN AND
 GROUNDWATER SAMPLING LOCATIONS & RESULTS

290 BAYVILLE AVE.
 BAYVILLE N.Y.

NOTE DEPTH TO WATER BENEATH THE SITE IS APPROXIMATELY 8.5 FEET

LEGEND

- TCE TRICHLOROETHENE
- PCE TETRACHLOROETHENE
- DCE 1,2 DICHLOROETHENE
- BDL BELOW DETECTABLE LEVEL

TAGM NYSDEC DIVISION TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMMORANDUM ON DETERMINATION OF SO CLEANUP OBJECTIVES AND CLEANUP LEVELS - JANUARY 24,1994 (HWR-94-4046)

*NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES - OCTOBER 22, 1993

- PROPERTY LINE
- STREET LINE

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Date 11/8/96

FILE No. BVC961-2

pool were sampled. Sampling of the cesspool was performed since the structure was identified as an area of concern by the NYSDEC at a July 23, 1996 meeting.

3.1 Excavation of Sanitary System

Excavation of the on site sanitary pool was conducted by Brookside on July 29, 1996. The excavation began adjacent to a riser pipe believed to be connected to the primary leaching pool (see Photo # 12). To confirm that the riser was connected to the primary pool, the structure's concrete cover was excavated (see Photo # 13). Upon opening the cover, it was noted that the structure contained liquid up to the level of the base of the dome. Therefore, leaching rings were not visible from the surface. A potable water flush test, performed from the building's bathroom, confirmed that this was the primary structure of the sanitary system. In an attempt to confirm if the primary structure was constructed of pre-cast leaching rings, the walls of the structure were probed with a shovel. At this time, voids were felt in routine intervals down the length of the structure which indicates the structure does leach. Also observed, was a PVC elbow located on the west side of the primary structure's dome. It is believed that the elbow leads to an overflow leaching pool however, this was not confirmed through excavation.

3.2 Sanitary System Sampling Procedures and Analyses

A grab sample of the top 1-6 inches of bottom deposits of the primary leaching pool was collected on July 29, 1996. The sample was collected with a hand held auger which was properly decontaminated prior to use as described in section 2.2. Bottom deposits were collected through standing liquid present in the structure. Bottom deposits consisted of black sludge with coarse sand and fine gravel. Depth to the bottom of the structure was approximately 9 feet, with at least 8 feet of standing water. Upon collection, the sample was placed in laboratory supplied glassware and

properly labeled. A headspace reading, using the PID, of 0.1 cge was obtained from the sample. The sample was also delivered to Ecotest to be analyzed for volatile organic compounds PCE, TCE, DCE, and vinyl chloride by EPA Method 8240.

To definitively determine if the primary structure leaches to the subsurface, a geoprobe unit was used to "blind probe" the structure on October 4, 1996. The blind probe was conducted through the structure's riser pipe (see Photo # 14). During probing, bottom deposits within the structure were originally encountered at approximately 9 feet below grade. The probe was then continually advanced to determine if the structure contained a solid bottom. The probe was advanced to approximately 16 feet below grade, without encountering a solid bottom, before terminating the probing. Therefore, based on our investigation, it is apparent that the structure is constructed to leach to the subsurface.

3.3 Sanitary System Sampling Results

The results of the sanitary system sampling is depicted on Figure 4. As can be seen in Figure 4, PCE and DCE were detected at concentrations of 90 ug/kg and 27 ug/kg, respectively. These concentrations are well below the TAGM soil cleanup objectives of 1,400 ug/kg for PCE and 300 ug/kg for DCE. The existence of DCE may indicate that the detection of these compounds resulted from an incidental discharge that occurred some time ago.

4.0 OFF SITE STORM DRAIN

The off site storm drain, located on the northeast corner of 17th Street and Bayville Avenue (see Figure 4), was sampled as part of NCDH investigation and found to contain PCE at a concentration of 880,000 ppb. It is believed that the NCDH sample consisted of black sludge collected within the top two feet of bottom deposits within the drain. The off site storm drain was

not addressed in the original investigation performed by PWGC since allegations of deliberate dumping in the storm drain were not confirmed by the owner of the Site. In addition, the on site contaminated soil identified by the NCDH coincided with known unit discharges that have the potential to be sources of PCE and no indication of deliberate dumping was evident. However, as a result of the storm drain being identified as an area of concern, an investigation of the storm drain was incorporated into this remedial phase/investigation phase. The objective of the investigation was to document the extent of soil contamination within the structure as well as to determine if the structure is contributing to groundwater contamination documented beneath the Site.

4.1 Off Site Storm Drain Construction

As part of the investigation of the storm drain, it was intended to determine its construction, interconnection with additional structures, and its overall condition. The inspection of the drain, conducted by a representative of PWGC, took place on October 4, 1996. The structure contains a solid cast iron cover to grade, which is located within the sidewalk. The structure is designed to receive storm water via a sectioned inlet located within the southern curb of Bayville Avenue. Upon removal of the structure's cover, the drain was found to consist of a 6' x 6' square solid dome to approximately 4 feet below grade. The solid dome appeared to be supported by "cinderblock" type material, constructed of concrete with open holes in the center. A 2 foot diameter transite pipe was noted at the base of the dome (4' below grade) at the northwest corner of the structure. The transite pipe appeared to travel in the northwest direction, toward an additional storm drain located on the north side of Bayville Avenue. This structure appeared to be of similar construction with an inlet located within the north curb however, its solid cover was located within the street. Though it is likely that the two storm drains are interconnected, this was not confirmed through dye testing. At

the time of inspection the depth to standing water was approximately 5 feet below grade and the depth to the bottom sediments was approximately 6 feet below grade. The soil boring performed through the structure confirmed that it did not contain a solid bottom. Soil boring procedures will be discussed further in section 4.2.

4.2 Off Site Storm Drain Soil Sampling Procedures and Analyses

A soil boring (B-1) was performed within the storm drain to determine the extent of soil contamination both within and below the structure. Prior to performing work within the storm drain, a road opening permit was obtained through the NCDPW. Copies of the correspondence relating to the permit are contained in Appendix E.

Boring B-1 was performed on October 4, 1996 by Zebra Environmental Services of Inwood, N.Y. (Zebra), utilizing a Geoprobe unit. The Geoprobe is a vehicle-mounted hydraulically driven hammer that facilitates the collection of discreet subsurface samples by driving a dedicated collection tube (1 1/4-inch diameter by 2 foot) to a desired depth. Each sampling tube contained a dedicated disposable acetate liner.

Continuous soil samples were collected from B-1 in 2 foot intervals from the bottom of the structure and through standing water (6 and 5 feet below grade, respectively) to 18 feet below grade. Upon retrieval of the samples, a Photovac PID was used as a screening tool to obtain total organic vapor reading in the soil samples. Field screening was conducted immediately following the cutting of the acetate liner. The Photovac PID was calibrated, as per manufacturer's instructions, prior to the collection of soil samples. After field screening was complete, the sample was placed into appropriate laboratory supplied glassware. A complete geologic log, including appropriate PID responses, is included in Appendix F. The material encountered within the first 2 feet (6'-8') of the

structure consisted of extremely loose (due to being situated beneath standing water) black organic sludge. Due to the materials consistency, only a very small amount of material was recovered from approximately the 8' depth, not enough to fill the appropriate laboratory vial. The following 8'-10' foot sample delineated the sludge layer as the top 2 inches of the sample consisted of the material. In general, soils observed below the sludge in the 8'-10' sample and in subsequent samples consisted of tan, coarse-grained sand and sub angular gravel (see geologic log included in Appendix F). As shown in the geologic log, the sludge exhibited significant PID readings. The sludge was incorporated into the 8'-10' sample to represent worst case conditions however, it seemed evident from the PID response, that worst case conditions are limited to the sludge layer.

To provide a vertical profile of soil quality within the storm drain, soil samples B-1(8'-10'), B-1(10'-12'), B-1(12'-14'), B-1(14'-16'), and B-1(16'-18') were delivered to Ecotest to be analyzed for volatile organic compounds PCE, TCE, DCE, and vinyl chloride by EPA Method 8240. Sample B-1(6'-8') was not analyzed due to insufficient sample volume. In addition, a blind duplicate was collected on the B-1 (10'-12') sample and a soil field blank sample was collected by pouring laboratory supplied water through an unused acetate liner encased in a decontaminated steel tube.

4.3 Off Site Storm Drain Soil Sample Results

The results of the off site storm drain soil samples were successful in delineating the vertical extent of impacted sediments within the storm drain by the contaminants of concern. As shown below and on Figure 4, PCE and its potential breakdown products were detected in the 8'-10' foot sample, above their respective soil cleanup objective (with the exception of vinyl chloride) contained in the NYSDEC TAGM document.

Parameters(ug/kg)	TAGM Value	B-1(8-10')	B-1(10-12')	B-1(12-14')	B-1(14-16')	B-1(16-18')
Tetrachloroethene	1,400	170,000	BDL	BDL	BDL	BDL
Trichloroethene	700	6,400	BDL	BDL	BDL	BDL
1,2 Dichloroethene	300	11,000	BDL	BDL	BDL	BDL
Vinyl chloride	200	90	BDL	BDL	BDL	BDL

The concentration of PCE in the 8'-10' sample is significantly less than the original NCDH sample result (880,000 ppb) however, it is within the same order of magnitude. The remaining compounds would not have been detected in the NCDH sample due to their elevated detection limit of 100,000 ppb. Compounds analyzed for in soil samples collected below the 8'-10' interval were below detectable levels. Based on these sampling results, it appears that the impacted sediments within the storm drain are limited to the black organic sludge layer and sediments immediately below this layer.

4.4 Off Site Storm Drain and Vicinity Groundwater Sampling Procedures and Analyses

A total of 5 groundwater samples were collected within (B-1) and immediately adjacent to (B-2 through B-5) the storm drain to determine if the structure is contributing to groundwater contamination documented beneath the Site. The locations of the groundwater samples are depicted on Figure 4.

Borings for the collection of groundwater samples were also advanced by Zebra on October 4, 1996. Groundwater samples were collected using a 1-inch diameter by 4 foot long continuous-slot sampling screen. The screen was properly decontaminated prior to and between samples using a non phosphate detergent scrub followed by a distilled water rinse. During the collection of groundwater samples, the screen was driven within a protective sheath. Once the desired depth was reached, the sheath was retracted and dedicated 3/8-inch polyethylene tubing fitted with a stainless steel bottom

check value was inserted. The poly tubing was oscillated up and down to drive a column of water to the surface. Approximately 1 gallon of water was purged prior to collecting each sample. Groundwater was generally encountered at approximately 8.5 feet below grade and the top of the stainless steel screen set at 11.5 feet below grade.

Groundwater samples were collected in 40 ml laboratory supplied glass vials and delivered to Ecotest to be analyzed for volatile organic compounds PCE, TCE, DCE, and vinyl chloride by EPA Method 8240. In addition, a blind duplicate sample was collected at the B-2 location and a groundwater field blank sample was collected by pouring laboratory supplied water through the decontaminated screen and collecting the rinsate.

4.5 Groundwater Flow Direction

A description of the hydrogeologic setting of the Bayville Peninsula was addressed in the original *Soil and Groundwater Investigation Report* prepared by this office and contained in Appendix A. As discussed in the report, due to Bayvilles's close proximity to surrounding surface water bodies, it is not believed that the Upper Glacial Aquifer beneath the peninsula is hydraulically connected to the same aquifer located beneath the main body of Long Island. Additionally, the direction of shallow groundwater flow is likely influenced by tidal forces acting upon these surface water bodies, with shallow groundwater ultimately discharging to these bodies of water.

To confirm if the above conditions do exist, NYSDEC petroleum spill No. 9404015 was reviewed through the freedom of information act (FOIL). In addition, conversations with NYSDEC inspectors Mr. Brian Campbell regarding the above referenced spill and Mr. Nick Acompora regarding spill No. 9210820 were conducted. Spill No. 9404015 is located at a Gulf Service Station at 23 Ludlam Avenue, approximately 275 feet southwest of the Site (see Figure 5). As part of the

BAYVILLE AVENUE



BAYVILLE
VILLAGE
CLEANERS

SEVENTEENTH STREET

AVENUE
LUDWIG

FIRST AVENUE

GULF
SERVICE
STATION

VIVANA COURT

SCALE: 1"=60'

P.W. ENGINEER CONSULTING / ENGINE & ARCHITECTURE, P.C.

100 South Main Street, Suite 202
Bayville, New York 11715-2180
Ph: (516) 882-2362 - Fax: (516) 882-8705

Prepared for: THOMAS RYAN

File No. FIGS-5 Date: 11/12/96

SITE VICINITY MAP

290 BAYVILLE AVE.
BAYVILLE N.Y.

FIGURE NO:

5

petroleum spill investigation, numerous monitoring wells were installed and surveyed to determine the local direction of groundwater flow. Two groundwater contour maps (February 7, 1995 and August 23, 1995) were contained in the subject spill file. Copies of the groundwater contour maps are contained in Appendix G. The February 7, 1995 map indicates that local groundwater flow is to the west, while the August 23, 1995 map indicates that groundwater flow is towards the southwest. Based on this, it seems likely that the change in groundwater flow direction may be at least in part due to tidal influence. Mr. Campbell, the inspector handling the spill, indicated that there was no specific monitoring of the wells to determine tidal influence (such as groundwater elevations taken at low and high tides) however, he indicated that this may be a good idea to explain the differences in groundwater flow direction.

Further information regarding the potential for shallow groundwater flow to be influenced by tidal forces was gained in an inquiry into petroleum spill No. 9210820, located at Ludlam Avenue and Bayville Road. It was originally thought that this spill also occurred at the Gulf station. However, Mr. Nick Acompora, the inspector handling the spill, indicated that the spill was the result of a rise in the water table coinciding with a storm event which displaced No. 2 fuel oil from a home owners underground storage tank. This indicates that shallow groundwater is hydraulically connected to the surrounding surface water bodies. Overall, it is believed that the predominant direction of groundwater flow is in the west to southwest direction with variations depending on tidal forces and that shallow groundwater ultimately discharges to the surrounding surface water bodies due to their hydraulic connection. Groundwater flow in the immediate vicinity of the storm drain will likely be radial, prior to the predominant west to southwest flow direction taking over. In addition, due to the hydraulic connection of the surface water to shallow groundwater, flow velocities may be fairly

significant.

4.6 Off Site Storm Drain and Vicinity Groundwater Sampling Results

The results of the groundwater sample taken beneath and in the vicinity of the subject storm drain are depicted on Figure 4. Also included on this figure are the results of the original groundwater samples (W-1 through W-3) collected during the initial phase of the investigation, prior to remediation. As shown in Figure 4, PCE, TCE and DCE were detected in the groundwater directly beneath the storm drain in the same relative concentrations (with the exception of vinyl chloride) as were detected in the black sludge layer encountered within the structure. The concentrations detected in the groundwater are relatively low as compared to their concentrations detected in the sludge a few feet above the groundwater sample interval. This seems to indicate that the contamination is not migrating significantly downward, possibly due to the nature of the sludge material or the flow regime emanating from the storm drain.

Three of the remaining four groundwater samples were collected beneath the subject property. Groundwater samples B-3 (G.W.) And B-4 (G.W.) were collected in close proximity to the storm drain, while sample B-5 (G.W.) was collected between the storm drain and the former excavated area. As shown on Figure 4, PCE was detected in both the B-3 and B-5 groundwater sample at relatively low concentrations, while the compounds analyzed for were below detectable levels in the B-4 groundwater sample. PCE was detected slightly in excess of the NYSDEC groundwater standard of 5 ug/l at the B-5 location and below this standard at the B-3 location. The B-4 sample was collected in close proximity to original sample W-1, where the greatest concentration of PCE (200 ug/l) was detected in the initial investigation phase. Therefore, it is believed that the sample results of B-4 are representative of current groundwater conditions. The original sample results may have

been due to radial flow from the storm drain following a storm event, which dissipated rapidly as a result of tidal influence and significant flow velocities.

As shown on Figure 4, groundwater sample B-2(G.W.) was collected off site of the subject property, directly southwest of the subject storm drain. Significant concentrations of DCE and vinyl chloride and to a lesser extent TCE were detected in this sample. Of particular note is the non detection of PCE in this sample, which seems unlikely due to the significant concentrations of PCE detected in the sludge layer within the storm drain and its detection in groundwater samples collected beneath the Site. Furthermore, it has been our experience that a total breakdown of a parent compound into its by products (which would be the case in sample B-2), does not occur under the aerobic conditions found on long island. This seems to indicate that the detection of the TCE, DCE and vinyl chloride in both the soil and groundwater within and in the vicinity of the storm drain are due to an older source(s) of TCE or all three compounds and that the source of the PCE is likely a separate and relatively recent event.

Based on the direction of groundwater flow and the flow regime in the vicinity of the storm drain, the off site groundwater sample taken at the B-2 location would be considered down gradient of the storm drain and may reflect the impact of shallow groundwater from past discharges. It appears likely that there may have been some impact of shallow groundwater quality beneath the site in the vicinity of the storm drain from PCE, resulting from radial flow away from the structure.

4.7 Storm Drain & Groundwater Investigation QA/QC Sampling Results

Results of the analysis performed on the trip and the two field blanks performed in conjunction with this phase of the investigation confirm that the decontamination procedures utilized during the soil and groundwater sample collection were effective and cross contamination of samples did not

occur. This is based on the non-detection of the contaminants of concern in the trip and respective field blanks. In addition, a blind duplicate sample was performed on soil sample B-1 (10'-12') and groundwater sample B-2 (G.W). There is a good correlation between the sample results in both matrices. VOC's analysed in both soil samples were below detectable levels, while the concentrations detected in both groundwater samples were similar and in the same relative concentrations when compared to one another. Copies of the analytical results are contained in Appendix C.

4.8 Clean Out of the Off Site Storm Drain

On October 30, 1996, the NCDPW cleaned out the subject storm drain. It is uncertain whether the clean out was performed as part of routine maintenance or as a response to recent extreme flooding as the result of an October 19, 1996 "northeaster" storm event. As a result of the storm, many buildings' basements were inundated with water. Flooding of the Site did not occur during this storm. Subsequently, homeowners pumped their flooded basements directly to the storm drain system (including the storm drain in question) to alleviate the flooding. This action can obviously result in improper discharges to the subject storm drain. Other past discharges such as fluid used to clean rugs was documented as being discharged to this structure.

Clean out of the storm drain was conducted by NCDPW truck No. R-4123. Prior to removing material from the drain, a mechanical device was inserted in to the storm drain and rotated. It is believed that this method is used so loosen any sludge type material for removal and to increase future drainage. This action may also serve to laterally spread potential impacted standing water to the area surrounding the storm drain. Once this mixing was complete, an "orange peeler" device was used to remove the black sludge material. Approximately, 13 scoops of material were removed from the structure using this device.

On November 8, 1996, the storm drain was inspected by a representative of PWGC. At this time it was noted that depth to bottom deposits, using a hand held auger, were approximately 7.5 feet and the material consisted of a grey sandy sludge. Therefore, at the very least, it appears that 1.5 feet of the sludge material was removed by the NCDPW. It is also possible that they removed the existing black sludge material and the grey material represents more recent runoff from the surface of Bayville Avenue. The removal of the black sludge layer is significant in that the contamination was documented as being limited to this layer.

5.0 SUMMARY & CONCLUSIONS

This section incorporates the finding of our previous and current investigations and remedial measures at the Site and presents comprehensive findings relative to on site and off site soil and groundwater contamination.

5.1 On Site Soil Contamination and Remediation

PCE impacted surface soils delineated in an initial soil and groundwater investigation performed at the site in May, 1996, were successfully removed by excavation as documented through the collection of endpoint samples. Impacted soils were likely the result of discharges from a vacuum system and evaporator unit. Of the 7 bottom endpoint samples where PCE was detected, concentration in 5 samples were below 50 ug/kg. The greatest PCE concentration (620 ug/kg) was detected in the shallowest portion of the excavation (2.5 feet deep) and, as documented in the original investigation, it is likely that PCE concentrations decrease with depth. The highest concentration of PCE detected in a sidewall endpoint sample was 140 ug/kg however, PCE concentrations in the remaining sidewall samples were below 100 ug/kg.

The results of the endpoint samples do not confirm that on site groundwater contamination

has occurred as a result of impacted on site soils. This is due to the fact that bottom endpoint samples were collected above the current water table. However, prior fluctuations of the water table may have accounted for the minor impact to shallow groundwater quality identified directly beneath the impacted soils. If this is the case, the original groundwater sample W-3, collected through impacted soils prior to remediation, likely represents worst case conditions. PCE was detected at 47 ug/l within this sample and concentrations have likely decreased at this location as seen in the vicinity of the W-1 sample. Due to that fact that PCE was detected well below its TAGM soil cleanup objective of 1,400 ug/kg in both the sidewall and bottom endpoint samples, it is believed that no further remediation of on site soils is warranted.

5.2 On Site Sanitary System

The primary leaching structure of the Site's sanitary system was investigated as a result of the NYSDEC identifying the system as an area of concern. The identified structure was confirmed to be the primary structure through a flush test and was confirmed to leach through excavation and blind probing with a Geoprobe. A sample of the bottom deposits within the structure detected PCE and DCE at concentrations of 90 ug/kg and 27 ug/kg, respectively. These concentrations are well below their respective TAGM guidance values and therefore, it is believed clean out of the structure is not warranted. In addition, there is no indication of a significant impact to shallow groundwater has resulted from these concentration based on original groundwater sample W-3, which only detected PCE at 8 ug/l. This sample was collected directly west of the sanitary system, which was identified as a direction of groundwater flow in a nearby petroleum related spill investigation overseen by the NYSDEC.

5.3 Off Site Storm Drain

The off site storm drain was also investigated as a result of being identified as an area of concern by the NYSDEC. A NCDH sample result of bottom deposits from within the structure detected PCE at 880,000 ppb. The objective of the investigation was to document the extent of soil contamination within the structure as well as to determine if the structure is contributing to groundwater contamination documented beneath the Site. Soil sample results were successful in vertically defining the extent of contamination within the storm drain. Through soil analyses, it was determined that contamination was limited primarily to the 2 foot sludge layer contained directly at the bottom of the structure. Compounds detected were PCE, TCE, DCE, and vinyl chloride. Additionally, the storm drain was cleaned out by the NCDPW using an "orange peeler" device on October 30, 1996. An inspection of the structure indicates that the clean out likely removed the majority of impacted sludge contained within the storm drain. The clean out occurred soon after a recent flooding event where home owners pumped water from their basements directly to this storm drain. This practice was also documented in the past as well as other similar discharges that can result in the documented contamination.

Based on the groundwater sample results, it does not appear that the detection of TCE, DCE, and vinyl chloride in the bottom sediments are due to the breakdown of PCE. PCE was not detected southwest of the storm drain (at off site boring location B-2), which appears to be the predominant direction of groundwater flow. However, at this location the compounds TCE, DCE, and vinyl chloride were detected at fairly significant concentrations greatly exceeding groundwater concentrations of PCE both on and off site. Based on the above, it seems likely that the compounds other than PCE may be due to historical discharges and that the PCE may be due to a more recent

discharge. Looking at PCE alone, it appears the detection of PCE had the greatest impact to groundwater directly beneath the storm drain (though fairly minor 260 ug/l) and migrated radial to a lesser degree to the area surrounding the structure. Due to these fairly low concentrations as compared to the soil quality results, it appears that the contamination is not significantly migrating downward. However, groundwater has been significantly degraded by TCE, DCE and vinyl chloride down gradient of the storm drain off site of the subject property.

5.4 Conclusions

It is believed that no further investigative or remedial work is warranted in regard to Bayville Village Cleaners. PCE impacted soils likely associated with two unit discharges were successfully remediated through excavation, as documented through the collection of endpoint samples. Sample results of the on site sanitary system, an additional potential source of contamination, revealed only incidental impact of PCE and DCE. On site groundwater quality, including directly beneath impacted soils and immediately down gradient of the sanitary system was not significantly impacted by PCE. The original groundwater samples collected prior to remediation represent worst case conditions and it is likely that concentrations of PCE have declined since the sampling. The greatest impact of soils and groundwater appear to be associated with the off site storm drain. It appears that there may have been past impacts of TCE, DCE and vinyl chloride to this drain through historical discharges to this structure. It is these compounds that appear to be causing the greatest impact to groundwater southwest of the storm drain, off site of the subject property. In addition, there is no link between the PCE impacted sediment and groundwater in the subject storm drain to documented impacted on site soils at Bayville Cleaners.



Photo 1 - Western Side of the Bayville Village Cleaners Building Prior to Excavation.



Photo 2 - Former Location of Vacuum Unit Discharge.

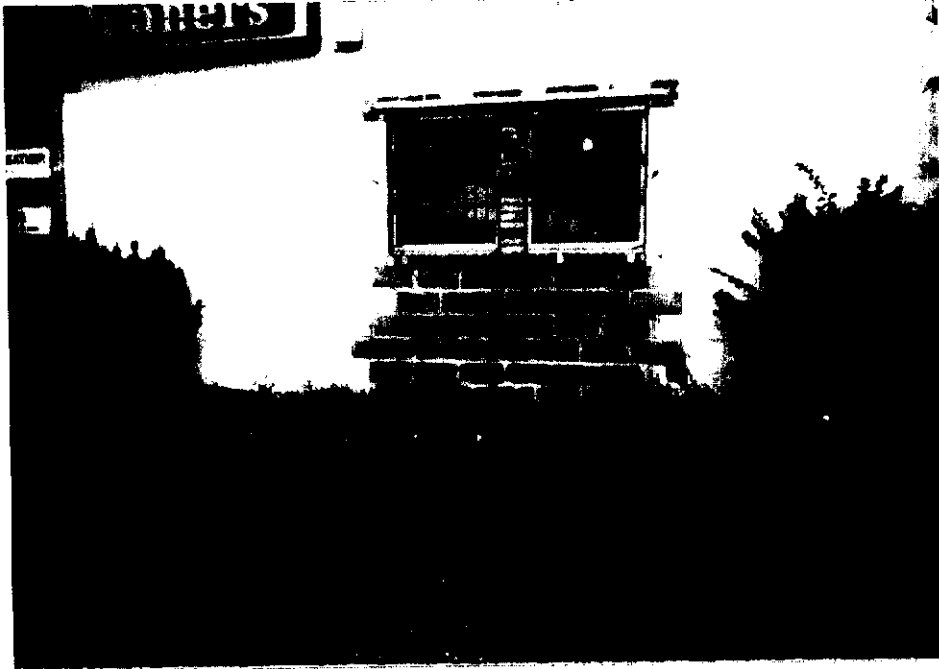


Photo 3 - Former Location of Evaporator Unit Discharge.



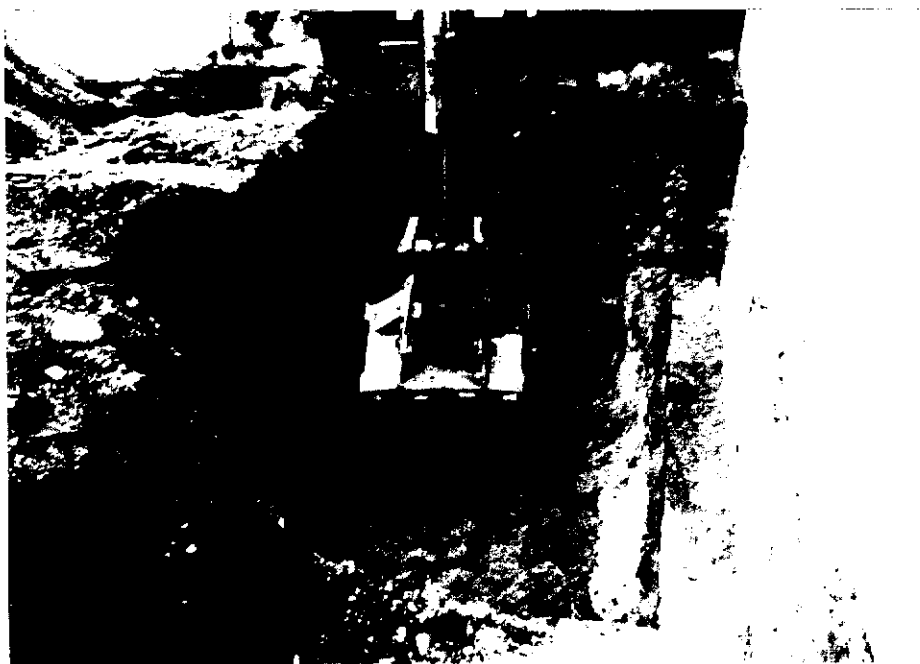
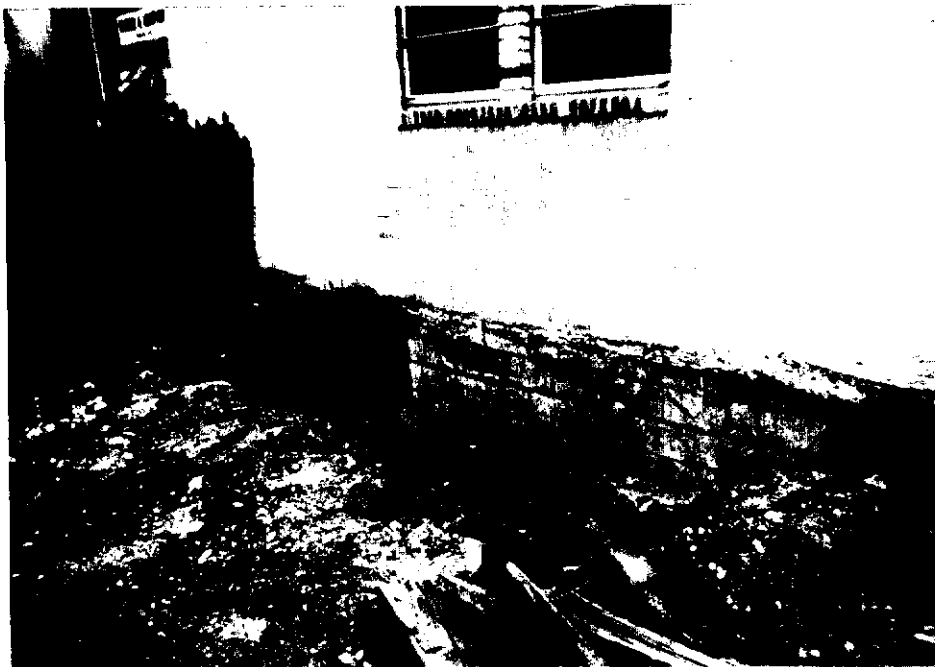
Photo 4 - Area of the Excavation Corresponding to the Vacuum Unit Discharge.



Photo 5 - Deepest Portion of the Excavation (8.0') Corresponding to the Vacuum Unit Discharge.



Photo 6 - Excavated Area Between the Two Former Unit Discharge Locations.



Photo's 7 & 8 - Area of the Excavation Corresponding to the Former Evaporator Unit Discharge.



Photo's 9 & 10 - Lining & Backfilling of the Excavation.



Photo 11 - Completed Backfilled Excavation.

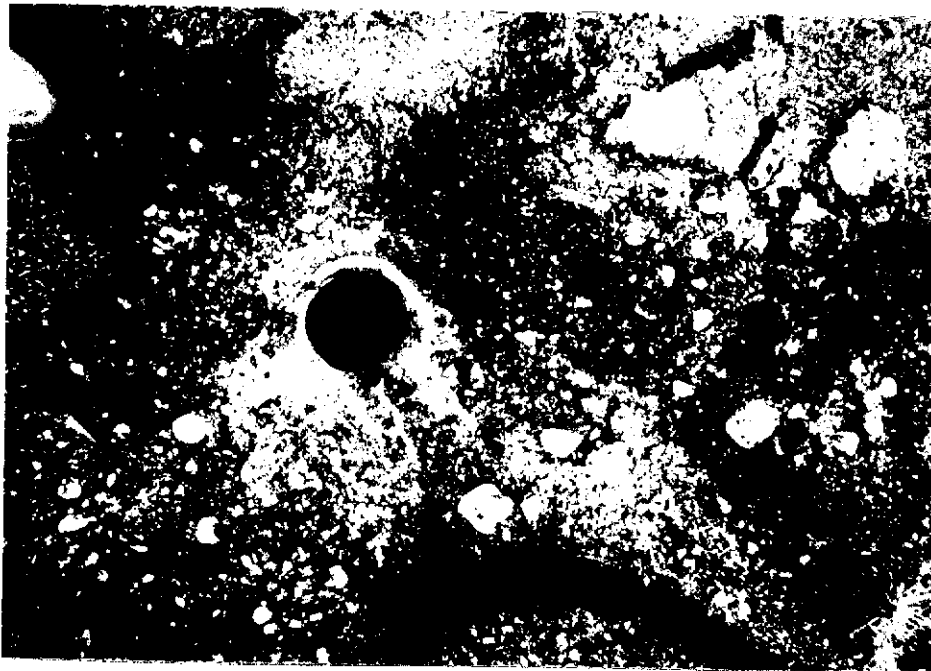


Photo 12 - Riser Pipe to Primary Leaching Pool.



Photo 13 - Excavated Primary Leaching Pool.



Photo 14 - Probing of the Primary Leaching Pool.

APPENDIX A
SOIL & GROUNDWATER INVESTIGATION REPORT



May 22, 1996

Mr. Joe DeFranco
Nassau County Department of Health
240 Old Country Road
Mineola, NY 11501

Re: Soil and Groundwater Investigation
Bayville Village Cleaners
290 Bayville Avenue
Bayville, NY 11709

Dear Mr. DeFranco:

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. (PWGC) has prepared the following report to document the sampling and analysis work completed at the above referenced site. Work was performed in the presence of, and according to, the Nassau County Department of Health (NCDH) approved soil and groundwater investigation plan submitted by PWGC on April 2, 1996.

BACKGROUND

Bayville Village Dry Cleaners is located on the portion of the Bayville peninsula which is approximately 2000 feet wide. To the north is the Long Island Sound, to the southwest is Mill Neck Bay, and to the southeast is Oyster Bay Harbor. There were two pipes exiting the west side of the building from two separate unit processes as depicted in Figure 1. The first unit process (to the south) is a vacuum system which captures water during clothes pressing. The water vapor is released out the side of the building, above an outdoor flower bed. The second process was a evaporator unit. This unit was designed to release vapor through a pipe, which was located above the flower bed surface toward the north. The two unit processes are typical dry cleaning equipment which are designed to recover perchloroethylene (PCE), a common solvent used in the dry cleaning process. Both processes have been recommended by the Neighborhood Cleaning Association (NCA) to help minimize the amount of PCE used and to reduce the amount disposed of as waste. The PCE waste generated at the site is stored in DOT certified 30 gallon plastic containers that are periodically picked up by Safety Kleen. The manifest forms for waste disposal are kept on file by the Owner.

The NCDH initiated a soil sampling study at the site on May 26, 1995. The NCDH collected soil samples from the flower bed in the vicinity of the evaporator and vacuum drains. The analytical results shown on Figure 1 indicated elevated levels of volatile organics including PCE.

PWGC was retained by the Owner to delineate the vertical and horizontal extent of on-site soil contamination in order to aid in the development of an appropriate remedial plan and to determine if groundwater had been impacted. A PWGC soil and groundwater investigation work plan dated April 2, 1996 was accepted by the NCDH. The scope of work outlined in the plan consisted of the collection



*Mr. Joe DeFranco
May 17, 1996 Page 2*

of soil samples at interval depths to be determined in the field at eight different boring locations. Two boring locations were chosen to coincide with the approximate locations originally taken by the NCDH. In addition, three groundwater samples were collected; one south of the potential source area, one north of the potential source area, and one within the potential source area.

SAMPLING PROCEDURES

The soil and groundwater investigation was completed on April 10, 1996 by two PWGC field representatives, in the presence of Mr. Joe DeFranco of the NCDH. Prior to sampling, both the evaporator and vacuum pipes were cut, and the holes were cemented closed. An all terrain vehicle-mounted Geoprobe unit supplied and operated by Zebra Environmental Services Inc., Inwood NY, was used to advance the borings to extract the soil and groundwater samples. Between sample collection, the equipment was decontaminated with a non phosphate detergent, Alconox, followed by a double rinse with tap water and final rinse with distilled water. The polyethylene tubing and acetate liners were discarded after use. The holes drilled in the asphalt parking lot were sealed with asphalt prior to leaving the site.

Soil Sample Collection

Initially, a clean Macro Core (MC) sampler was driven to the desired sampling depth, and a soil core measuring 44" long by 1.5" in diameter was collected. Each of the samplers used was fitted with a new acetate liner prior to use. The acetate liner assisted in the removal of the soil samples from the tube to preserve sample integrity and to prevent cross contamination. Large Bore (LB) samplers were also used in order to collect soil samples at depths exceeding 4' BG. LB samplers feature 24" by 1" acetate liners and can be driven closed to a desired sampling depth. LB samplers were used below 4' in order to provide discreet depth samples and to avoid cross contamination from the surface soils which were documented as being impacted by the NCDH.

A total of four soil samples were collected at each boring location; 0'-4' ; 4'-6' ; 6'-8' ; 8'-10'. The MC was the 0'-4' sample which was split by hand into a 0'-2' and 2'-4' sample for borings S-2 and S-3 and the deeper samples were retrieved with the LB samplers. After retrieval of the sampler, the acetate liner was cut open by a PWGC field representative and a composite sample was placed in the laboratory supplied glassware and stored in a cooler. No significant staining was noted in the soil samples which consisted of primarily coarse grained sands. A second composite sample from the same liner was placed in a plastic zip lock bag to screen for a head space reading. The soil samples were screened using a photoionization detector (PID) which is a portable field instrument used to detect the presence of volatile organic compounds such as PCE. Two jarred soil samples from each boring were submitted for laboratory analyses based upon their PID response. The first boring sample submitted for analyses was intended to represent worst case conditions, based on PID response. This generally coincided with the 0'-4' sample. The second sample submitted from each boring was intended to; (1) define the vertical extent of soil contamination and (2) demonstrate that contaminated on site soils were not impacting groundwater. For each boring, these two criteria were represented by the 6'-8' soil sample interval.

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Samples collected from the 8'-10' interval were into the water table and therefore, not submitted for analysis. The table below shows the PID responses and the samples that were submitted for laboratory analyses. The jarred samples were delivered to a New York State certified Laboratory, Ecotest Laboratories Inc., where they were analyzed for PCE, TCE, DCE and Vinyl Chloride.

Depth (feet)	S - 1 PID (units)	S - 2 PID (units)	S - 3 PID (units)	S - 4 PID (units)	S - 5 PID (units)	S - 6 PID (units)	S - 7 PID (units)	S - 8 PID (units)	S - 9 PID (units)
0'-2'		34	9*						
2'-4'		20,28*	5						
0'-4'	10,15*			4*	0*	0.8*	6*	0.6*	1*
4'-6'	3	1*	2	2	0.6	0	1	0	0.6
6'-8'	6*	5*	4*	0*	0.4*	0*	0*	0.4*	0.2*
8'-10'	2.5	3.8	1	0.8	1.2	0	0.2	0	0.2

* Samples submitted for laboratory analyses
Samples with two PID values were screened twice for quality control due to elevated PID responses

The boring S-1 was located at the former location of the pipe for the vacuum system. To define the horizontal extent of contamination around S-1, three additional borings were advanced in a four foot radius surrounding it, one to the south, west, and north. However, when the boring S-2 to the south of S-1 was advanced, higher PID responses were detected in S-2 than in S-1. Because of these higher PID responses, it was decided to advance an extra boring, S-4 further to the south of S-2 to define the horizontal extent of soil contamination. Also noted in the table, a third sample was submitted for analyses for boring S-2. This was done to provide a complete vertical profile for the boring with the worst overall PID response.

Groundwater Sample Collection

Groundwater samples were collected using a decontaminated Geoprobe Screen Point 15 groundwater sampler (SP15). The SP15 is a 1.5" O.S. X 52" overall length sampler encased within a protective sheath. The 41" screen, consisting of a slot size of 0.004", is exposed as the sampler is retracted. The design of the SP15 allows the stainless steel screen to remain retracted within the protective sheath until it is driven to the desired sampling depth. After the screen was exposed, an unused, clean section of 3/8" polyethylene tubing was fitted with a stainless steel bottom check valve and inserted down the probe rod to the desired sampling depth. The poly tubing was oscillated up and down to drive a column of water to the surface. A volume of water approximately equal to standing water in the 3/8" tube was purged prior to collecting a groundwater sample. The groundwater samples were collected by placing 40 ml laboratory supplied glass vials under the poly tubing. The samples were stored

Mr. Joe DeFranco
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in a cooler and delivered to EcoTest Laboratories Inc., where they were analyzed for PCE, TCE, DCE and Vinyl Chloride.

The northern W-1 groundwater sample, located at the northern extent of the property in the vicinity of an off-site Nassau County storm drain, was screened from a depth interval of 7 to 11 feet. The Zebra Environmental crew stated that depth to groundwater was at approximately 8.5 feet deep. The southern groundwater sample W-2, located near the southern extent of the property, was screened at an interval of 9 to 13 feet. A third groundwater sample, W-3, was collected at boring S-6 where the former evaporator pipe was located. It was decided to collect a groundwater sample at S-6 as opposed to where the former vacuum pipe was located because the NCDH's original sampling results indicated higher levels of soil contamination in the vicinity of the evaporator.

Figure 1 illustrates the soil and groundwater sample locations and analytical results of 19 soil samples collected at 9 boring locations in addition to the 3 groundwater samples. The soil and groundwater sampling program was successful in determining the extent of contamination present at the site.

SAMPLE RESULTS AND REMEDIAL RECOMMENDATIONS

The soil and groundwater samples collected and analyzed for the site reported no detection of perchloroethylene breakdown products (TCE, DCE, Vinyl Chloride). Perchloroethylene was detected in most of the samples collected at the site and is the contaminant of concern. For general guidance purposes, the soil sample analytical results have been compared to soil cleanup objectives contained in the New York State Department of Environmental Conservation's (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046). Though the TAGM specifically applies to NYSDEC listed hazardous waste sites, the Nassau County Department of Health has indicated that they use the document to determine if non-listed sites require cleanup. The TAGM value for perchloroethylene contaminated soils is 1400 ug/kg. The chains of custody and analytical results for the soil and groundwater samples are contained in Appendix A.

Soil Sample Data Evaluation

Evaporator Unit Location

The soil samples collected in the vicinity of the former evaporator pipe reported perchloroethylene concentrations below the TAGM value for the four borings, S-6, S-7, S-8, S-9 (see table below). Since the sample results were below the TAGM by an order of magnitude in both the 0'-4' and the 6'-8' samples, remediation by excavation is not warranted at this location.

Mr. Joe DeFranco
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Depth (feet)	S - 6 (ug/kg)	S - 7 (ug/kg)	S - 8 (ug/kg)	S - 9 (ug/kg)
0 to 4	780	200	450	130
6 to 8	80	<5	120	7

Vacuum Unit Location

At the former vacuum location, the soil sample analytical results were consistent when comparing the vertical profile of the borings to each other (table below). The surface soils contained the highest levels of contamination which dropped significantly with depth to levels below the TAGM in the 4'-6' sample collected for S-2 and in the 6'-8' samples for S-1, S-4 and S-5 (table below).

Depth (feet)	S - 1 (ug/kg)	S - 2 (ug/kg)	S - 3 (ug/kg)	S - 4 (ug/kg)	S - 5 (ug/kg)
0 to 2			500		
2 to 4		20,000	4,700 NCDH		
0 to 4	2,500			2,500	1,800
4 to 6		110			
6 to 8	42	60	1,700	19	36

As stated earlier, boring S-2 had the highest PID readings (20, 28 units) and therefore, it was decided to submit an additional sample from this boring to provide a more complete vertical profile of the contamination. The maximum PID response shown earlier at the 2'-4' interval correlates well with the analytical result of 20,000 ug/kg which was the overall highest level of perchloroethylene reported. Boring S-2 displayed the most significant drop in concentrations with depth, to a level well below the TAGM in the both the 4'-6' and 6'-8' sample intervals.

The analytical results were reported below the TAGM in the 6'-8' interval for each boring with the exception of S-3. It appears inconsistent, that the surface sample was below the TAGM and that the 6'-8' sample was slightly above the TAGM value. However, during an informal conversation with the NCDH, PWGC was notified that the NCDH sample result for S-3 (2'-4') was 4,700 ug/kg (this interval was not analyzed by PWGC). Therefore, the analytical results for boring S-3 did show decreasing concentrations from the 2'-4' interval down to the 6'-8' interval as noted in the other borings. The low level of 500 ug/l in the 0'-2' interval of SB-3 could be a result of volatilization from the surface soils. It is believed, that the remaining NCDH split sample analytical results corresponding to borings SB-4, SB-6, and SB-7 for the 6'-8' interval were below detectable levels.

Based upon the soil sample analytical results, the recommended method of soil remediation in the

Mr. Joe DeFranco
May 17, 1996 Page 6

area of the former vacuum pipe would be to excavate the soils to a depth of 5 feet as shown on Figure 1. The horizontal area to be excavated would be the area south of the bushes near S-5 to the southern border of the flower bed. The soils will be excavated from the building westward up to and including S-3. At the S-3 location, the excavation will be extended vertically to an approximate depth of 8 feet below grade. The soils directly west of S-2 near S-3 will also be excavated to 8 feet. The PID will be used to screen the soils as they are excavated to help determine where to terminate the excavation. An attempt will be made not to disturb soils located at the capillary fringe in order to prevent contamination in on-site soils from being introduced to groundwater.

Groundwater Sample Data Evaluation

The results of the three groundwater samples that were collected at the site are also included on Figure 1. Groundwater sample W-3, which was collected beneath the potential source area, reported a concentration of 47 ug/l. Groundwater sample W-2, collected near the southern property boundary reported 8 ug/l, which is the lowest concentration detected. Groundwater sample W-1, located at the northern extent of the property, reported the highest concentration of perchloroethylene at 200 ug/l. The concentrations at the three locations are above the NYSDEC's groundwater standard of 5 ug/l for perchloroethylene contained in the October, 1993 guidance document Ambient Water Quality Standards and Guidance Values.

Based on these concentrations, it is unclear that contaminated on-site surface soils impacted the groundwater. It has been our experience that the concentrations present in the shallow groundwater are representative of typical background levels found in areas where on-site sanitary systems are present. Products containing solvents were commonly used in the past to flush, clean, and treat cesspools. In addition, the results of the soil investigation indicated that the majority of soil contamination exists at the surface, which is subject to volatilization. The levels of contamination within the borings decreased with depth to levels well below the TAGM guidance value at the 6'-8' interval, above groundwater. As mentioned earlier, NCDH sample results for this interval were below detectable levels. Furthermore, the highest concentration of perchloroethylene was not detected beneath the potential source area, which would be expected from a continuing source. The highest concentration was detected near the northern extent of the property, in the vicinity of an off-site storm drain, which the NCDH has documented as being impacted by perchloroethylene. Therefore, the greater concentration in the northern sample is likely due to bottom deposits within the off-site storm drain rather than on-site soils.

It is believed, that due to the hydrogeologic setting and shallow groundwater flow dynamics beneath the Bayville Peninsula, it is unlikely that the concentrations of perchloroethylene found beneath the site would impact Public Supply Wells. The hydrogeologic setting beneath the site is depicted below.

Mr. Joe DeFranco
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Depth to bottom (feet)	Thickness (feet)	HYDROGEOLOGIC SETTING*
--	--	BAYVILLE LAND SURFACE
100	100	UPPER GLACIAL AQUIFER
200	100	FORT WASHINGTON CONFINING UNIT
250	50	FORT WASHINGTON AQUIFER REPLACED THE MAGOTHY AQUIFER
300	50	RARITAN CLAY
425	125	LLOYD AQUIFER
		BEDROCK

*Figure Information obtained from:

Kilburn, C. and Krulik, "Hydrogeology and Ground-Water Quality of the Northern Part of the Town of Oyster Bay, Nassau County, New York, in 1980", Water Resources Investigations Report 85-4051, U.S. Geological Survey, 1987.

Public Water Supply in the Village of Bayville is supplied by the Village of Bayville Water Department. The Village of Bayville operates three active wells, which are screened in the Lloyd Aquifer, to supply drinking water to the Village. The closest supply well (N-10144) is located approximately 1,200 feet southeast of the Site. The well is screened in the Lloyd Aquifer at a depth of 374 feet below surface and has the capacity of 1000 gallons per minute (gpm). The remaining active wells (N-7620, and N-8776), are located approximately one mile west of the Site. These wells are screened in the Lloyd Aquifer at depths of 480 and 459 feet below land surface respectively. To date, it is believed that these wells are free of volatile organic compounds.

According to the Hydrogeologic setting depicted above for the Bayville area, the Lloyd Aquifer is separated from the Upper Glacial Aquifer by clay layers totaling 150 feet in thickness. It is known that these clays have an approximate hydraulic conductivity of 0.01 gallons/day/sq. foot. This value is extremely low and demonstrates that the clays are effective confining units, isolating the Lloyd Aquifer from impacts from above. Therefore, it is unlikely that the Public Supply Wells screened in the Lloyd Aquifer, will be impacted by the shallow groundwater contamination identified beneath the site.

The direction of groundwater flow in the Upper Glacial Aquifer in the vicinity of the Site could not be discerned from published information because of the lack of monitoring wells screened in this aquifer. In addition, due to Bayville's close proximity to surrounding surface water bodies, it is not believed that the Upper Glacial Aquifer on this peninsula is hydraulically connected to the same aquifer located beneath the main body of Long Island. The direction of shallow groundwater flow is likely

Mr. Joe DeFranco
May 17, 1996 Page 8

influenced by the tidal forces acting upon the surrounding surface water bodies, resulting in induced tidal variation of groundwater flow. The tidal influence on shallow groundwater flow direction indicates that groundwater in the Upper Glacial Aquifer likely discharges to the surrounding surface water bodies. As a result, the shallow groundwater contamination identified, does not pose a significant threat to the environment. Therefore, it is believed, that no remedial action in regard to groundwater is warranted.

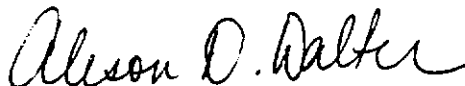
SUMMARY AND CONCLUSIONS

After analyzing the laboratory data obtained on soil samples collected from the Site, it has been recommended to excavate the soils in the area of the former vacuum discharge to a depth of five feet. The soils near S-3 and west of S-2 will be excavated to a depth of 8 feet. The soils in the vicinity of the former evaporator discharge are in no need of remediation. The soils will be excavated in the presence of the NCDH and the contaminated soils will be properly disposed of to a treatment plant facility. During excavation, soils will be screened with a PID to aid in the excavation activities and determine when clean soils are encountered. In addition, the structural integrity of the building will be considered during excavation, since the flower bed containing the soils to be excavated runs immediately adjacent to the building. The excavation may have to be performed in small sections so as to not undermine its foundation.

Based upon the concentrations detected in groundwater, and the hydrogeologic nature of the area, the contamination is not likely to impact Public Supply Wells. Additionally, do to the tidal influence on shallow groundwater flow direction, it is likely the groundwater in the Upper Glacial Aquifer discharges to the surrounding surface water bodies. Therefore, it is believed, that the groundwater contamination beneath the site does not pose a significant threat to the environment and no remedial action is necessary.

If you have any questions regarding this report please do not hesitate to call.

Very truly yours



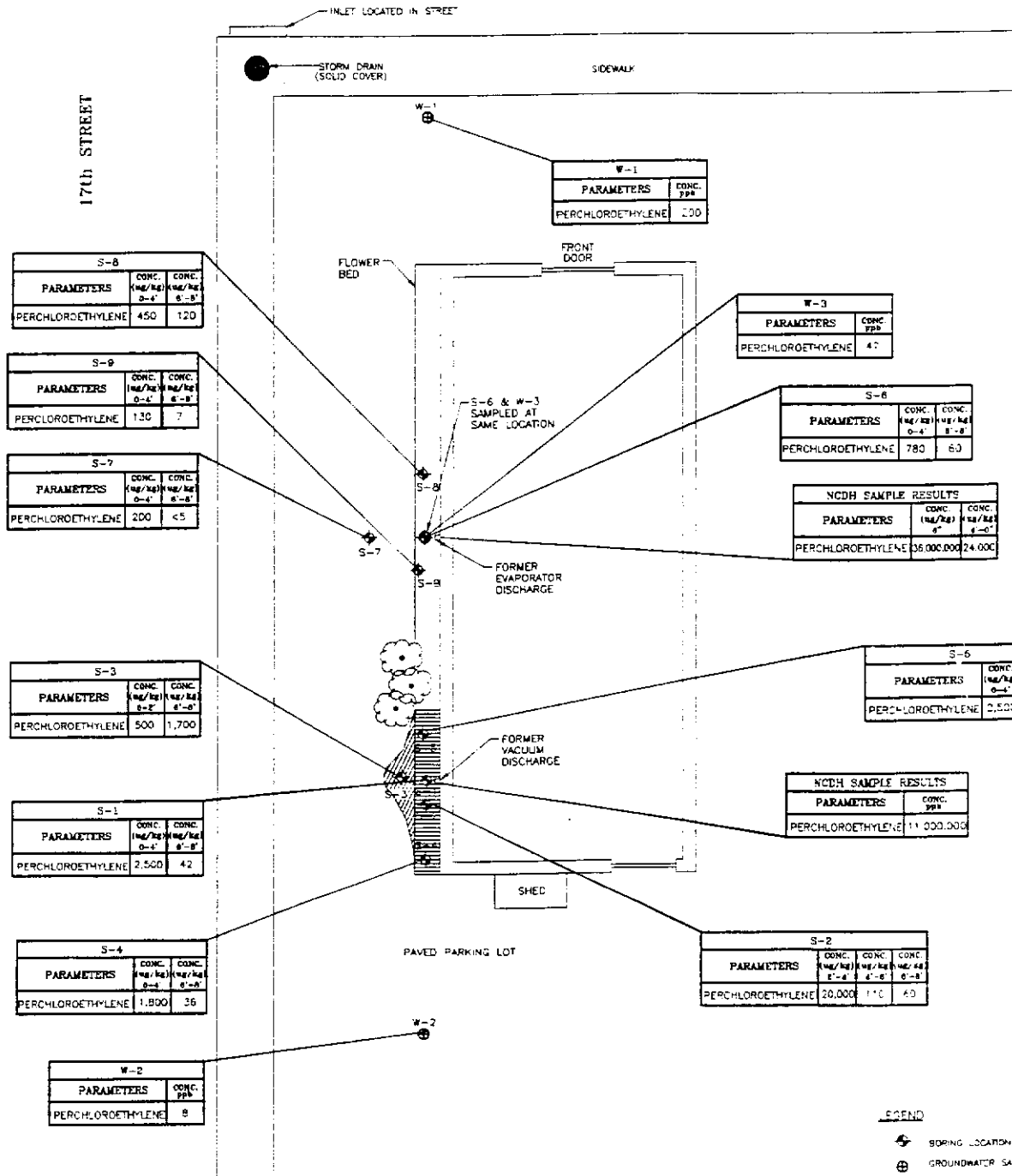
Alison D. Walter
Project Environmental Engineer

ADW:adj
encl.
cc: Thomas Ryan
John Soderberg, Esq.



BAYVILLE AVENUE

17th STREET



SCALE: 1/16" = 1'-0"

- LEGEND
- BORING LOCATION
 - GROUNDWATER SAMPLING LOCATION
 - REMEDIATE TO 5'
 - REMEDIATE TO 8' OR UNTIL THE CAPILLARY FRINGE IS ENCOUNTERED

P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, P.C.

100 South Main Street, Suite 202 Bayville, New York 11782-3150

prepared for: THOMAS RYAN

File No. BVC9601 Date: 5/13/96

SITE PLAN SAMPLING LOCATIONS

290 BAYVILLE AVENUE BAYVILLE, NEW YORK

FIGURE NO. 1

APPENDIX A

ECO TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING

377 Sheffield Avenue, North Babylon, New York 11703
 (516) 422-5777 • FAX (516) 422-5770

Client: P.D. Grosser
 Address: 100 S. Main St. Ste. 202
 Sagville NY
 Phone: 516 897 6353 FAX:
 Person receiving report: J.P.R./A.W.
 Sampled by: AW/L.S.
 Source: BAYVILLE AVE, BAYVILLE
 Job No.: BVC9601

TYPE & NUMBER OF CONTAINERS

MATRIX (Soil, Water, etc.)	COLLECTED		SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	REMARKS—TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL Q.C. etc	DATE/TIME	SEAL INTACT?		DATE/TIME	Relinquished by: (Signature)		Received by: (Signature)		
	DATE	TIME					YES	NO NA		Representing:	Received by:	Representing:		
Water			W-1 (N)	2	PCE, TCE, DCE, VINYL CHLORIDE									
			W-2 (S)	2										
			W-3 (S-6)	2										
Soil			S-1 0-4"	1										
			S-2 6-8"	1										
			S-3 0-4"	1										
			S-3 6-8"	1										
			S-4 0-4"	1										
			S-5 6-8"	1										
			S-5 0-4"	1										
			S-5 6-8"	1										
			S-4 0-4"	1										
			S-4 6-8"	1										

Relinquished by: (Signature) _____ Received by: (Signature) _____
 Representing: _____ Representing: _____
 Relinquished by: (Signature) _____ Received by: (Signature) _____
 Representing: _____ Representing: _____

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/21

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-1 @ 2-4'

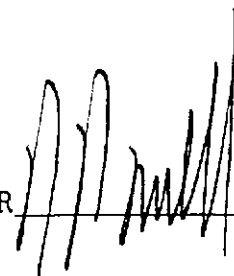
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	2500
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/22

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-1 @ 6-8'

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	42
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.C961398/18

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D:04/10/96 RECEIVED:04/10/96

SAMPLE: Soil sample, S-2 @ 2-4'

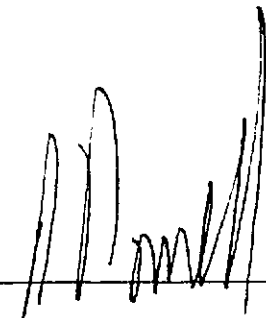
ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg 20000
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/19

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-2 @ 4-6'

ANALYTICAL PARAMETERS

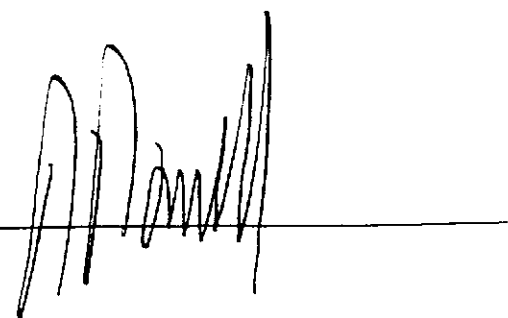
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	110
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



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LAB NO. C961398/20

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-2 @ 6-8'

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	60
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/16

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-3 @ 0-2'

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	500
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/17

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-3 @ 6-8'

ANALYTICAL PARAMETERS

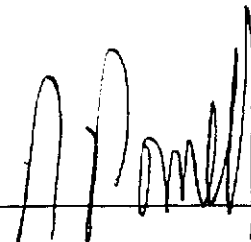
Tetrachloroethene	ug/Kg	1700
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/14

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-4 @ 0-4'

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	2500
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/15

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

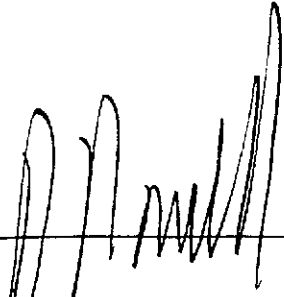
SAMPLE: Soil sample, S-4 @ 6-8'

ANALYTICAL PARAMETERS
Tetrachloroethene ug/Kg 19
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

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LAB NO. C961398/12

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-5 @ 0-4'

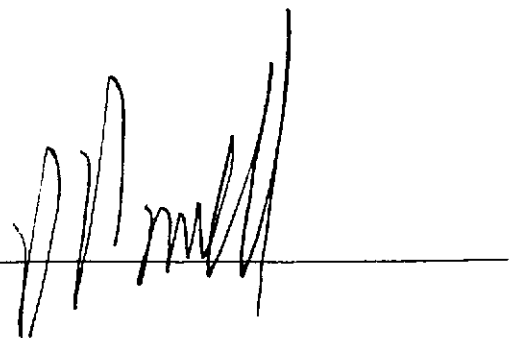
ANALYTICAL PARAMETERS		
Tetrachloroethene	ug/Kg	1800
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/13

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-5 @ 6-8'

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg 36
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR _____


377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/10

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-6 @ 0-4'

ANALYTICAL PARAMETERS

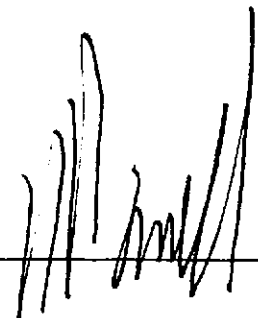
Tetrachloroethene	ug/Kg	780
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/11

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-6 @ 6-8'

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	80
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/8

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-7 @ 0-4'

ANALYTICAL PARAMETERS

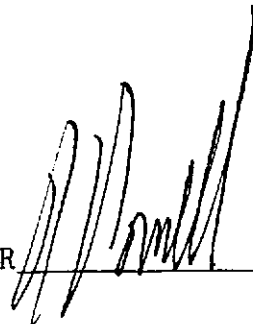
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	200
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/9

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-7 @ 6-8'

ANALYTICAL PARAMETERS

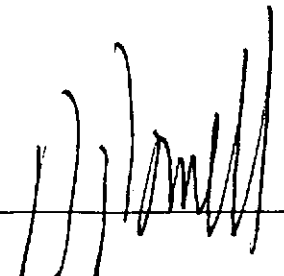
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/6

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-8 @ 0-4'

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	450
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/7

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-8 @ 6-8'

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	120
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/4

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-9 @ 0-4'

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	130
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/5

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Soil sample, S-9 @ 6-8'

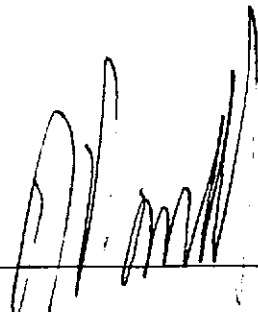
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	7
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/1

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Water sample, W-1 (N)

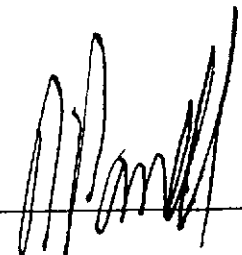
ANALYTICAL PARAMETERS		
Tetrachloroethene	ug/L	200
Trichloroethylene	ug/L	<1
Vinyl Chloride	ug/L	<1
1,2 Dichloroethene	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR _____



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LAB NO. C961398/2

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Water sample, W-2 (S)

ANALYTICAL PARAMETERS

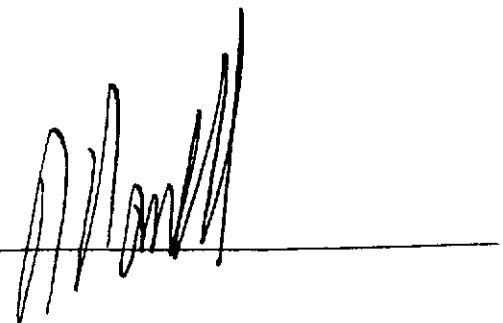
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	8
Trichloroethylene	ug/L	<1
Vinyl Chloride	ug/L	<1
1,2 Dichloroethene	ug/L	<1

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C961398/3

04/18/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 04/10/96 RECEIVED: 04/10/96

SAMPLE: Water sample, W-3 (S-6)

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	47
Trichloroethylene	ug/L	<1
Vinyl Chloride	ug/L	<1
1,2 Dichloroethene	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

APPENDIX B

NCDH REQUEST FOR OVERSIGHT CORRESPONDENCE



July 24, 1996

VIA FACSIMILE

Mr. Bruce Smith
Nassau County Department of Health
Bureau of Environmental Management
240 Old Country Road
Mineola, New York 11501

Re: Bayville Village Cleaners
290 Bayville Avenue
Bayville, N.Y. 11545

Dear Mr. Smith:

This letter is to inform you that we will proceed with the remediation as described in our May 22, 1996 "Soil and Groundwater Investigation" report prepared for the above referenced site. The work is scheduled for July 29, 1996 and we request the presence of the NCDH to observe and document the work as per Mr. Jamie Ascher's (NYSDEC) suggestion.

The remediation will consist of soil excavation in the area designated in the May 22, 1996 report. Additionally, at this time, we will excavate surface soils down to an approximate depth of four feet in the vicinity of the former location of the evaporator discharge. To document the effectiveness of the remediation, endpoint samples will be collected and analyzed for PCE, TCE, DCE, and Vinyl Chloride. Quality assurance/ quality control (QA/QC) samples will include a trip blank, field blank, and blind duplicate. These samples will be analyzed for the sample compounds as the endpoint samples. In accordance with Mr. Ashers's suggestion, the excavation will be enveloped prior to backfilling will clean fill.

Please contact me as soon as possible regarding your decision. If you have any questions, please do not hesitate to contact this office.

Very truly yours,

James P. Rhodes
Sr. Hydrogeologist

cc: Thomas Ryan
John Soderberg, Esq.
Joe Defranco, NCDH
Jamie Ascher, NYSDEC



APPENDIX C
ANALYTICAL RESULTS



Client: W. G. G. S. C.
 Address: 1100 N. 10th St
 Phone: 516 422 5777 FAX: 516 422 5770
 Person receiving report: ALICE J. JONES
 Sampled by: ALICE J. JONES
 Source: BAYVILLE CLEAN S-
 Job No.: BUC 9501

MATRIX (Soil, Water, etc.)	COLLECTED		SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	TYPE & NUMBER OF CONTAINERS	REMARKS—TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL O.C. etc.	Relinquished by: (Signature)		SEAL INTACT?		DATE/TIME		Received by: (Signature)	
	DATE	TIME					YES	NO	NA	YES	NO	NA	DATE/TIME	REPRESENTING:
	7/29/95	9:45	EP-1 (B)	11		PRACTICE, DE VINYL CHLORIDE								
	8/1/95	9:58	EP-2 (S)	11										
	10/07		EP-3 (B)	11										
	10/27		EP-4 (S)	11										
	10/34		EP-5 (B)	11										
	10/04		EP-6 (S)	11										
	10/48		EP-7 (S)	11										
	11/23		EP-8 (B)	11										
	11/32		EP-9 (B)	11										
	11/41		EP-10 (S)	11										
	11/50		EP-11 (S)	11										
	1/37		EP-12 (B)	11										
	1/32		EP-13 (B)	11										
	2/04		EP-14 (S)	11										
	1/23/01		EP-15 (B)	11										

Relinquished by: (Signature) [Signature] Received by: (Signature) [Signature]
 Representing: [Signature] Representing: [Signature]
 Relinquished by: (Signature) [Signature] Received by: (Signature) [Signature]
 Representing: [Signature] Representing: [Signature]

CHAIN OF CUSTODY RECORD

TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
 377 Sheffield Avenue, North Babylon, New York 11703
 (516) 422-5777 • FAX (516) 422-5770

Client: P.W. GROSSER
 Address: 100 S MAY ST.
 Bayville NY
 Phone: (516) 655-2803 FAX: (516) 655-2705
 Person receiving report: TIM RHODES
 Sampled by: ALISON
 Source: BAYVILLE CLEANERS
 Job No.: BVC9501

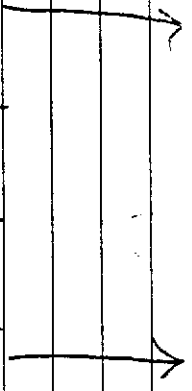
TYPE & NUMBER OF CONTAINERS

TOTAL NUMBER OF CONTAINERS
405
204

2

MATRIX (Soil, Water, etc.)	COLLECTED		SAMPLE IDENTIFICATION	RECEIVED BY: (Signature)		SEAL INTACT? YES NO NA	DATE/TIME		RELINQUISHED BY: (Signature)	SEAL INTACT? YES NO NA		RECEIVED BY: (Signature)	DATE/TIME		RELINQUISHED BY: (Signature)	SEAL INTACT? YES NO NA		RECEIVED BY: (Signature)	
	DATE	TIME		Representing:	Representing:		DATE/TIME	DATE/TIME		DATE/TIME	DATE/TIME		DATE/TIME	DATE/TIME		DATE/TIME	DATE/TIME		
SOIL	10/27/91		DUPLICATE	1	1														
SOIL	2:58		EP-16 (S)																
SOIL	3:12		EP-17 (S)																
SOIL	10:20		TRIP BLANK																
SOIL	10:20		FIELD BLANK																
SOIL	3:20		C-18 (respon)																

REMARKS-TESTS REQUIRED
 SPECIAL TURNAROUND, SPECIAL Q.C. etc
 PCE, TCE, DCE, VIOXYCHLORIDE



Relinquished by: (Signature)
 Representing:
 Relinquished by: (Signature)
 Representing:
 Relinquished by: (Signature)
 Representing:

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/1

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-1 (B), 9:45 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	9
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/2

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-2 (S), 9:58 am

ANALYTICAL PARAMETERS

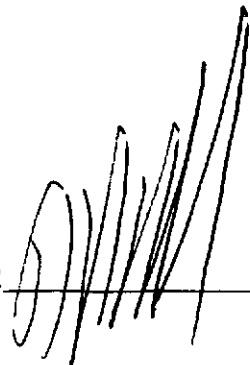
ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg 55
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/3

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-3 (B), 10:07 am

ANALYTICAL PARAMETERS

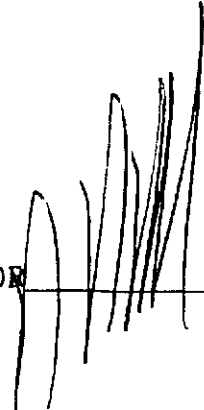
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	28
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/4

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-4 (S), 10:27 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg <5
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/5

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-5 (B), 10:34 am

ANALYTICAL PARAMETERS


ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	230
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	34

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/6

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-6 (S), 10:44 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg <5
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/7

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-7 (S), 10:48 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg <5
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/8

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-8 (B), 11:23 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	33
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/9

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-9 (B), 11:32 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/Kg 29
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/10

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-10 (S), 11:41 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	75
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/11

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-11 (S), 11:50 am

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	55
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/12

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-12 (B), 1:37 pm

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	620
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/13

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-13 (B), 1:52 pm

ANALYTICAL PARAMETERS

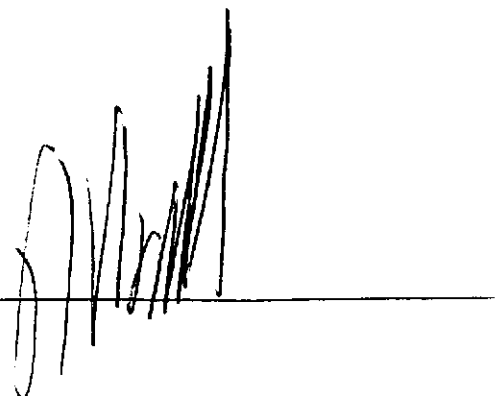
Tetrachloroethene	ug/Kg	34
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/14

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-14 (S), 2:04 pm

ANALYTICAL PARAMETERS

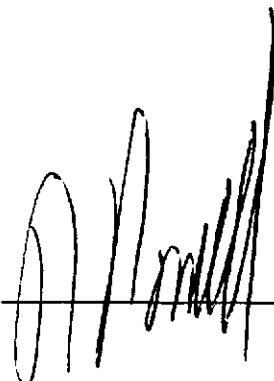
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	140
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/15

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-15 (B), 2:30 pm

ANALYTICAL PARAMETERS

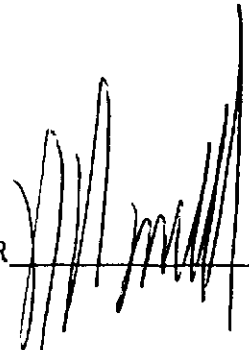
Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/16

08/07/96

ATTN: P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96


SAMPLE: Soil sample, Duplicate

ANALYTICAL PARAMETERS
Tetrachloroethene ug/Kg <5
Trichloroethylene ug/Kg <5
Vinyl Chloride ug/Kg <5
1,2 Dichloroethene ug/Kg <5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/17

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-16 (S), 2:58 pm

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	55
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/18

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, EP-17 (S), 3:12 pm

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	31
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/19

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Water sample, Trip Blank

ANALYTICAL PARAMETERS

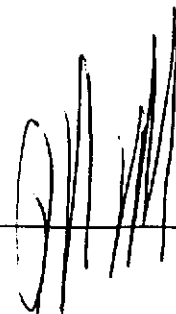
ANALYTICAL PARAMETERS

Tetrachloroethene ug/L <1
Trichloroethylene ug/L <1
Vinyl Chloride ug/L <1
1,2 Dichloroethene ug/L <1

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/20

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Water sample, Field Blank

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	<1
Trichloroethylene	ug/L	<1
Vinyl Chloride	ug/L	<1
1,2 Dichloroethene	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C963115/21

08/07/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Cleaners, BVC 9501
COLLECTED BY: Client DATE COL'D: 07/29/96 RECEIVED: 07/30/96

SAMPLE: Soil sample, C-18, cesspool, 3:20 pm

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	90
Trichloroethylene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	27

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



Client: _____
 Address: _____
 Phone: _____ FAX: _____
 Person receiving report: _____
 Sampled by: _____
 Source: _____

MATRIX (Soil, Water, etc.)	COLLECTED		SAMPLE IDENTIFICATION
	DATE	TIME	
1	12/1/99	10:00	B-1 (A-100)
1	12/1/99	10:00	B-1 (A-101)
1	12/1/99	10:00	B-1 (A-102)
1	12/1/99	10:00	B-1 (A-103)
1	12/1/99	10:00	B-1 (A-104)
1	12/1/99	10:00	B-1 (A-105)
1	12/1/99	10:00	B-1 (A-106)
1	12/1/99	10:00	B-1 (A-107)
1	12/1/99	10:00	B-1 (A-108)
1	12/1/99	10:00	B-1 (A-109)
1	12/1/99	10:00	B-1 (A-110)
1	12/1/99	10:00	B-1 (A-111)
1	12/1/99	10:00	B-1 (A-112)
1	12/1/99	10:00	B-1 (A-113)
1	12/1/99	10:00	B-1 (A-114)
1	12/1/99	10:00	B-1 (A-115)
1	12/1/99	10:00	B-1 (A-116)
1	12/1/99	10:00	B-1 (A-117)
1	12/1/99	10:00	B-1 (A-118)
1	12/1/99	10:00	B-1 (A-119)
1	12/1/99	10:00	B-1 (A-120)

RECEIVED		RELINQUISHED		DATE/TIME	SEAL INTACT ?	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	SEAL INTACT ?	RECEIVED BY: (Signature)
DATE/TIME	SEAL INTACT ?	DATE/TIME	SEAL INTACT ?							
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]
12/1/99	YES	12/1/99	YES	10:00	YES	[Signature]	[Signature]	10:00	YES	[Signature]

TOTAL NUMBER OF CONTAINERS

TYPE & NUMBER OF CONTAINERS

REMARKS - TESTS REQUIRED, SPECIAL TURNAROUND, SPECIAL O.C. etc

12/1/99 10:00 B-1 (A-100) ...

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/1

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Soil sample, B-1, (8'-10'), 10:12 am

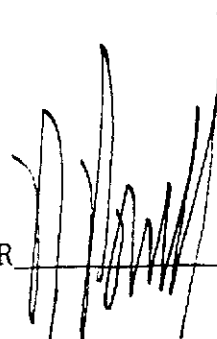
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	170000
Trichloroethylene	ug/Kg	6400
1,2 Dichloroethene	ug/Kg	11000
Vinyl Chloride	ug/Kg	90

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/2

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Soil sample, B-1, (10'-12'), 10:18 am

ANALYTICAL PARAMETERS

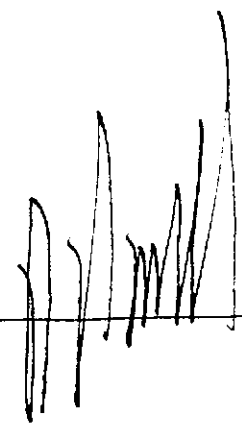
Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/3

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Soil sample, B-1, (12'-14'), 10:25 am

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/4

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Soil sample, B-1, (14'-16'), 10:40 am

ANALYTICAL PARAMETERS

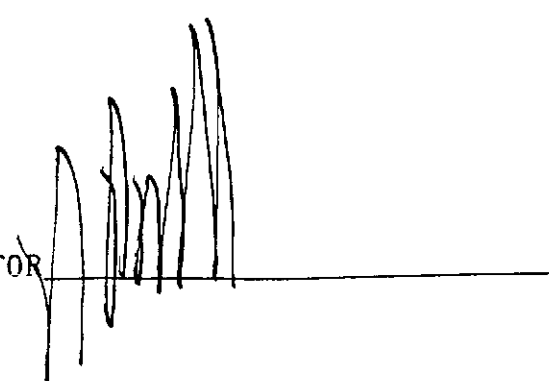
Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/5

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Soil sample, B-1, (16'-18'), 10:40 am

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/6

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Soil sample, Duplicate

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/Kg	<5
Trichloroethylene	ug/Kg	<5
1,2 Dichloroethene	ug/Kg	<5
Vinyl Chloride	ug/Kg	<5

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/7

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, FB-1, 11:10 am

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	<1
Trichloroethylene	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Vinyl Chloride	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/8

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, B-1 (GW), 11:20 am


ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	260
Trichloroethylene	ug/L	7
1,2 Dichloroethene	ug/L	32
Vinyl Chloride	ug/L	<1

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/9

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, B-2 (GW), 11:55 am

ANALYTICAL PARAMETERS

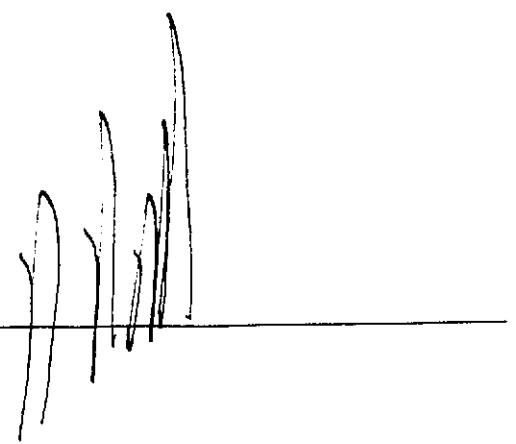
ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	<5
Trichloroethylene	ug/L	460
1,2 Dichloroethene	ug/L	8600
Vinyl Chloride	ug/L	1900

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/10

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, B-3 (GW), 1:15 pm

ANALYTICAL PARAMETERS


ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	2
Trichloroethylene	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Vinyl Chloride	ug/L	<1

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/11

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, FB-2, 1:45 pm

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	<1
Trichloroethylene	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Vinyl Chloride	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/12

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, B-4 (GW), 2:00 pm

ANALYTICAL PARAMETERS

ANALYTICAL PARAMETERS

Tetrachloroethene ug/L <1
Trichloroethylene ug/L <1
1,2 Dichloroethene ug/L <1
Vinyl Chloride ug/L <1

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/13

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, B-5 (GW), 2:20 pm

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	9
Trichloroethylene	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Vinyl Chloride	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/14

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782
ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, Duplicate

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	<5
Trichloroethylene	ug/L	440
1,2 Dichloroethene	ug/L	10000
Vinyl Chloride	ug/L	1800

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR 

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO. C964152/15

10/17/96

P.W. Grosser Consulting
P.O. Box 39, 100 South Main Street
Sayville, NY 11782

ATTN: James P. Rhodes, Jr.

SOURCE OF SAMPLE: Bayville Avenue, Bayville, #BVC9601
COLLECTED BY: Client DATE COL'D: 10/04/96 RECEIVED: 10/04/96

SAMPLE: Water sample, Trip Blank

ANALYTICAL PARAMETERS

Tetrachloroethene	ug/L	<1
Trichloroethylene	ug/L	<1
1,2 Dichloroethene	ug/L	<1
Vinyl Chloride	ug/L	<1

ANALYTICAL PARAMETERS

cc:

REMARKS:

DIRECTOR



APPENDIX D

CLEAN FILL RECEIPTS & HAZARDOUS WASTE MANIFESTS

2629

Liotta & Sons INC.

3966 Long Beach Road
Island Park, New York
11558

Phone: (516) 432-7085
Fax: (516) 432-6710
Beeper: (516) 892-9377

Name: Brookside Environmental 7/29/96
Bayville Village Cleaners

Driver:

	Yards/Tons
Concrete Sand	
Fine Sand	
Bank Run	
Grit	
----- Gravel	
Screened Top Soil	
Fill	25
----- Stone	
Salt Sand	
Misc.	
Truck Hire	Hours

Accepted by: Arthur J. [Signature] Date: 7-29-96

Delivery to curb only - driver crosses curb, sidewalk or driveway at owner's risk.

2628

Liotta & Sons INC.

3966 Long Beach Road
Island Park, New York
11558

Phone: (516) 432-7085
Fax: (516) 432-6710
Beeper: (516) 892-9377

Name: Brookside Environmental 7/29/96
Bayville Village Cleaners

Driver: Charlie

	Yards/Tons
Concrete Sand	
Fine Sand	
Bank Run	
Grit	
----- Gravel	
Screened Top Soil	
Fill	20
----- Stone	
Salt Sand	
Misc.	
Truck Hire	Hours

Accepted by: Arthur J. [Signature] Date: 7-29-96

Delivery to curb only - driver crosses curb, sidewalk or driveway at owner's risk.



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE

ATT. DIS. REJ. PR.

required under authority of Act 1979, as amended and Act 136, P.A. 1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type.

Form Approved OMB No. 2050-0039 Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST		Generator's US EPA ID No. NYD112208386800002		Manifest Document No. 00002	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Bayville Village Cleanals 290 Bayville Avenue Bayville, New York 11709				A. State Manifest Document Number MI 4076190		B. State Generator's ID SAME	
4. Generator's Phone (516) 628-1522		6. US EPA ID Number PAD1146714878		C. State Transporter's ID H-3078		D. Transporter's Phone 800-220-8807	
5. Transporter 1 Company Name Horwith Trucks, Inc.		7. Transporter 2 Company Name		E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address Wayne Disposal, Inc. 49350 I-94 Service Drive Belleville, Michigan 48111				10. US EPA ID Number MID048090633		G. State Facility's ID SAME	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and HM ID NUMBER).				12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	I. Waste No. N/H
a. <input checked="" type="checkbox"/> RQ Hazardous Waste Solid, n.a.s (FOOZ) 9 NA 3077 PG III				001	DTXXX	20 T	FOOZ H
J. Additional Descriptions for Materials Listed Above a) Soil contaminated with trace perchloroethylene				K. Handling Codes for Waste Listed Above		a/ <input type="checkbox"/> b/ <input type="checkbox"/> c/ <input type="checkbox"/> d/ <input type="checkbox"/>	
15. Special Handling Instructions and Additional Information Approval # 013096							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Thomas P. Clark				Signature <i>[Signature]</i>		Date 07/30/96	
17. Transporter 1 Acknowledgment of Receipt of Materials Printed/Typed Name Lanny J. Bryfogle				Signature <i>[Signature]</i>		Date 07/30/96	
18. Transporter 2 Acknowledgment of Receipt of Materials Printed/Typed Name				Signature		Date	
19. Discrepancy Indication Space NDZ received 481606US 2727 TONS							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						Date	
Printed/Typed Name James A. Visser				Signature <i>[Signature]</i>		Date 07/31/96	

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-9333

WAYNE
SERVICES INC.
1349 HURON
Ypsilanti, Michigan 48197

Office: (313)485-6460
I-94 Landfill (313)697-7880

SURCHARGE APPLIED

WRITTEN BY: JAF DATE: 7/31/96

ACCT. NAME: BROOKSIDE ENVIRONMENTAL

ACCOUNT NUMBER: 2614 SHORT NAME: BROOKS

CODE: F002 - 6 - QUANTITY: 24
Approval # 73096-WZ

~~EPA# NYD122083268~~
REMARKS:
BAYVILLE VILLAGE CLEANERS
Manifest # MI4076190
Hauler HORWITH-
Time In 1:31 PM Time Out 2:19 PM
G- 81,680 T- 33,520 N- 48,160

I understand and acknowledge that entry is permitted only at my own risk. I, both personally and on behalf of my employer release Wayne Disposal, Inc. and/or Michigan Disposal, Inc. from any and all liability not caused by its gross negligence or willful misconduct.

Ticket # 1054394


DELIVERED BY

NO SALVAGING ON PREMISES

DNR
MICHIGAN DEPARTMENT
OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE

ATT. DIS. REJ. PR.

Required under authority of Act 64, P 1979, as amended and Act 136, P.A. 1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type.

Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **NYD1220838680001** Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Bayville Village Cleaners
290 Bayville Avenue
Bayville, New York 11709

A. State Manifest Document Number
MI 4076194

4. Generator's Phone (**516**) **628-1522**

B. State Generator's ID
SAME

5. Transporter 1 Company Name
Horwith Trucks, Inc.

6. US EPA ID Number
PAID146714878

C. State Transporter's ID
H-5084

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone
800-220-880

9. Designated Facility Name and Site Address
Wayne Disposal Inc
49350 I-94 Service Rd.
Belleville, Michigan 48111

10. US EPA ID Number
MI D048090633

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID
SAME

H. Facility's Phone
313-697-2200

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)
HAZARDOUS Waste Solid, mas (FOOZ)
9 NA3077 PGIII

12. Containers
 No. Type

13. Total Quantity

14. Unit Wt/Vol

15. Waste No. NA

No.	Type	Total Quantity	Unit Wt/Vol	Waste No.	NA
001	DTX, X, X, 20 T			FOOZ H	

14. Additional Descriptions for Materials Listed Above
a) Soil contaminated with trace perskloroethylene

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
APPROVAL # 073096 WZ

a) b) c) d)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: **Thomas L Ryan** Signature: *[Signature]* Date: **07/30/96**

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: **GEORGE SZALSKA** Signature: *[Signature]* Date: **07/31/96**

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name: Signature: Date:

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
WZ Received 4860 LBS of 2 drums

Printed/Typed Name: **JAMES A. VISASSE** Signature: *[Signature]* Date: **07/31/96**

CUSTOMER COPY

WAYNE
SERVICES INC.
1349 HURON
Ypsilanti, Michigan 48197

Office: (313)485-6460
I-94 Landfill (313)697-7830

SURCHARGE APPLIED

WRITTEN BY: JAV DATE 7/31/96

ACCT. NAME: BROOKSIDE ENVIRONMENTAL ✓

ACCOUNT NUMBER: 2614 SHORT NAME: BROOKS

CODE: F002 - 6 - QUANTITY: 24
Approval # 73096-WZ

EPA# NYD122083866
REMARKS:
BAYVILLE VILLAGE CLEANERS
Manifest # MI4076191
Hauler HORWITH-
Time In 1:32 PM Time Out 2:14 PM
S- 81,420 T- 32,560 N- 48,860

I understand and acknowledge that entry is permitted only at my own risk. I, both personally and on behalf of my employer release Wayne Disposal, Inc. and/or Michigan Disposal, Inc. from any and all liability not caused by its gross negligence or willful misconduct.

Ticket # 1054397

RECEIVED BY *George Spada*

NO SALVAGING ON PREMISES

DNR
MICHIGAN DEPARTMENT
OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE
 ATT. DIS. REJ. PR.

1979, as amended and Act 136, P.A. 1989.
 Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1989.

Form Approved, OMB No. 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **NYD112208386809903** Manifest Document No. **2** Page 1 of 1

2. Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address **Bayville Village Cleaners**
290 Bayville Avenue
Bayville, New York 11709

A. State Manifest Document Number **MI 4076192**

4. Generator's Phone **(516) 628-1522**

B. State Generator's ID **SAME**

5. Transporter 1 Company Name **Horvath Trucks, Inc.** 6. US EPA ID Number **PAD1146714878**

C. State Transporter's ID

7. Transporter 2 Company Name 8. US EPA ID Number

D. Transporter's Phone **800-220-8807**

E. State Transporter's ID

9. Designated Facility Name and Site Address **Wayne Disposal, Inc.**
49350 I-94 Service-Drive
Belleville, Michigan 48111

10. US EPA ID Number **MI D0480906133**

G. State Facility's ID **SAME**

H. Facility's Phone **313-697-2200**

a.	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste No	N/H
		No.	Type				
<input checked="" type="checkbox"/>	RQ Hazardous Waste Solid, n.o.s. (FOOZ) 9 NA3077 PG III	09	1 DTE	20	T	FOOZ H	
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.) Soil contaminated with perchloroethylene
Approved 0730 700 WZ

K. Handling Codes for Waste Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name **THOMAS R. LYAN** Signature *[Signature]* Date **07/30/96**

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name **Jeff Weckman** Signature *[Signature]* Date **07/30/96**

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name _____ Signature _____ Date _____

19. Discrepancy Indication Space
Waste received 385W 683

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name **TAMEI A.** Signature *[Signature]* Date **07/31/96**

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7860 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-9802 24 HOURS PER DAY.

WAYNE
SERVICES INC.
1349 HURON
Ypsilanti, Michigan 48197

Office: (313)485-6460
I-94 Landfill (313)697-7830

SURCHARGE APPLIED

WRITTEN BY: JMC DATE: 7/31/96

ACCT. NAME: BROOKSIDE ENVIRONMENTAL

ACCOUNT NUMBER: 2614 SHORT NAME: BROOKS

CODE: F002 - 6 - QUANTITY: 19
Approval # 73096-WZ

REMARKS: EPA# NYD122083868
BAYVILLE VILLAGE CLEANERS
Manifest # MI4076192
Hauler HORWITH-
Time In 1:01 PM Time Out 1:55 PM
G- 71,200 T- 32,700 N- 38,500

*69010
287*

I understand and acknowledge that entry is permitted only at my own risk. I, both personally and on behalf of my employer release Wayne Disposal, Inc. and/or Michigan Disposal, Inc. from any and all liability not caused by its gross negligence or willful misconduct.

Ticket # 1054392

[Signature]
DELIVERED BY

NO SALVAGING ON PREMISES

APPENDIX E
ROAD OPENING PERMIT CORRESPONDENCE



July 31, 1996

Honorable John M. Waltz, P.E., Commissioner
Nassau County Department of Public Works
1 West Street
Mineola, N.Y. 11501

Re: Request to Perform
Soil Boring in Nassau County Storm Drain

Dear Commissioner Waltz:

P.W. Grosser Consulting respectfully requests to perform a soil boring within the Nassau County storm drain located at the southeast corner of Bayville Avenue and 17th street, Bayville N.Y. The soil boring is part of an on going soil and groundwater investigation and remediation being performed in conjunction with Bayville Village Cleaners.

The storm drain has a solid cover, which is located within the sidewalk. To perform the soil boring, the cover will be removed and subsequently replaced when the boring is complete. The boring will be conducted with a Geoprobe. This is a small, unobtrusive machine capable of performing the boring quickly. During work, the area will be properly partitioned so that pedestrians will be alerted to the work.

P.W. Grosser Consulting would like to proceed with the work as soon as possible. Your attention to this matter is greatly appreciated. Should you have any questions or require further information, please do not hesitate to contact this office.

Very truly yours,

Paul W. Grosser, Ph.D., P.E.
President

PWG:jpr

cc: Thomas Ryan, Bayville Cleaners
John Soderberg, Esq.
Jamie Asher, NYSDEC
Joe DeFranco, NCDH





COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

August 15, 1996

P.W. Grosser Consulting Eng. & Hydrogeologist, P.C.
100 South Main St., Suite 202
Sayville, NY 11782-3150

Attn: Paul W. Grosser, Ph.D., P.E.

Re: Nassau County Road Opening Permit
Proposed Soil Boring
At SE Corner of Bayville Ave. & 17th St.
Bayville

Gentlemen:

We are in receipt of your July 31 letter requesting authorization to perform a soil boring through an existing catch basin floor at the referenced location.

Please be advised that a permit will be required from this Department for you to perform the proposed soil boring. For your convenience, we have enclosed a permit application for you to complete and return to our permit office at 1550 Franklin Ave., Mineola, NY 11501. There is a \$100.00 application fee and we will require a \$400.00 deposit for the permit to be issued. The permit deposit is refundable, minus our inspection charge, when your work has satisfactorily been completed. Any damage that may occur to the catch basin as a result of your work must be repaired in accordance with our standard specifications.

If you have any questions, do not hesitate to contact Kenneth Glupe of this Department at 571-4184.

Very truly yours,

John B. Faughnan, P.E.
Deputy Commissioner

JBF:KHG:mtd
Enclosure

cc: John M. Waltz, Commissioner



September 12, 1996

Mr. Kenneth Glupe
Nassau County Department of Public Works
1 West Street
Mineola, N.Y. 11501

Re: Road Opening Permit Application
Bayville Village Cleaners
Bayville, N.Y. 11709

Dear Commissioner Waltz:

Enclosed is the road opening permit that is required by your Department for the proposed soil boring within the Nassau County storm drain located at the southeast corner of Bayville Avenue and 17th street, Bayville N.Y. Also enclosed is a check for \$500 for the permit processing fees.

P.W. Grosser Consulting would like to schedule the work as soon as possible and would appreciate notification as soon as the permit is processed. Should you have any questions or require further information, please do not hesitate to contact this office.

Very truly yours,
P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P. C.

James P. Rhodes
James P. Rhodes
Sr. Hydrogeologist

JPR:jpr
encl.

cc: Thomas Ryan, Bayville Cleaners w/encl.
John Soderberg, Esq. w/o encl.
Jamie Asher, NYSDEC w/o encl.
Joe DeFranco, NCDH w/o encl.



ROAD OPENING PERMIT APPLICATION
Nassau County Department of Public Works
for work on Right-of-Way of County Roads

Non-refundable application fee \$100.00

Please Print or Type this application.
Check where applicable:

Receipt No.:

Site Drawings (5) are required to be attached to this application

New Work Reconstruction Grass Area Drainage
 Road Opening Sidewalk Opening Curb Cut Other

Applicant: P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. Tel No.: (516)589-6353
(Owner or Agent)

Address: 100 South Main Street Sayville, New York 11782

School Dist.: N/A , Section N/A , Block N/A & N/A Lot

I request permission to N/A open, N/A (re) construct the (N-E-S-W Middle) side
(circle one)

of Bayville Avenue , Bayville , at a distance
(name of road) (Community)

5 feet N-E-S-W of 17th Street for the purpose of
(circle one) (nearest intersection)

Performing a soil boring through bottom of storm drain with cast iron cover to grade.

Do trees have to be removed? Yes No. If yes indicate on drawing.

ROAD/SIDEWALK OPENING: N/A ROAD PAVEMENT RESTORATION: see contr's list) ^{N/}

Contractor: Zebra Environmental Corp. Contractor: _____

Address: 200 Roger Ave. Inwood, NY 11696 Address: _____

Tel. No.: Day (516)371-2020 Night _____ Tel No.: Day _____ Night _____

Licensed by & No.: _____

I have read and agree to abide by the Rules & Regulations pertaining to Permits for work on and within
County Roads

Signature: James P. Ahvdes Title: Sr. Hydrogeologist Date: 8/27/96
N/A= Not Applicable

FOR OFFICIAL USE ONLY

To: Highways & General Engineering

Your approval or disapproval is required. When completed, please return this referral to the Contracts & Permits unit for processing. (Use reverse side for additional comments).

Check where applicable: Deposit Amount \$ _____

Disapproved

Approved By _____ Date: _____

Comments:

BAYVILLE AVENUE

INLET LOCATED IN STREET

STORM DRAIN
(SOLID COVER)

SIDEWALK

FLOWER
BED

FRONT
DOOR

N



17th STREET

BAYVILLE
VILLAGE
CLEANERS

SHED

PAVED PARKING LOT

SCALE: 3/32" = 1'-0"

P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.

100 South Main Street, Suite 202
Bayville, New York 11712-3120

Prepared for: THOMAS RYAN

File No. BVC961-3 Date: 8/26/96

SITE PLAN
SAMPLING LOCATIONS

290 BAYVILLE AVENUE
BAYVILLE, NEW YORK

FIGURE NO:

1

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS
(ROAD OPENING ACT, NASSAU COUNTY)

TEL NO. (516) 589-6353

PERMIT

ISSUED DATE: 09/20/96

PERMIT NO: 96-0048453-000-R

PERMITTEE: P.W. GROSSER CONSULTING ENG.

REF NO:

100 S. MAIN ST. SAYVILLE, NY 11782

REFUND DEPOSIT TO: BAYVILLE VILLAGE CLEANERS, INC

290 BAYVILLE AVE. BAYVILLE, NY 11709

I. HEREBY AUTHORIZED TO DO WORK AT BAYVILLE AVE
S / S 5 FT E / O 17TH ST , BAYVILLE

FOR PURPOSE OF: SOIL PROBE

NOTES: PERMIT TO PERFORM SOIL BORING THROUGH FLOOR OF CATCH BASIN. ANY DAMAGE
TO CATCH BASIN STRUCTURE OR UNDERMINING MUST BE REPAIRED TO SATISFACTION
OF N.C. DPW.

239K: DEPOSIT NO. 48453 AMOUNT OF DEPOSIT \$400.00

NOTICE SA

1) THE PERMITTEE ACKNOWLEDGES THAT THIS PERMIT DOES NOT RELIEVE HIM/HER FROM
OBTAINING ANY AND ALL OTHER PERMITS OR PERMISSIONS, OR FOLLOWING ANY AND
ALL RULES OR REGULATIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE,
COUNTY, TOWN, CITY, OR VILLAGE AGENCY, DEPARTMENT, OR DIVISION; OR OTHER
PUBLIC OR PRIVATE PARTIES; AND THAT THIS PERMIT DOES NOT SUPERCEDE
ANY OF THE ABOVE.

THE PERMITTEE EXPRESSLY WARRANTS THAT BY COMMENCING WORK, ANY AND ALL
OTHER REQUIRED PERMITS AND PERMISSIONS HAVE BEEN OBTAINED AND ARE BEING
COMPLIED WITH; AND THAT THE REQUIREMENTS OF ANY AND ALL APPLICABLE
RULES AND REGULATIONS HAVE BEEN AND ARE BEING MET.

FAILURE TO COMPLY WITH ALL OF THE ABOVE TERMS AND CONDITIONS MAY RESULT
IN THE SUSPENSION OR REVOCATION OF THIS PERMIT, AND THE COUNTY MAY DIRECT
THE PERMITTEE TO RESTORE THE WORK AREA TO THE PRE-PERMIT CONDITION AT
HIS/HER EXPENSE.

2) IF THE WORK UNDER THIS PERMIT HAS NOT STARTED WITHIN 30 DAYS FROM THE
DATE OF ISSUE THE PERMIT IS VOID UNLESS EXTENDED BY THE COUNTY.

3) THE PERMITTEE IS RESPONSIBLE FOR MAINTAINING OPENINGS AT ALL TIMES AND
TO COMPLETE FINAL RESTORATION WITHIN 90 DAYS OF START OF WORK.

4) THE OFFICE OF HIGHWAYS & GENERAL ENGINEERING IS TO BE NOTIFIED (TEL. NO.
516-571-4184) 48 HOURS IN ADVANCE OF START OF ANY WORK AND ALSO 48 HOURS
NOTICE IN ADVANCE OF RESTORATION.

*** SEE ATTACHED FOR OTHER CONDITIONS ***

JOHN M. WALTZ, P.E.
COMMISSIONER OF PUBLIC WORKS

INSPECTOR'S REPORT

WORK STARTED: / / WORK FINISHED: / /
SIZE OF OPENING: SIZE OF CUT BACK:
CONTRACTOR: SAME AS APPLICANT TELEPHONE NO.: (000) 000-0000
TEMPORARY PATCH INSTALLED: DATE COMPLETED:
PERMANENT PATCH INSTALLED: SUPERVISION CHARGE:
KIND OF MATERIAL: ADDITIONAL CHARGE:
INSPECTOR'S HOURS: DATE REFUNDED:
REFUND:

REMARKS:

INSPECTOR'S SIGNATURE

DATE:





September 26, 1996

Mr. Jamie Ascher
New York State Department
of Environmental Conservation
SUNY, Building 40
Stony Brook, N.Y. 11790-2356

Re: Bayville Village Cleaners
Bayville, N.Y.

Dear Mr. Ascher:

This letter is to inform you that we have received the road opening permit from the Nassau County Department of Public Works (NCDPW) to perform a soil boring through the storm drain located on the southeast corner of 17th Street and Bayville Avenue, Bayville N.Y. A copy of the permit is attached.

We have scheduled the work for 9:00 am on October 4, 1996. Representatives of the NYSDEC and the Nassau County Department of Health (NCDH) are welcome to observe field work and collect split samples at their discretion. A copy of this letter is being sent to Mr. Joe DeFranco of the NCDH for notification purposes.

Should you have any questions or require further information, please do not hesitate to contact this office.

Very truly yours,
P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.

James P. Rhodes
James P. Rhodes
Sr. Hydrogeologist

JPR:jpr
encl.

cc: Thomas Ryan, Bayville Cleaners w/ encl.
John Soderberg, Esq. w/o encl.
Joe DeFranco, NCDH w/o encl.

f:\shared\pwg\bvc\9601\corespnd



APPENDIX F
GEOLOGIC LOG

P. W. Grosser Consulting Engineer and Hydrogeologist, P.C.
100 South Main Street, Suite 202, Sayville N.Y. 11782-3150
LOG OF BORING: B-1

Project Name & Location		Project Number		Date & Time Started		Date & Time Completed	
Bayville Cleaners-290 Bayville Ave., Bayville,		BVC9601		10/4/96: 10:00am		10/4/96: 11:00am	
Drilling Company		Driller		Sampler(s)			
Zebra Environmental		Kirk Balderas		James P. Rhodes			
Drilling Equipment		Method		Elevation & Datum		Completion Depth	
Geoprobe						18 feet below grade	
P.W. Grosser Hydrogeologist/Engineer							
James P. Rhodes							
DEPTH ft. below grade	SAMPLES					SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (inches)	Blows per 6"	Time Collected	PID (ppm)		
6	1	1		10:00	>2,000	Soil Sample #1: Dark black organic sludge. Saturated, extremely loose consistency. Not enough material recovered for sample analysis.	strong odor
7							
8	2*	12		10:12	>1,000 -32.0	Soil Sample #2: Top 3" Black organic sludge (PID=>.1000. Bottom 9" Tan coarse sand, and very fine gravel. Trace fine gravel up to 1/4" sub angular, moderate sorting.	strong odor
9							
10							
11	3*	18		10:12	0	Soil Sample #3: Tan /orange medium-coarse sand, with 30% fine gravel. Sub angular, moderate-well sorting.	No odor
12							
13	4*	12		10:28	0	Soil Sample #4: Tan /orange coarse sand and very fine gravel, with 20% fine medium gravel up to 1/2". Sub angular, moderate sorting.	No odor
14							
15	5	11		10:28	0	Soil Sample #5: Tan fine gravel, with 20% medium gravel up to 1/2". Trace medium sand. Sub angular, moderate-well sorting.	No odor
16							
17	6*	12		10:50	0	Soil Sample #6: Tan coarse sand with fine gravel. 15% medium gravel up to 12". Trace medium sand. Sub angular, moderate sorting.	No odor
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

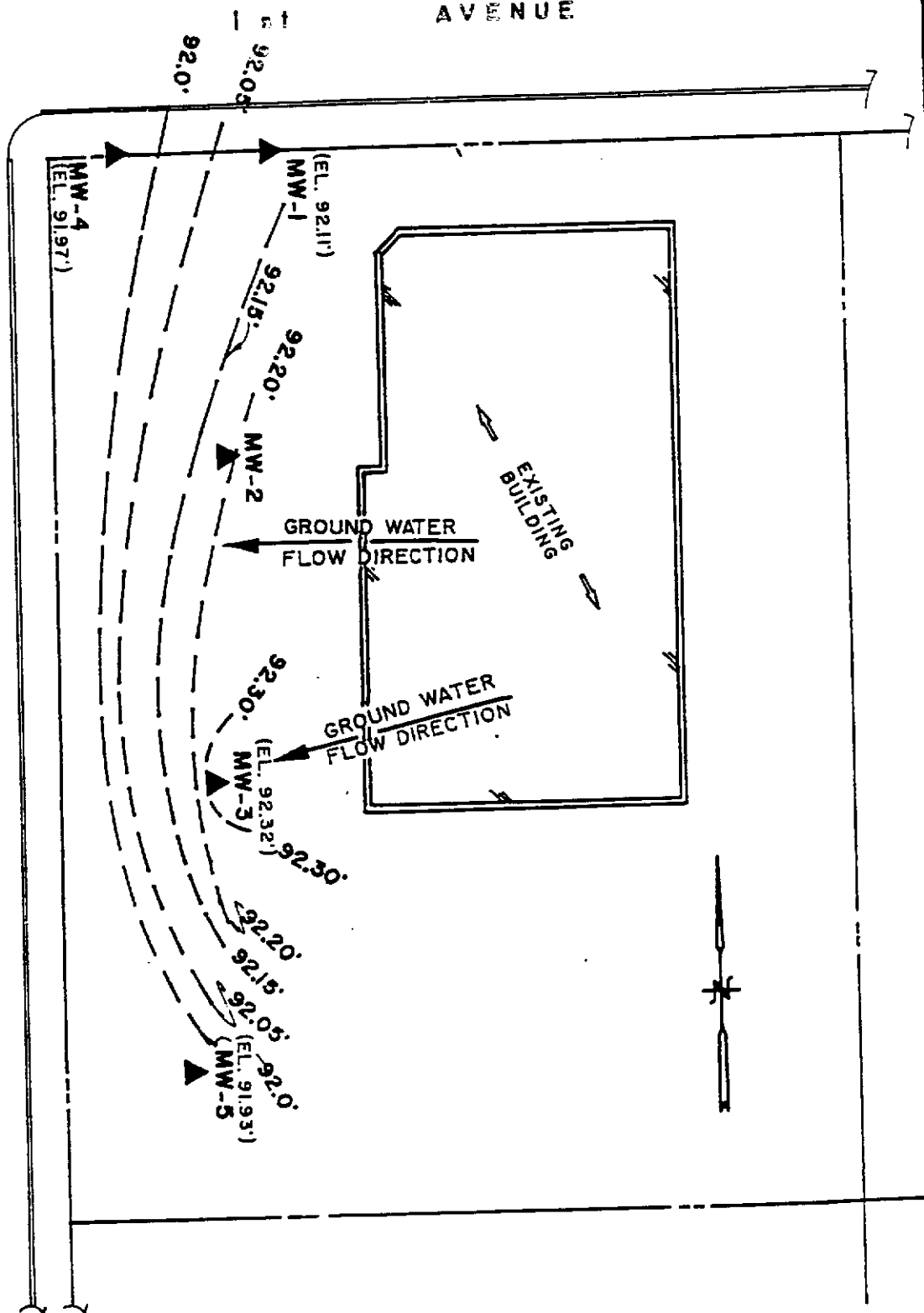
PID response represents initial readings immediately upon opening of the acetate liner.

* Sample submitted for laboratory analysis.

APPENDIX G
NYSDEC PETROLEUM SPILL INFORMATION

AVENUE

LUDLAM AVENUE



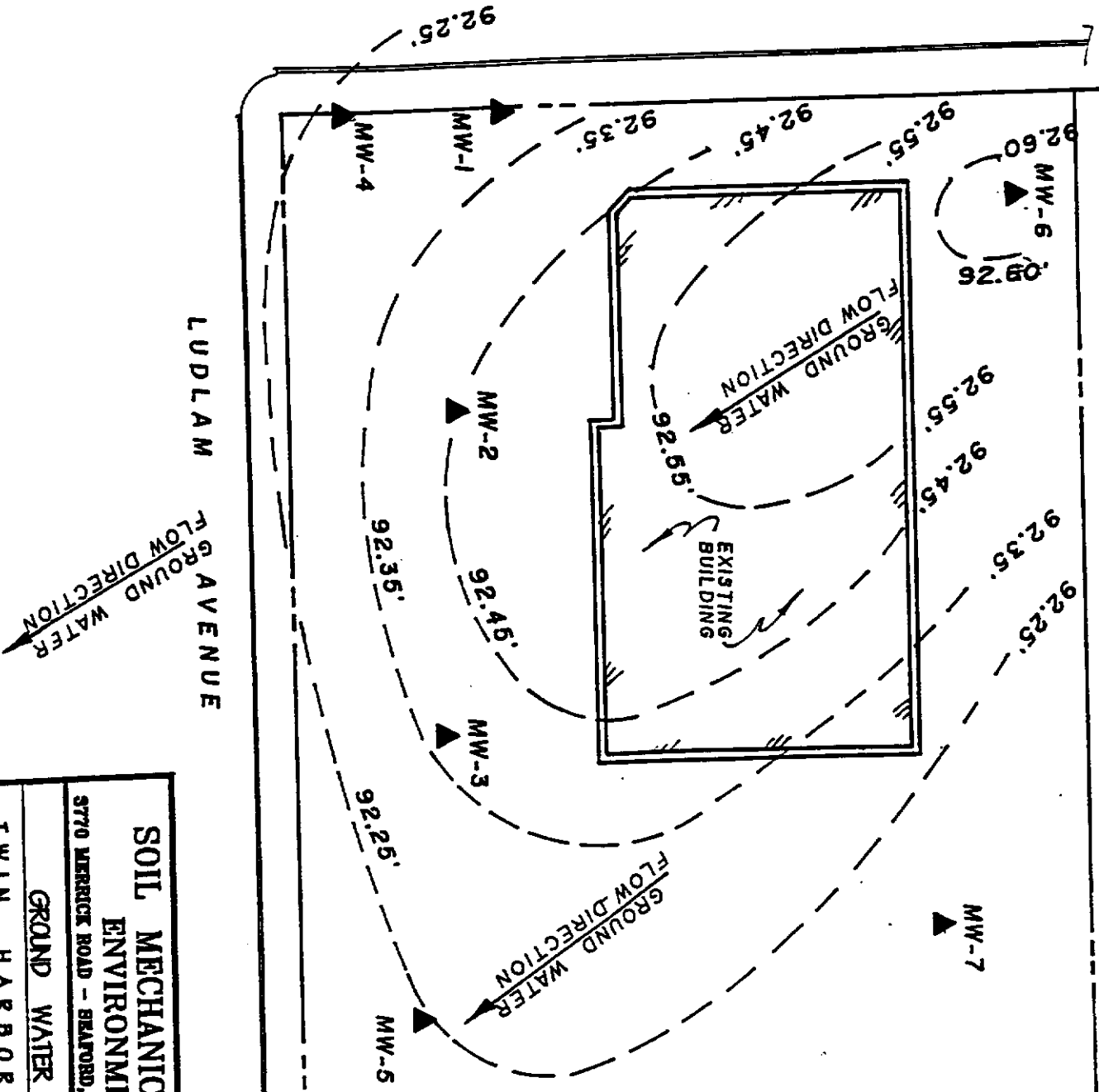
**SOIL MECHANICS
ENVIRONMENTAL SERVICES**
3170 MERRICK ROAD SEAFORD, LI, NEW YORK 11783 (516) 221-1593

GROUND WATER CONTOUR MAP
TWIN HARBOR AUTO REPAIR
BAYVILLE, NEW YORK

L.L.

SCALE: 1" = 100'
DATE: JUNE 1995
JOB # 130

1st AVENUE



SOIL MECHANICS

ENVIRONMENTAL SERVICES

5770 MERRICK ROAD - BEAUFORD, L.I., NEW YORK - (516) 881-7600

GROUND WATER CONTOUR MAP

TWIN HARBOR AUTO REPAIR

BAYVILLE, N.Y.

SCALE: 1" = 200' DATE: AUGUST 25, 1985 JOB #: 88008

BY: [Signature] L.L.

