# P.W. GROSSER CONSULTING

November 27, 2006

Nathan E. Putnam, NYSDEC
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, N.Y. 12233-7015

Re: Subsurface Investigation Report (Site No. 1-30-034), Former Penetrex Processing, Inc., Glenwood Landing, New York

Dear Mr. Putnam:

P.W. Grosser Consulting Inc. (PWGC) has prepared the enclosed report to document the findings of the Subsurface Investigation conducted at the above-referenced site in September and August 2006. The Investigation included a geophysical investigation, test pits, a soil boring program, groundwater vertical profile sampling, monitoring well sampling, and soil gas sampling.

Results indicate that soil and groundwater impacted with volatile organic compounds (VOCs), especially tetrachloroethene, appear to be concentrated in the eastern parking area of the subject site. These results are consistent with the results of previous subsurface investigations at the site.

PWGC believes enough data has been collected to complete the remedial investigation, and recommends that an Interim Remedial Measure (IRM) be performed to expedite neutralization of residual material adversely impacting groundwater and to eliminate subsurface VOC vapors at the site.

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

Very truly yours,
P.W. Grosser Consulting, Inc.

John Eichler
Field Hydrogeologist

James P. Rhodes, CPG
Vice-President

Cc: G. Bobersky, NYSDEC
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ACEC
American Council of Engineering Companies
Peer Reviewed Member

# SUBSURFACE INVESTIGATION REPORT

FORMER PENETREX PROCESSING FACILITY
GLENWOOD LANDING, NEW YORK
SITE # 1-30-034

*Prepared for:*
The New York State Department of Environmental Conservation
Division of Environmental Remediation
Albany, New York

*On behalf of:*
Sive, Paget & Riesel, P.C.
New York, New York

Project No.: PEN0001

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**NOVEMBER 2006**

**FORMER PENETREX PROCESSING FACILITY**
**Subsurface Investigation Report**

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# 1.0 INTRODUCTION AND OBJECTIVES

This Subsurface Investigation Report has been prepared by P.W. Grosser Consulting, Inc. (PWGC) to document the subsurface investigation conducted at the former Penetrex Processing Inc. facility (the site) in August and September 2006. The site is currently listed on the New York State Department of Environmental Conservation (NYSDEC) Registry as a Class II Inactive Hazardous Waste Disposal Site.

The work plan for the investigation was presented by PWGC in correspondence with the NYSDEC in a letter dated October 26, 2005, and revised and approved by the NYSDEC in letters dated September 14, 2005 and December 22, 2005. These letters are included in this report as **Appendix A.** The objectives of the investigation were to:

- evaluate groundwater flow during a tidal cycle,
- locate additional UIC structures which may have discharged wastes,
- inspect the disposal conduit from the former Penetrex facility to its cesspool (DW-5) for areas that may have discharged wastes,
- evaluate groundwater quality throughout the site to determine if volatile organic compounds (VOC) have migrated, and if they have naturally degraded,
- evaluate soil quality in the vicinity of leaching structures DW-1 and DW-5 to determine if residual impact exists, and
- evaluate soil vapor quality at the property boundary with the small off-site residence to the southwest of the site to determine if further investigation is warranted.

## 1.1 Site Background

The subject site consists of an approximately one-acre parcel located on the east side of Shore Road (a.k.a. Glen Cove Roslyn Shore Road), in the Hamlet of Glenwood Landing, Town of North Hempstead, Nassau County, New York. The property is identified in Nassau County Tax

maps as Section 20 - Block K - Lots 10 through 12. The property is improved with a two-story brick industrial building, asphalt parking, communications tower, and other ancillary improvements.

The property is bounded to the west by Shore Road and to the east by West Street. The site is generally located north of Scudders Lane and is situated near and adjoining several major oil storage facilities, coastal terminals, and a municipal power station near Hempstead Harbor. Glenwood Oil Terminal Corp. is located northwest, diagonally across the property. A Site Vicinity Map is included as **Figure 1**.

A detailed site history of the site, prior to PWGC's involvement in the project, is documented in the Groundwater / Soil Gas Investigation Report, PWGC, April 2005, submitted under separate cover.

## 1.2 Previous Subsurface Investigations

Prior to the 2006 Subsurface Investigation, PWGC had conducted various investigations at the site, including a November 2001 Remedial Investigation, an October 2003 Interim Groundwater Investigation, an October 2004 Groundwater / Soil Gas Investigation, and an August 2005 Sub-Slab Vapor and Indoor Air Investigation.

### 1.2.1 November 2001 - Remedial Investigation

A remedial investigation was conducted at the site in November 2001 to obtain the information necessary to determine the need for a remediation at the site. The remedial investigation consisted of a file search (Town of North Hempstead Building Department), site reconnaissance, a soil boring program, the collection and analysis of soil samples, and the collection and analysis of groundwater samples from the existing on-site monitoring wells.

An underground injection control (UIC) investigation and remediation was performed in response to the results obtained from the soil boring program. This UIC program successfully dealt with soil issues identified during the investigation and the site has received closure regarding these UIC issues from the Nassau County Department of Health (NCDH) and the United States Environmental Protection Agency (USEPA). Findings from the remedial investigation are presented in the Preliminary Remedial Investigation Report, PWGC, July 2002 and the Storm Drain and Sanitary Leaching Pool Remediation and Closure Report, PWGC, September 2003, each submitted under separate cover.

### 1.2.2 October 2003 – Interim Groundwater Investigation

A groundwater investigation was performed at the site from October 2003 through January 2004 at the request of the NYSDEC and as part of the Remedial Investigation to delineate the horizontal and vertical extent of the dissolved VOCs and to determine if additional investigation/remediation is warranted. Based on the results of the soil boring investigation and monitoring well sampling that was performed as part of the remedial investigation, and correspondence with the NYSDEC, eight locations were chosen for vertical profile groundwater sampling. These vertical profiles were also performed to confirm the location and the depths for additional permanent monitoring wells. The samples were collected in accordance with the protocol established in the Preliminary Remedial Investigation Report, PWGC, July 2002, submitted under separate cover. Results are detailed in the Interim Groundwater Investigation Report, PWGC, March 2004, submitted under separate cover.

### 1.2.3 October 2004 – Groundwater / Soil Gas Investigation

Based on the results of the October 2003 vertical profile groundwater investigation results, one additional temporary groundwater vertical profile well and three permanent groundwater monitoring wells were installed at the site. In addition, four soil gas points were installed as a result of a request by the NYSDEC to address concerns regarding soil vapor intrusion.

Typically, the greatest concentrations of VOCs detected in the groundwater across the site were

found at the water table. To further delineate the groundwater contamination at this location, and to confirm the results from the Interim Groundwater performed in October 2003-January 2004, an additional temporary vertical profile was installed and sampled in accordance with the protocol established in the Interim Groundwater Investigation Report, PWGC, March 2004, submitted under separate cover.

Samples were delivered to Environmental Testing Laboratories (ETL), Farmingdale, New York (NYSDOH ID #10969) for analysis of volatile organic compounds (VOCs) - Target Compound List (TCL) by USEPA Method 8260.

Three permanent monitoring wells were constructed on December 28, 2004, to monitor the contamination detected in the groundwater beneath the site. Following installation and development, sampling of the new and existing wells was performed. Groundwater sampling was performed on January 19, 2005. VOCs were detected above the NYSDEC Groundwater Standards in each of the samples collected, with the exception of MW-6, which is located down-gradient of the site, across Shore Road.

To address the NYSDEC's concerns regarding soil vapor intrusion into the adjacent buildings, PWGC conducted soil gas sampling at the following locations:

- SG-1 - 10 feet from the former Nameplate building;
- SG-2 - 10 feet from the former Penetrex building and to the north of GW-7;
- SG-3 - conducted at the property boundary between GW-7 and the residence to the south;
- SG-4 - 10 feet from the residence.

Soil gas sampling points were installed on December 20, 2004 in accordance with procedures described in the Revised Addendum to the March 2004 Interim Groundwater Investigation Report prepared by PWGC and approved by the NYSDEC.

Analytical results were compared to the USEPA Target Shallow Soil Gas Concentrations as specified in the USEPA's Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. Results are detailed in the Groundwater / Soil Gas Investigation Report, PWGC, April 2005, submitted under separate cover.

### 1.2.4 August 2005 - Sub-Slab Vapor and Indoor Air Investigation

In August 2005, a Sub-Slab Vapor and Indoor Air Sampling Investigation was conducted at the request of the NYSDEC to address concerns regarding soil vapor intrusion into the on-site buildings.

PWGC conducted sub-slab vapor, indoor air, and outdoor air sampling at the following locations:

- SS-1 (Sub-Slab-1) and IA-1 (Indoor Air-1) - the office of Landing Wholesale;
- SS-2 and IA-2 - the warehouse of Landing Wholesale;
- SS-3 and IA-3 - Sunnyside-Up Parties;
- SS-4 and IA-4 - Parabit Manufacturing;
- SS-5 and IA-5 - the basement of the on-site residence;
- IA-6 - the church/religious organization located upstairs from Sunnyside-Up Parties;
- OA-1 (Outdoor Air-1) - 15 feet to the southwest of the industrial building;
- OA-2 - 20 feet to the southwest of the residence.

Sub-slab vapor sampling points were installed on August 25, 2005, in accordance with procedures described in the Revised Sub-Slab Vapor and Indoor Air Sampling Plan, June 2005, prepared by PWGC and approved by the NYSDEC.

Sub-slab vapor and indoor air sampling was conducted by PWGC on August 26, 2005, the day after sub-slab sampling point installation, under the supervision of a NYSDEC representative. Samples were collected directly into six liter, laboratory supplied Summa® canisters attached to

a sampling tube. Indoor air samples were collected to characterize exposures to air within the on-site buildings.

Analytical results indicated elevated concentrations of VOCs in the sub-slab vapor samples, but very low concentrations in the indoor air samples. Based on the results of the investigation, PWGC recommended that sub-slab depressurization systems be installed in both on-site buildings to mitigate the existence of sub-slab VOCs. Results are detailed in the Sub-Slab Vapor and Indoor Air Investigation Report, PWGC, November 2005, submitted under separate cover.

## 2.0 SUBSURFACE INVESTIGATION - 2006

In 2006, PWGC conducted a subsurface investigation at the site which included a geophysical investigation, a test pit investigation, a soil boring program, groundwater sampling, and soil gas sampling. A site plan which includes locations of the site's UIC structures and the investigation's soil boring, groundwater vertical profile, and soil gas locations is included as **Figure 2**.

### 2.1 Groundwater Flow and Tide Evaluation

On June 23, 2006, PWGC measured groundwater elevations in the site's monitoring wells to confirm the direction of groundwater flow derived from previous investigations, and to determine if nearby Hempstead Harbor imposes a tidal influence on the site's groundwater. A PWGC hydrogeologist conducted hourly depth to water measurements in each of the site's seven associated monitoring wells for a period of nine hours. As expected, the direction of flow was toward the west northwest, toward Hempstead Harbor.

During the nine-hour measuring period, the groundwater elevation in monitoring well MW-2 rose approximately 0.80 feet and lowered 0.60 feet. Similarly, the groundwater elevation in MW-6 rose 0.85 feet and lowered 0.60 feet at the same time and rate. These fluctuations coincide with the tides in that area of Long Island Sound for that time period. There was also a 0.08 foot groundwater fluctuation in MW-4. Elevation changes in the other four wells were limited to changes of 0.02 feet or less.

Monitoring wells MW-2 and MW-6 are the wells located furthest down-gradient and closest to Hempstead Harbor. It can be concluded from the measurements that tidal influence exists in the western portion of the site, but is unnoticeable in the eastern portion. Results of the groundwater flow and tide evaluation were included in a letter prepared by PWGC, August 2006 and submitted to the NYSDEC (A copy of this report is included as **Appendix B**.)

## 2.2 Geophysical Investigation

PWGC conducted a geophysical investigation at the site on June 23, 2006 as part of a subsurface investigation deemed appropriate by the New York State Department of Environmental Conservation (NYSDEC). The investigation included the use of a metal detector and ground penetrating radar (GPR) by NAEVA Geophysics, Inc. to locate subsurface structures in the parking area of the site. The main objective of the investigation was to trace the sanitary conduit from the building to sanitary leaching pool DW-5 to verify that no additional sanitary system structures exist which could be acting as residual sources of tetrachloroethene (PCE) contamination. During the investigation, several "metal detector anomalies" were detected utilizing a TW-6 Pipe and Cable Locator. GPR was used to confirm the locations of these anomalies. Preliminary results of the geophysical investigation are documented in a PWGC letter to the NYSDEC dated August 1, 2006, included as **Appendix B**.

Based on the findings of the geophysical investigation, PWGC recommended the excavation of the metal detector anomalies large enough to be leaching structures and/or underground storage tanks.

## 2.3 Test Pit Investigation

On August 24, 2006, excavation of four metal detector anomalies was performed at the site to identify them. In addition, sanitary leaching structure DW-5 was exposed to facilitate its sampling. Excavation activities were coordinated and overseen by PWGC. Excavation services were provided by Eastern Environmental Solutions, Inc. A representative from the NYSDEC was present to witness the activities.

Leaching structure DW-5 was full of sanitary waste. Sampling adjacent to DW-5 would occur on August 30, 2006 as part of the soil boring program at the site, described in section 3.3 of this report.

Metal Detector Anomaly "10" (MDA-10) was found to be miscellaneous metal construction debris (sheet metal, wire, metal scraps). The debris was located directly below the asphalt pavement. Soil from the test pit was screened for VOCs with a photoionization detector (PID) by a PWGC hydrogeologist. Based on PID response, a soil sample was collected from approximately four feet below grade surface and submitted to the laboratory for analysis of VOCs by EPA method 8260.

Three of the anomalies uncovered were previously-undetected leaching structures. Upon discovery, these leaching structures were labeled DW-8, DW-9, and DW-10. Leaching structure locations are indicated on **Figure 2**.

The concrete cover of leaching structure DW-8 was uncovered approximately 1.5 feet below grade surface. It was constructed of eight-foot diameter pre-cast concrete leaching rings. A four-inch diameter pipe entered the structure from the direction of DW-2, which had been abandoned. The depth to the bottom sediment was measured at 11 feet below grade surface. There was approximately four inches of water, believed to be groundwater, as this corresponds to groundwater measurements in nearby monitoring wells.

The steel cover of DW-9 was uncovered approximately five inches below grade surface. DW-9 had been abandoned and was full of sand to a depth of five feet below grade. There was no visible piping.

The concrete cover of leaching structure DW-10 was uncovered approximately 2 feet below grade surface. DW-10 was constructed of eight-foot diameter pre-cast concrete leaching rings. As with DW-8, a four-inch diameter pipe entered the structure from the direction of the abandoned DW-2. The depth to the bottom sediment was measured at 13 feet below grade surface. There was approximately two feet of water in DW-10 corresponding to the site's depth of groundwater.

Sediment samples were collected from the floors of structures DW-8 and DW-10 utilizing a stainless steel hand auger, following NCDH "Cleanup Guidelines for Remediation of Drywells and Individual Septic Systems." The samples were placed in pre-cleaned laboratory supplied glassware and placed in a cooler packed with ice for transport to American Analytical Laboratories in Farmingdale, New York, an ELAP-certified laboratory.

The NCDH was notified of the discovery of the three UIC structures and that the structures would be added to the inventory of injection wells for the site.

The sampling of DW-9 occurred on August 30, 2006 as part of the NYSDEC soil boring investigation at the site. A Geoprobe® was used to sample through the center of the leaching structure. Soils were collected continuously from the surface of the fill material to a depth of 20 feet below grade surface. Soils were characterized by a PWGC field hydrogeologist. The interface between the original bottom sand of the structure and the fill material added during the structure's previous abandonment was apparent due to the distinct difference in the color and grain size of the sands above and below. This interface was determined to be 13 feet below grade surface. The soil collected directly below the interface was collected in pre-cleaned laboratory supplied glassware and placed in a cooler packed with ice for transport to American Analytical Laboratories. The sample was labeled SB-8, 13'–15' as it was collected from the eighth soil boring of the subsurface investigation.

Samples were submitted to the laboratory for analysis of VOCs by EPA method 8260, SVOCs by EPA method 8270, and the eight RCRA Metals in accordance with the NCDH procedures and protocols.

### 2.3.1 Test Pit Analytical Results

Analytical results were compared to Recommended Soil Cleanup Objectives (RSCOs) specified in the NYSDEC Technical and Administrative Guidance Memo (TAGM) #4046, to determine if remediation of the UIC structures is warranted, and if VOC-impacted material existed at MDA-10. The TAGM was specifically designed to address soil clean-up goals at inactive hazardous

waste sites. VOC analytical data for samples DW-8, DW-9, DW-10, and MDA-10 is shown on **Table 1**. Laboratory data sheets are included in **Appendix C**. Complete results of the sampling of DW-8, DW-9, and DW-10 are detailed in the UIC Closure Work Plan, PWGC, October 2006, submitted under separate cover. Analytical data shows concentrations of cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), and trichloroethene (TCE) below RSCOs in DW-8 and DW-10. A low concentration of toluene was detected in DW-9. There were no other VOCs detected in the leaching pool samples. These low concentrations appear to be the result of the limited migration of dissolved VOCs from the area of leaching structures DW-1 and DW-5, rather than the result of direct discharge from former storm drain DW-2, as the bottom of these structures coincide with the water table. The low concentrations confirm that DW-8, DW-9, and DW-10 are not sources of contamination. PWGC does not believe that remediation of these structures is warranted.

Concentrations of cis-1,2-DCE, PCE, trans-1,2-dichloroethene, and TCE were detected in soil sample MDA-10. The concentration of cis-1,2-DCE exceeded its recommended soil cleanup objective. These concentrations are relatively low compared to concentrations from soil samples collected in the vicinity of leaching structure DW-1. Although elevated VOC concentrations at MDA-10 due not indicate a major release of contaminants to that area, the concentrations may be due to a minor leak in the sanitary line which discharges to sanitary leaching pool DW-5, or from incidental contamination associated with the debris uncovered at location MDA-10. Additional soil boring results detailed below do not indicate that the sanitary line has leaked.

## 2.4 Soil Borings

A series of eight soil borings were performed in the parking area of the site in August 2006. The locations of the borings are shown on **Figure 2**. The location and rationale of each soil boring is shown on the following table:

| Sample ID | Location |
|---|---|
| SB-1 | Near residence to document VOC migration toward house and because of elevated results from original soil gas investigation in that area |
| SB-2 | Near residence to document VOC migration toward house and because of elevated results from original soil gas investigation in that area |
| SB-3 | Adjacent to sanitary waste line to document possible sources along the line |
| SB-4 | Adjacent to sanitary waste line to document possible sources along the line |
| SB-5 | Adjacent to sanitary waste line to document possible sources along the line |
| SB-6 | Former vertical profile location where elevated VOC concentrations were detected |
| SB-7 | Down-gradient and adjacent to DW-5 (a potential source of contamination) |
| SB-8 | Through DW-9; Added to soil boring program after Test Pit Investigation to document concentrations of VOCs, SVOCs, and metals to facilitate UIC closure and to document migration of VOCs down-gradient |

Soil borings were advanced using a track-mounted Geoprobe® provided by Associated Environmental, Inc. Samples were collected using a Macro-Core® lined with a disposable acetate sleeve. Geoprobe® standard operating procedures were utilized for both Geoprobe® operation and soil sampling. Samples were visually classified and analyzed by a PWGC hydrogeologist for VOCs using a PID.

Borings were advanced to a depth of approximately ten feet below the water table following the procedures described in the subsurface investigation work plan. Due to the substantial slope of the site, groundwater was encountered at various depths. The groundwater depth was between 15 and 20 feet bgs at the borings in the upper (eastern) portion of the parking area (SB-1 through SB-7) and only ten feet bgs at location SB-8 in the lower (western) portion of the parking area. Soil samples were collected continuously to the bottom of each boring.

No visual or olfactory evidence of contamination was observed in the soil samples except for a slight septic odor in SB-8, the boring advanced through abandoned leaching pool DW-9, between 10 and 17.5 feet bgs. The water table was encountered at 9 feet bgs, but the former bottom of the leaching pool was identified at 13 feet bgs.

PID readings were observed above background levels in samples SB-1 between 22.5 to 25 feet, SB-2 at 20 to 25 feet, SB-5 at 12.5 to 17.5 feet, and SB-7 at 15 to 20 feet. These intervals are in the area of typical water table fluctuations (smear zone). The deepest sample interval from each boring location was submitted for laboratory analysis. In addition to the deepest interval, the interval with the highest PID reading was also submitted for analysis. In borings where there were no PID readings obtained above background levels, a sample was submitted from the unsaturated zone, directly above the water table. Overall, the highest levels and most consistent PID response were observed in SB-1 from near grade to ten feet below the water table. At SB-1, the deepest sample (27.5'–30' bgs) and the sample from the water table (22.5'-25' bgs) were submitted for analysis. PWGC added a third sample from this boring, given the consistent PID response. The third sample was submitted from a depth of 12.5 – 15' bgs to verify if contaminated soil truly existed within the unsaturated zone in the area of SB-1, or if impact is limited to the smear zone of the water table. The PID response from this interval was slightly elevated. Complete boring logs with PID responses are included in **Appendix D**.

Overall, a total of 17 soil samples were submitted to American Analytical Laboratories, a New York State Department of Health ELAP-certified laboratory and analyzed for VOCs by EPA Method 8260 to locate and quantify concentrations of compounds associated with chlorinated solvents.

### 2.4.1 Soil Boring Analytical Results

Soil boring analytical results were compared to the NYSDEC's RSCOs. Soil sample analytical results are summarized on **Table 2** and Laboratory Data is included in **Appendix C**. VOCs were detected in 10 of the 17 samples. PCE and cis-1,2-DCE were detected at concentrations exceeding RSCOs. The greatest concentrations of PCE were detected in samples SB-1, SB-2, and SB-6 at the depths corresponding to the water table interface and smear zone. In the deeper sample collected from SB-1 (27.5'-30'), PCE was detected at a concentration slightly above the method detection limit (9.5 µg/kg) but well below its respective RSCO. Concentrations of PCE

at the deepest depths in SB-2 and SB-6 were below detectable concentrations. Furthermore, the concentration of PCE in the shallowest sample in SB-1 (12.5'-15' bgs), collected 10 feet above the water table, was 15 µg/kg, well below its RSCO.

Concentrations of cis-1,2-DCE were detected slightly above RSCOs in the soil samples corresponding to the water table at locations SB-7 and SB-8. Borings SB-7 and SB-8 are generally located down-gradient form the potential source area. Cis-1,2-DCE is one of the breakdown products of PCE. The elevated levels of this compound, as opposed to PCE and TCE at these locations, likely indicates that some breakdown of the parent compound is occurring and that dissolved concentrations of cis-1,2-DCE have migrated from the area of DW-1 and DW-5 in the direction of groundwater flow, effecting soil quality at locations SB-7 and SB-8.

Soil samples collected from borings SB-3, SB-4, and SB-5, conducted around the discharge pipe connecting DW-5 to the building, confirm that the leaks from the discharge line (if they occurred) have not impacted the surrounding soils. PID readings were relatively minor at these boring locations. PCE and related compounds were below detectable levels in SB-3 and SB-4, while PCE was detected at a concentration of 140 µg/kg at the water table interface in SB-5.

Overall, the results show that PCE-impacted soil exists at the smear zone in the vicinity of leaching structures DW-1 and DW-5. There is evidence that some reductive dechlorination is occurring as breakdown products of PCE are also found in this area. In addition, breakdown compounds such as cis-1,2-DCE, are found in greater concentrations immediately down-gradient from this area. It is likely that this residual source area resulted from former discharges to DW-1 and DW-5. Both structures have been cleaned out in the past, but the limited impact that reached the water table from these two structures, remains in the area. It appears that this impact is contributing to impact noted in the groundwater and the elevated VOCs in the soil gas detected beneath the residence to the south. Reductive dechlorination can be encouraged with the existence of petroleum-related compounds. Minor concentrations of compounds such as toluene, 1,2,4-trimethylbenzene, and 1,2,4,5-tetramethylbenzene were detected in various soil samples. Increased activity of naturally occurring bacteria, which consume the petroleum-related

compounds, may have resulted in anaerobic conditions as increasing bacterial populations consumed available oxygen in the subsurface.

### 2.4.2 Soil Sampling QA/QC

In addition to the soil samples, QA/QC samples were collected and analyzed for VOCs by EPA Method 8260. One trip blank and one field blank were collected each day during the sampling program and submitted to the laboratory for analysis.

Field blanks were prepared with laboratory-supplied deionized water. The water was poured through an acetate liner, transferred into laboratory-prepared glassware, and analyzed for VOCs. Field blanks were analyzed for VOCs to document the sterility of the sampling equipment. A laboratory-prepared trip blank accompanied the sample containers from the time of shipment to the laboratory until analysis. Trip blank samples were also analyzed for VOCs. Laboratory QA/QC summaries are included in **Appendix C**.

### 2.4.3 Soil Data Usability

PWGC reviewed the Laboratory QC Summary Package for the sample batch in which the project samples are included so that an appropriate data usability summary could be prepared.

This usability section pertains to the analytical results, submitted by American Analytical Laboratories, for the soil sampling conducted by PWGC at the former Penetrex Processing, Inc. site. The analytical results submitted were reviewed and the analytical results assessed against the project data quality objectives in the preparation of this report. There were no problems with the analyses and data for associated QC met laboratory specifications. Overall, the data submitted by American Analytical Laboratories met the project data quality objectives and are usable to determine the presence, absence, and magnitude of environmental contamination in the samples collected from the site. The Laboratory QC Package is included as **Appendix C**.

A total of 20 soil samples and 6 liquid samples (3 field blanks and 3 trip blanks) were collected and analyzed for VOCs by EPA Method 8260. All of the analyses were conducted in accordance with the most recent version of the SW-846 methodologies. Methylene chloride was detected in laboratory blanks at similar concentrations as those detected in samples collected from the site. Therefore, the detection of methylene chloride appears to be a result of laboratory interference.

## 2.5 Groundwater Sampling

As per the request of the NYSDEC and in accordance with the approved work plan, four groundwater vertical profiles were performed at the site in September 2006. In addition to the vertical profiles, the seven monitoring wells associated with the site were sampled. Groundwater sampling was performed to evaluate groundwater quality throughout the site to determine if VOC contaminants had migrated, and if they had naturally degraded. Vertical profile and monitoring well locations are shown on **Figure 2**.

### 2.5.1 Temporary Groundwater Vertical Profile Well Installation and Sampling

To further delineate the groundwater contamination at this location, four vertical profiles were performed in the parking area of the site in September 2006 in accordance with the protocol established in the Interim Groundwater Investigation Report, PWGC, March 2004. Vertical profile sampling locations are described in the following table:

| Profile | Location |
|---|---|
| GW-1 | Near residence to document VOC migration toward house and because of elevated results from original soil gas investigation in that area |
| GW-2 | Near residence to document VOC migration toward house and because of elevated results from original soil gas investigation in that area |
| GW-3 | Down-gradient of DW-5 to document VOC migration down-gradient from source drywell |
| GW-4 | Down-gradient of sanitary waste line to document possible sources along the line and down-gradient of MW-7, where elevated VOC concentrations were detected in a previous groundwater investigation |

At each of the four locations, groundwater samples were collected at 15-foot intervals from the water table to a depth 30 feet below the water table. Four-inch diameter steel augers were driven vertically with a drill rig. Two-inch diameter piping with a five-foot long screen was inserted through the augers to the deepest sampling depth. The augers were removed, leaving the temporary well in place.

Sample collection was performed as per the USEPA, Region II "Groundwater Sampling Procedure for Low Stress (Low Flow) Purging and Sampling," March 1998. Low stress sampling minimizes stress on the geological formation and minimizes disturbance of sediment. The benefits of this method are that it produces samples with low turbidity and reduces the volume of groundwater produced, lowering the costs of disposal.

A Grundfos® variable-speed, submersible pump connected to disposable tubing was installed in the temporary well to the sampling depth. A flow rate of 500 mL/min or less was maintained during purging and sampling. Temperature, pH, turbidity, specific conductivity, dissolved oxygen, and oxygen/reduction potential were monitored and recorded. Once these parameters stabilized, the sample was collected.

Once the deepest sample was collected, the pump was removed from the well and decontaminated in an Alconox® wash and a tap water rinse. The associated tubing was discarded. The temporary well was raised so that the screen was set 15 feet above the previous depth. The decontaminated pump was reinserted into the well with new tubing. This procedure was repeated for each sampling interval at each temporary well. Purge water was contained in a 55-gallon drum for proper disposal.

Groundwater recharge at sampling location GW-4 was very slow. A constant flow could not be maintained. At each sampling interval of GW-4, the temporary well was purged until it was dry. The pump was turned off and the well was allowed to recharge. The pump was turned on and a sample was collected. Upon removal of the well, clay was noticed clogging the well screen. Clay was not encountered at the other vertical profile locations. Flow was maintained at these locations.

Groundwater samples were collected in laboratory-supplied glassware and placed in a cooler containing ice for transport. Groundwater sampling sheets are included as **Appendix E**.

Non-disposable sampling equipment was cleaned using an Alconox® detergent wash and a potable water rinse prior to the collection of each sample. The samples were placed in pre-cleaned laboratory supplied glassware and stored in a cooler packed with ice for transport to the laboratory. Samples were delivered to American Analytical Laboratories, Farmingdale, New York for analysis of volatile organic compounds (VOCs) by USEPA Method 8260.

### 2.5.2 Monitoring Well Sampling

Groundwater samples were collected from each of the monitoring wells associated with the site, following the USEPA, Region II "Groundwater Sampling Procedure for Low Stress (Low Flow) Purging and Sampling," March 1998.

Prior to sampling, groundwater elevations were measured in each of the monitoring wells. Groundwater elevations are shown on **Table 3**. Groundwater elevation measurements were used to calculate groundwater contours and flow direction. As shown in **Figure 3**, groundwater flow is toward the west (toward Hempstead Harbor), which is consistent with previous flow evaluations.

Once depth to water and depth to bottom measurements were collected, the wells were purged and sampled. A Grundfos® variable-speed, submersible pump connected to disposable tubing was inserted into the monitoring well, approximately two feet above the bottom of the well. A flow rate of 500 mL/min or less was maintained during purging and sampling. Temperature, pH, turbidity, specific conductivity, dissolved oxygen, and oxygen/reduction potential were monitored and recorded. Once these parameters stabilized, the sample was collected. Groundwater samples were collected in laboratory-supplied glassware and placed in a cooler containing ice for transport. Samples were delivered to American Analytical Laboratories, Farmingdale, New York for analysis of volatile organic compounds (VOCs) by USEPA Method

8260. Groundwater sampling sheets are included as **Appendix E**.

Monitoring well MW-6 was purged and sampled using a disposable bailer. MW-6 is located on the opposite side of Shore Road from the site, behind a guard rail. Since the generator needed to operate the submersible pump was too heavy to manually transport to that location, low-stress sampling could not occur without blocking a lane on a curved portion of Shore Road, thereby creating a hazardous traffic condition. The bailer was inserted and removed slowly from the well in an attempt to recreate low stress sampling procedures.

### 2.5.3 Groundwater Analytical Results

Analytical results for vertical profile and monitoring well sampling were compared to the NYSDEC Class GA Groundwater Standards as specified in the NYSDEC's (TOGS) 1.1.1, June 1998. The results of the groundwater samples collected from the vertical profiles (GW-1 through GW-4) are included on **Table 4** and complete laboratory data packages are contained in **Appendix C**. As shown, VOCs were predominantly detected in the samples collected from vertical profiles GW-1 and GW-2. Contamination at these two locations primarily consists of PCE and its breakdown products, TCE, cis-1,2-DCE, and vinyl chloride as expected. Of note is the concentration of toluene at these locations which supports that reductive dechlorination can occur at this site. The greatest concentrations were noted at the water table interval. A significant drop off in contaminant concentrations was noted in the next sampling interval (15 feet below the water table) in GW-2. The decrease was less pronounced in GW-1. Overall, the lowest concentrations were detected in the deepest sample interval from these two locations. Since soil contamination was not detected below the smear zone and portions of the site are tidally influenced, the deeper contamination may be related to the collection of samples through the source area at these locations.

As shown on **Table 4**, only relatively low levels of PCE were detected at the water table at the GW-3 and GW-4 (25 µg/L and 6.7 µg/L, respectively) vertical profile sample locations. GW-3 was located approximately 35 feet down-gradient from GW-1, where VOC impacted material was noted. This indicates that groundwater impact migration from the source area has been

limited. Again, cis-1,2-DCE was also detected at the down-gradient location (GW-3), indicating the breakdown of PCE. There were no other concentrations of VOCs detected in GW-3 and GW-4 except methylene chloride, which was detected in the trip blank associated with these samples, suggesting that methylene chloride in these samples was most likely a result of laboratory interference.

The results of the groundwater vertical profile sampling coincide with the results of the soil boring program. Groundwater vertical profiles GW-1 and GW-2 correspond to the locations of soil borings SB-1 and SB-2, respectively. Therefore, the groundwater vertical profiles were performed through the smear zone believed to be acting as a residual source of contamination, located in the vicinity of DW-1 and DW-5. Again, the groundwater vertical profile results support that contaminant migration had been limited from this area, and explains the elevated soil gas readings in the vicinity of the residence, due to its proximity.

As previously described, the groundwater investigation also included a round of groundwater sampling from the monitoring wells. The results of the monitoring well sampling is shown on **Table 5** and complete laboratory data packages are contained in **Appendix C**.

As shown on **Table 5**, the greatest PCE concentrations were detected in monitoring wells MW-1 and MW-5 (120 µg/L and 530 µg/L, respectively). These wells are located closest to the area where the residual impact within the smear zone has been documented. Of note, PCE was not detected in monitoring wells MW-2, MW-3, MW-4, MW-5, and MW-6 during this latest sampling round. These wells essentially form a fence line down-gradient from the residual source area.

Groundwater total VOC contour lines at the water table are shown in **Figure 3**. **Figure 3** illustrates that the most impacted area of the site, based on the vertical profile water table data and monitoring well data, is centered around DW-1.

Also shown on **Table 5** are the historical groundwater results collected from the monitoring wells by PWGC. As shown, PCE concentrations have remained fairly consistent in wells MW-1

and MW-7 located near the residual source area. Overall, the concentrations in the down-gradient wells have declined, indicating that the groundwater contaminant migration from the source area has been limited. PWGC believes that the relatively stagnant nature of the groundwater impact reflects the tidally influenced groundwater along the western portion of the site. In addition, the historical results document the existence of both PCE breakdown products and petroleum related compounds which support reductive dechlorination of PCE.

Toluene, which was detected at elevated concentrations in MW-3 in past sampling rounds, was not detected during this sampling event. The elevated concentrations of toluene in MW-3 appear to be a result of a broken well cap (which has since been repaired) and parking lot runoff.

### 2.5.4 Groundwater Sampling QA/QC

In addition to the vertical profile and monitoring well groundwater samples, QA/QC samples were collected and analyzed for VOCs by EPA Method 8260. One trip blank and one field blank was collected each day and submitted to the laboratory for analysis.

The field blank was prepared with laboratory-supplied deionized water. The water was poured through a new piece of polyethylene tubing or disposable bailer, transferred into laboratory-prepared bottles and analyzed for VOCs. Field blanks were analyzed for VOCs to document the sterility of the sampling equipment. Laboratory-prepared trip blanks accompanied the sample containers, from the time of shipment to the laboratory, until analysis. Trip blank samples were also analyzed for VOCs. Laboratory QA/QC summaries are included in **Appendix C**.

### 2.5.5 Groundwater Data Usability

PWGC reviewed the Laboratory QC Summary Package for the sample batch in which the project samples are included, so that an appropriate data usability summary could be prepared.

This usability section pertains to the analytical results, submitted by American Analytical Laboratories, for the groundwater sampling conducted by PWGC at the former Penetrex

Processing, Inc. site. The analytical results were reviewed and the analytical results assessed against the project data quality objectives in the preparation of this report. There were no problems with the analyses and data for associated QC met laboratory specifications. Overall, the data submitted by American Analytical Laboratories met the project data quality objectives and are usable to determine the presence, absence, and magnitude of environmental contamination in the samples collected from the site. The Laboratory QC Package is included as **Appendix C**.

A total of 19 groundwater samples, 3 field blanks, and 3 trip blanks were collected and analyzed for VOCs by EPA Method 8260. All of the analyses were conducted in accordance with the most recent version of the SW-846 methodologies. Methylene chloride was detected in laboratory blanks at similar concentrations as those detected in samples collected from the site. The detection of methylene chloride appears to be a result of laboratory interference.

## 2.6 Soil Gas Investigation

To address the NYSDEC's request to perform a soil gas intrusion investigation for the small residence to the south of the site (letter dated December 22, 2005), PWGC conducted soil gas sampling at two locations along the site boundary adjacent the house. Soil gas sampling locations SG-1 and SG-2 are shown on **Figure 2**.

### 2.6.1 Soil Gas Sampling

Soil gas sampling points were installed on August 31, 2006 in accordance with procedures described in a letter prepared by PWGC and submitted to the NYSDEC on February 9, 2006, and approved by the NYSDEC in a letter dated March 29, 2006. At each location, a Geoprobe® unit was used to drive the probe rods to a depth of approximately four feet below grade surface where the drive point was knocked out. A one-foot stainless steel screen fitted to the tubing riser was lowered through the rods. The Geoprobe® rods were then removed and a bentonite seal was installed around the tubing to prevent the short circuiting of air.

Prior to sampling, each soil gas point was purged to evacuate between one and two probe volumes to ensure the collection of a representative sample. Purging was completed using a hand-held SKC sampling pump calibrated at 0.2 liters/minute. Following purging, soil gas samples were collected directly into six-liter, laboratory-supplied Summa® canisters attached to the risers using ¼ inch disposable tubing. The samples were collected using one-hour flow regulators at a rate of between 0.1 and 0.2 liters/minute. Proper QA/QC protocol was followed during the collection of soil gas samples to ensure that cross-contamination in the field did not occur.

Samples were delivered to EcoTest Laboratories in North Babylon, New York for analysis of volatile organic compounds (VOCs) by USEPA Method TO-15. Canister sampling data sheets are included as **Appendix F**.

### 2.6.2 Soil Gas Analytical Results

Analytical results were compared to the USEPA Target Shallow Soil Gas Concentrations as specified in the USEPA's "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils." TCE was detected at concentrations exceeding target soil gas concentrations in both samples SG-1 and SG-2. Chloroform and PCE were also detected at concentrations exceeding target soil gas concentrations in sample SG-1. Several other VOCs were detected in the soil gas samples, but at concentrations below the USEPA Target Shallow Soil Gas Concentrations. Soil gas analytical data is summarized on **Table 6,** and laboratory data sheets are contained in **Appendix C**.

Overall, the soil gas analytical results obtained from SG-1 and SG-2 are considerably lower than the concentrations detected during the initial soil gas sampling performed in December 2004. These soil gas points were performed within the residual source area out toward the commercial building and the multi-story residence. The lesser concentrations likely reflect the distance from the source area.

### 2.6.3 Soil Gas Data Usability

PWGC reviewed the Laboratory QC Summary Package for the sample batch in which the project samples are included, so that an appropriate data usability summary could be prepared.

This usability section pertains to the analytical results submitted by EcoTest Laboratories for the soil gas sampling conducted by PWGC at the former Penetrex Processing, Inc. site. The analytical results were reviewed and the analytical results assessed against the project data quality objectives in the preparation of this report. Overall, the data submitted by EcoTest Laboratories met the project data quality objectives and are usable to determine the presence, absence, and magnitude of environmental contamination in the samples collected from the site. A total of two soil gas samples were collected and analyzed for VOCs by EPA Method TO-15. The laboratory QC package is included as **Appendix C**.

## 3.0 CONCLUSIONS AND RECOMMENDATIONS

Results of the soil sampling performed indicate that a residual source area exists within the smear zone in the vicinity of sanitary leaching structure DW-5 and storm drain leaching structure DW-1. Soil samples collected above and below the smear zone confirm that the impact is limited to the smear zone caused by fluctuating water table levels.

Vertical profile groundwater sampling results coincide well with the observations obtained during the soil boring program. Again, the greatest concentrations were detected in the vicinity of DW-5 and DW-1 at their corresponding soil boring locations. Although VOC concentrations above standards were observed fifteen feet below the water table, concentrations were greatly reduced at this depth. Additionally, contaminant concentrations were the lowest in the deepest sample intervals. Since soil contamination was not detected below the smear zone and portions of the site are tidally influenced, the deeper contamination may be related to the collection of groundwater samples through the source area at these locations.

PWGC believes that the residual source area is likely due to former discharges of PCE to DW-1 and DW-5. Past remediation of these structures has removed the bulk of the contamination. Contamination below the structures which has reached the water table appears to have spread at the water table in the immediate vicinity of these two structures.

The results of the monitoring well groundwater samples confirm that the groundwater impact is fairly limited in extent as significant down-gradient migration has not occurred. There is evidence in both the soil and groundwater data that the conditions which support reductive dechlorination exist. PWGC has attributed the lack of migration of the groundwater impact to the tidal influence of groundwater documented at the site. Significant changes in groundwater elevation were observed along the western boundary of the site in response to the tidal cycle.

Three UIC structures were detected during the geophysical investigation. Sampling results of these structures indicate relatively low concentrations of VOCs. A UIC Closure Work Plan,

prepared by PWGC in October 2006, has been submitted to the NCDH. In that Work Plan, PWGC recommends abandonment of these structures.

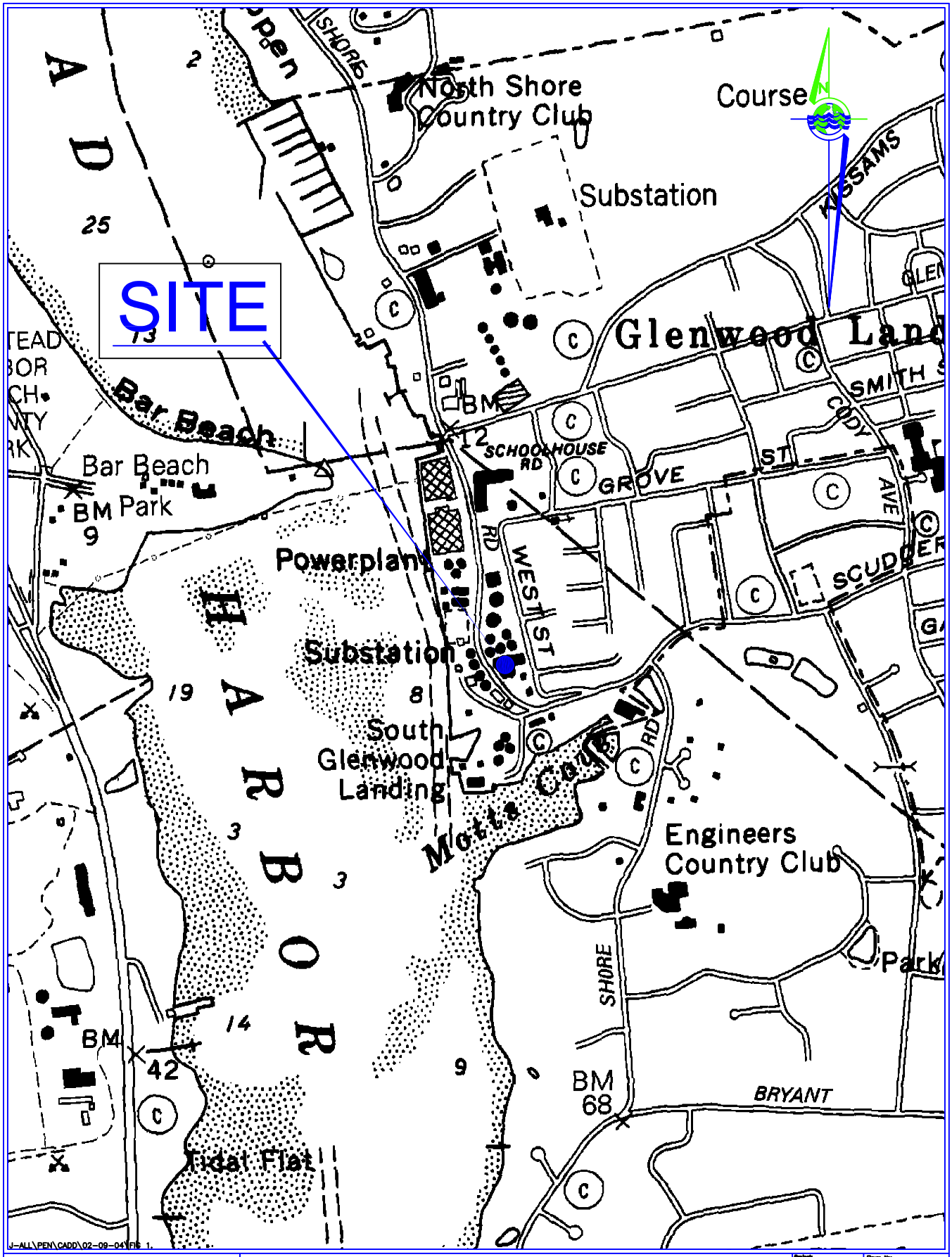
Soil gas sampling results show that chlorinated VOC vapors have migrated toward the southwest portion of the site. The source of these vapors is most likely the soil and groundwater contamination located in the area of DW-1 and DW-5. The concentration detected in the two soil gas points are substantially lower than the initial soil gas results obtained from the residual source area out towards the commercial building and multi-story residence.

Results of the sub-slab vapor sampling previously performed at the commercial and multi-story residential buildings at the site show that VOC vapors exist directly below the slabs of both structures. To mitigate the existence of VOC vapors, sub-slab depressurization systems will be installed in both structures. The systems are designed to actively draw out vapors, venting above the roofs of the structures.

PWGC believes that with the data obtained from this latest subsurface investigation, the soil and groundwater impacts at the site have been adequately delineated both horizontally and vertically. Therefore, PWGC believes that the remedial investigation should be deemed complete.

In order to address the residual source area documented at the site, PWGC recommends that an interim remedial measure (IRM) be implemented to expedite neutralization of residual source material adversely impacting groundwater and to eliminate subsurface VOC vapors at the site. Based on its limited nature, it appears that a chemical oxidation injection program is appropriate for the site. PWGC will begin preparation of an IRM work plan for NYSDEC review. It is expected that with the implementation of the IRM, VOC impact in soil and groundwater will be addressed and the soil gas concentrations throughout the site will dissipate.

**FIGURES**




J-ALL\PEN\CADD\02-09-04\FIG 1.

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# Site Location Map

| | |
|---|---|
| Project | PEN0001 |
| Designed by | JPR |
| Approved by | JPR |
| Drawn by | KF |
| Figure No. | 1 |
| Date | 02\09\04 |


LEGEND

- MONITORING WELL
- DRY WELL / LEACHING STRUCTURE
- GW-3 — GROUNDWATER PROFILE LOCATION
- SB-1 — SOIL BORING LOCATION
- SG-1 — SOIL GAS LOCATION
- MDA-10 — TEST PIT LOCATION
- LEACHING STRUCTURE SAMPLE

0 40 80

SCALE: 1" = 40'

SOURCE: YEC, INC., SURVEY MAP 10, JULY 1992

# PROPOSED SOIL BORING LOCATIONS
# FORMER PENETREX PROCESSING NYSDEC I.D. No. 130034

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| Project: | Designed By: | Figure No: |
|---|---|---|
| PEN0001 | JPR | 2 |
| CADD Operator: LLG | Approved By: JPR | Date: 10/17/06 |



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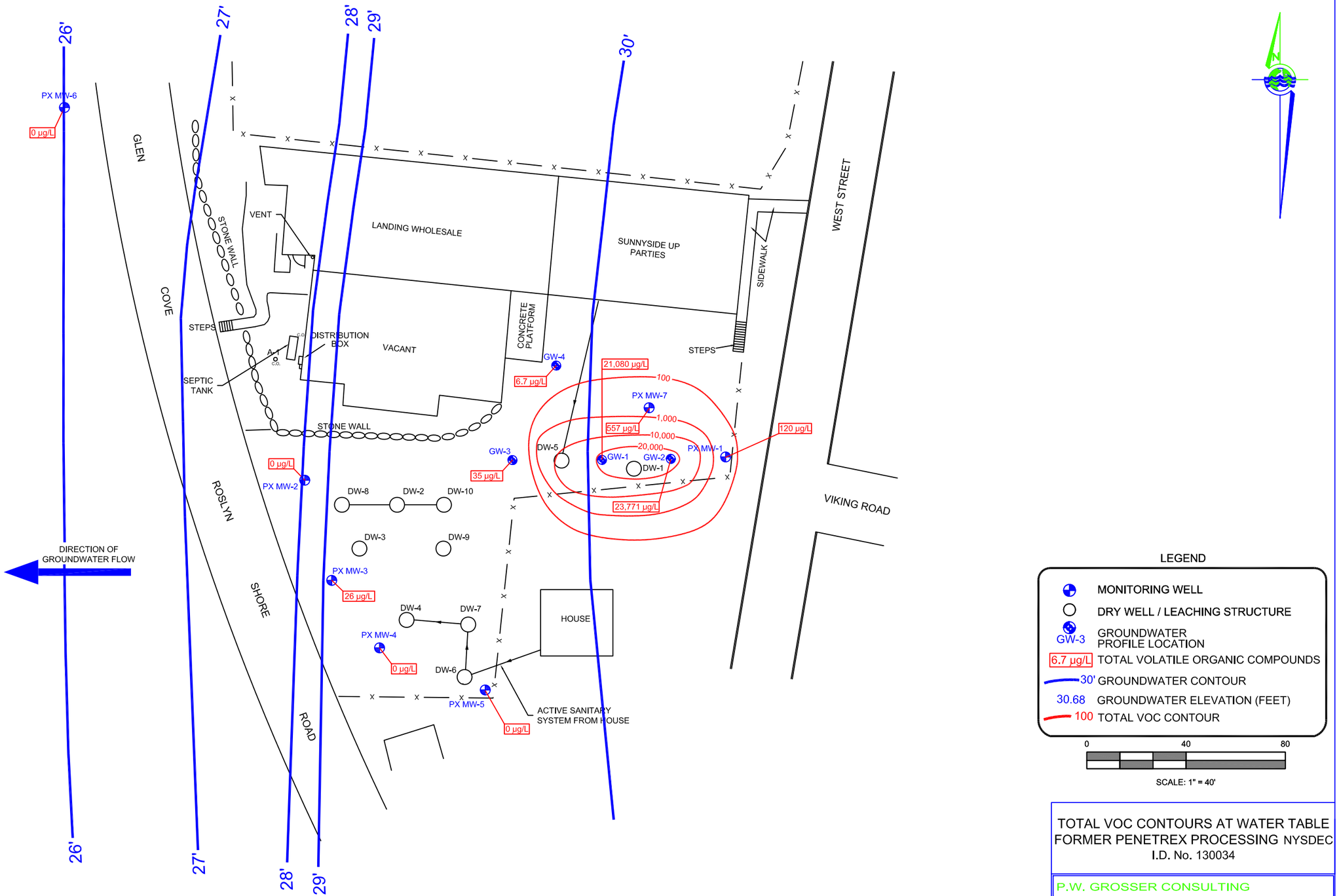


LEGEND

- MONITORING WELL
- DRY WELL / LEACHING STRUCTURE
- GW-3 GROUNDWATER PROFILE LOCATION
- 6.7 µg/L TOTAL VOLATILE ORGANIC COMPOUNDS
- 30' GROUNDWATER CONTOUR
- 30.68 GROUNDWATER ELEVATION (FEET)
- 100 TOTAL VOC CONTOUR

0 40 80

SCALE: 1" = 40'

SOURCE: YEC, INC., SURVEY MAP 10, JULY 1992

# TOTAL VOC CONTOURS AT WATER TABLE
# FORMER PENETREX PROCESSING NYSDEC I.D. No. 130034

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| Project: | Designed By: | Figure No: |
|---|---|---|
| PEN0001 | JPR | 3 |
| CADD Operator: LLG | Approved By: JPR | Date: 10/18/06 |



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# TABLES

**TABLE 1**

**Test Pit Soil Analytical Results for Volatile Organic Compounds by EPA Method 8260**
**One Shore Road, Glenwood Landing, New York**

| Compound | NYSDEC Standard(1) | DW-8 | DW-10 | MDA-10 | Trip Blank | Field Blank |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1,1,2-Tetrachloroethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane | 700 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1,2,2-Tetrachloroethane | 400 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1,2-Trichloroethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane | 300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1-Dichloroethene | 300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene | 8,300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2,3-Trichloropropane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene | 8,300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene | 7,900 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane | 20 or MDL | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene | 3,300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene | 1,600 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene | 8,500 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 2-Chlorotoluene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 4-Chlorotoluene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Benzene | 60 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Bromobenzene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Bromochloromethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Bromodichloromethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Bromoform | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Bromomethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Carbon Tetrachloride | 800 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Chlorobenzene | 1,100 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Chloroethane | 200 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Chloroform | 400 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Chloromethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| cis-1,2-Dichloroethene | 200 | 7.7 | 67 | **920** | < 1.0 | < 1.0 |
| cis-1,3-Dichloropropene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Dibromochloromethane | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Dibromomethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Ethyl benzene | 5,500 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Hexachlorobutadiene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Isopropylbenzene | 2,300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| m + p Xylene | 1,200 | < 12 | < 13 | < 13 | < 2.0 | < 2.0 |
| Methyl tertiary butyl ether | 1,200 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Methylene Chloride | 50 or MDL | 37 B | 26 B | 21 B | 16 B | 18 B |
| n-Butylbenzene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| n-Propylbenzene | 3,700 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| o Xylene | 1,200 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 4-Isopropyltoluene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| sec-Butylbenzene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Styrene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| tert-Butylbenzene | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Tetrachloroethene | 1,300 | 52 | 240 | 410 | < 1.0 | < 1.0 |
| Toluene | 1,500 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| trans-1,2-Dichloroethene | 200 | < 6.2 | < 6.4 | 55 | < 1.0 | < 1.0 |
| trans-1,3-Dichloropropene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Trichloroethene | 500 | 11 | 34 | 56 | < 1.0 | < 1.0 |
| Trichlorofluoromethane | 10,000* | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Vinyl chloride | 200 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 2-propanol | NS | < 62 | < 64 | < 65 | < 50 | < 50 |
| 1,2-Dibromoethane | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 2-Butanone | 300 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 2-Chloroethyl vinyl ether | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 2-Hexanone | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 4-Methyl-2-pentanone | 1,000 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Acetone | 200 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Acrolein | NS | < 31 | < 32 | < 32 | < 1.0 | < 1.0 |
| Acrylonitrile | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Carbon Disulfide | 2,700 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Chlorodifluoromethane | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Diisopropyl ether | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Ethanol | NS | < 31 | < 32 | < 32 | < 1.0 | < 1.0 |
| Ethyl acetate | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Freon-114 | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Isopropyl acetate | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| n-Amyl acetate | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Naphthalene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| n-Butyl acetate | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| n-Propyl acetate | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| p-Diethylbenzene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| p-ethyltoluene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| t-Butyl alcohol | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Vinyl acetate | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| Freon-113 | 6,000 | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2,4,5-tetramethylbenzene | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |
| 1,2-dibromo-3-chloropropane | NS | < 6.2 | < 6.4 | < 6.5 | < 1.0 | < 1.0 |

**Notes:**
1 - NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 12/00.
NS - Not specified.
Bold text denotes RSCO Exceedance.
* - No specific RSCO established, RSCO of 10,000 µg/kg for total VOCs is used.
All units are µg/kg.
B - Compound detected in method blank.

**TABLE 2**

**Soil Boring Analytical Results for Volatile Organic Compounds by EPA Method 8260**
**One Shore Road, Glenwood Landing, New York**

| Compound | NYSDEC Standard (1) | SB-1 12.5'-15' 8/28/2006 | SB-1 22.5'-25' 8/28/2006 | SB-1 27.5'-30' 8/28/2006 | SB-2 20'-22.5' 8/28/2006 | SB-2 27.5'-30' 8/28/2006 | SB-3 15'-17.5' 8/28/2006 | SB-3 27.5'-30' 8/28/2006 | Trip Blank 8/28/2006 | Field Blank 8/28/2006 |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1,1,2-Tetrachloroethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane | 700 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1,2,2-Tetrachloroethane | 400 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1,2-Trichloroethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane | 300 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1-Dichloroethene | 300 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene | 8,300 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2,3-Trichloropropane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene | 8,300 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene | NS | < 6.0 | 20 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene | 7,900 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane | 20 or MDL | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene | 3,300 | < 6.0 | 6.3 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene | 1,600 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene | 8,500 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 2-Chlorotoluene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 4-Chlorotoluene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Benzene | 60 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Bromobenzene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Bromochloromethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Bromodichloromethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Bromoform | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Bromomethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Carbon Tetrachloride | 800 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Chlorobenzene | 1,100 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Chloroethane | 200 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Chloroform | 400 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Chloromethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| cis-1,2-Dichloroethene | 200 | < 6.0 | 34 | 10 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| cis-1,3-Dichloropropene | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Dibromochloromethane | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Dibromomethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Ethyl benzene | 5,500 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Hexachlorobutadiene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Isopropylbenzene | 2,300 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| m + p Xylene | 1,200 | < 6.0 | < 12 | < 12 | < 11 | < 12 | < 10 | < 12 | < 2.0 | < 2.0 |
| Methyl tertiary butyl ether | 1,200 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Methylene Chloride | 50 or MDL | < 6.0 | 22 B | < 5.8 | < 5.6 | < 5.9 | < 5.2 | 23 B | 23 B | 22 B |
| n-Butylbenzene | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| n-Propylbenzene | 3,700 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| o Xylene | 1,200 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 4-Isopropyltoluene | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| sec-Butylbenzene | NS | < 6.0 | 5.4 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Styrene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| tert-Butylbenzene | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Tetrachloroethene | 1,300 | 15 | **3,100** | 9.5 | **7,100** | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Toluene | 1,500 | < 6.0 | < 6.1 | < 5.8 | 16 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| trans-1,2-Dichloroethene | 200 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| trans-1,3-Dichloropropene | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Trichloroethene | 500 | < 6.0 | 210 | < 5.8 | 32 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Trichlorofluoromethane | 10,000* | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Vinyl chloride | 200 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 2-propanol | NS | < 60 | < 61 | < 58 | < 56 | < 59 | < 52 | < 59 | < 50 | < 50 |
| 1,2-Dibromoethane | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 2-Butanone | 300 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 2-Chloroethyl vinyl ether | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 2-Hexanone | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 4-Methyl-2-pentanone | 1,000 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Acetone | 200 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Acrolein | NS | < 30 | < 31 | < 29 | < 28 | < 30 | < 26 | < 30 | < 1.0 | < 1.0 |
| Acrylonitrile | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Carbon Disulfide | 2,700 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Chlorodifluoromethane | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Diisopropyl ether | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Ethanol | NS | < 30 | < 31 | < 29 | < 28 | < 30 | < 26 | < 30 | < 1.0 | < 1.0 |
| Ethyl acetate | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Freon-114 | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Isopropyl acetate | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| n-Amyl acetate | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Naphthalene | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| n-Butyl acetate | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| n-Propyl acetate | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| p-Diethylbenzene | NS | < 6.0 | 39 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| p-ethyltoluene | NS | < 6.0 | 13 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| t-Butyl alcohol | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Vinyl acetate | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| Freon-113 | 6,000 | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2,4,5-tetramethylbenzene | NS | < 6.0 | 30 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |
| 1,2-dibromo-3-chloropropane | NS | < 6.0 | < 6.1 | < 5.8 | < 5.6 | < 5.9 | < 5.2 | < 5.9 | < 1.0 | < 1.0 |

**Notes:**

1 - NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 12/00.

NS - No RSCO established for this compound.

Bolded text denotes RSCO Exceedance.

* - No specific RSCO established, RSCO of 10,000 µg/kg for total VOCs is used.

All units are µg/kg.

B - Compound detected in the method blank.

MDL - Method Detection Limit.

**TABLE 2 (cont'd)**

**Soil Boring Analytical Results for Volatile Organic Compounds by EPA Method 8260**
**One Shore Road, Glenwood Landing, New York**

| Compound | NYSDEC Standard | SB-4 12.5'-15' 8/30/2006 | SB-4 27.5'-30' 8/30/2006 | SB-5 12.5'-15' 8/30/2006 | SB-5 27.5'-30' 8/30/2006 | SB-6 12.5'-15' 8/30/2006 | SB-6 27.5'-30' 8/30/2006 | SB-7 17.5'-20' 8/30/2006 | SB-7 27.5'-30' 8/30/2006 | SB-8 13'-15' 8/30/2006 | SB-8 17.5'-20' 8/30/2006 | Trip Blank 8/30/2006 | Field Blank 8/30/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1,1,2-Tetrachloroethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane | 700 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1,2,2-Tetrachloroethane | 400 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1,2-Trichloroethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane | 300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1-Dichloroethene | 300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene | 8,300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2,3-Trichloropropane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene | 8,300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 39 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene | 7,900 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane | 20 or MDL | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene | 3,300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene | 1,600 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene | 8,500 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 2-Chlorotoluene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 4-Chlorotoluene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Benzene | 60 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Bromobenzene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Bromochloromethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Bromodichloromethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Bromoform | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Bromomethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Carbon Tetrachloride | 800 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Chlorobenzene | 1,100 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Chloroethane | 200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Chloroform | 400 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Chloromethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| cis-1,2-Dichloroethene | 200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | **310** | < 5.9 | < 6.1 | **290** | < 1.0 | < 1.0 |
| cis-1,3-Dichloropropene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Dibromochloromethane | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Dibromomethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Ethyl benzene | 5,500 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 8.6 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Hexachlorobutadiene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Isopropylbenzene | 2,300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| m + p Xylene | 1,200 | < 10 | < 12 | < 11 | < 12 | < 11 | < 12 | 35 | < 12 | < 12 | 23 | < 2.0 | < 2.0 |
| Methyl tertiary butyl ether | 1,200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Methylene Chloride | 50 or MDL | 4.2 JB | < 6.1 | 7.3 B | 7.0 B | 5.7 JB | 8.2 B | 6.9 B | 7.6 B | 11 B | 9.9 B | 5.1 B | 5.2 B |
| n-Butylbenzene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| n-Propylbenzene | 3,700 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| o Xylene | 1,200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 18 | < 5.9 | < 6.1 | 16 | < 1.0 | < 1.0 |
| 4-Isopropyltoluene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| sec-Butylbenzene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 15 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Styrene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| tert-Butylbenzene | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Tetrachloroethene | 1,300 | < 5.2 | < 6.1 | 140 | 26 | **1,600** | < 6.0 | 10 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Toluene | 1,500 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | 26 | 480 | < 1.0 | < 1.0 |
| trans-1,2-Dichloroethene | 200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| trans-1,3-Dichloropropene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Trichloroethene | 500 | < 5.2 | < 6.1 | 13 | < 6.1 | 21 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Trichlorofluoromethane | 10,000* | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Vinyl chloride | 200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 2-propanol | NS | < 52 | < 61 | < 56 | < 61 | < 57 | < 60 | < 60 | < 59 | < 61 | < 62 | < 50 | < 50 |
| 1,2-Dibromoethane | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 2-Butanone | 300 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 2-Chloroethyl vinyl ether | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 2-Hexanone | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 4-Methyl-2-pentanone | 1,000 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Acetone | 200 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Acrolein | NS | < 26 | < 30 | < 28 | < 30 | < 29 | < 30 | < 30 | < 29 | < 31 | < 31 | < 1.0 | < 1.0 |
| Acrylonitrile | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Carbon Disulfide | 2,700 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Chlorodifluoromethane | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Diisopropyl ether | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Ethanol | NS | < 26 | < 30 | < 28 | < 30 | < 29 | < 30 | < 30 | < 29 | < 31 | < 31 | < 1.0 | < 1.0 |
| Ethyl acetate | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Freon-114 | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Isopropyl acetate | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| n-Amyl acetate | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Naphthalene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| n-Butyl acetate | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| n-Propyl acetate | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| p-Diethylbenzene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 28 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| p-ethyltoluene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 27 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| t-Butyl alcohol | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Vinyl acetate | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| Freon-113 | 6,000 | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2,4,5-tetramethylbenzene | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | 26 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |
| 1,2-dibromo-3-chloropropane | NS | < 5.2 | < 6.1 | < 5.6 | < 6.1 | < 5.7 | < 6.0 | < 6.0 | < 5.9 | < 6.1 | < 6.2 | < 1.0 | < 1.0 |

**Notes:**
1 - NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 12/00.
Bolded text denotes RSCO Exceedance.
NS - No RSCO established for this compound.
* - No specific RSCO established, RSCO of 10,000 ug/kg for total VOCs is used.
All units are µg/kg.
B - Compound detected in Method Blank.
MDL - Method Detection Limit.

**Table 3**

**Monitoring Well Groundwater Elevations**
**September 6, 2006**
**1 Shore Road, Glenwood Landing, New York**

| Well Location | Casing Elevation | Depth to Water | Groundwater Elevation |
|---|---|---|---|
| **MW-1** | 49.06 | 18.76 | **30.30** |
| **MW-2** | 38.88 | 10.88 | **28.00** |
| **MW-3** | 38.86 | 9.48 | **29.38** |
| **MW-4** | 39.36 | 10.02 | **29.34** |
| **MW-5** | 40.32 | 10.78 | **29.54** |
| **MW-6** | 38.09 | 12.08 | **26.01** |
| **MW-7** | 49.18 | 18.93 | **30.25** |

**Notes:**
Elevations based on arbitrary benchmark of 50'.
Units in feet.

ONE SHORE ROAD
GLENWOOD LANDING, NEW YORK

TABLE 4

GROUNDWATER VERTICAL PROFILE ANALYTICAL RESULTS
VOCs - EPA METHOD 8260

| Compound | NYSDEC GROUNDWATER STANDARDS (1) | GW-1 | | | GW-2 | | | GW-3 | | | GW-4 | | | TB | FB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 45'-50' | 30'-35' | 15'-20' | 45'-50' | 30'-35' | 15'-20' | 45'-50' | 30'-35' | 15'-20' | 42'-47' | 32'-37' | 17'-22' | | |
| 1,1,1,2-Tetrachloroethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | **27** | **160** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2,2-Tetrachloroethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2-Trichloroethane | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane | 5 | < 1.0 | **36** | **31** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,3-Trichloropropane | 0.04 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4,5-Tetramethylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromo-3-chloropropane | 0.04 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromoethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene | 3 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane | 0.6 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene | 3 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene | 3 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2-Chlorotoluene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 4-Chlorotoulene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 4-Isoproplytoluene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Acetone | 50 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Benzene | 1 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromobenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromodichloromethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromoform | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Bromomethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Carbon Tetrachloride | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chlorobenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chlorodibromomethane | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chloroethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chloroform | 7 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chloromethane | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| cis-1,2-Dichloroethene | 5 | **670** | **7,400** | **7,900** | < 1.0 | **68** | **380** | < 1.0 | < 1.0 | **10** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| cis-1,3-Dichloropropene | 0.04 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dibromochloromethane | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dibromomethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Dichlorodifluoromethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Diisopropyl ether | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethanol | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethyl acetate | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethyl Benzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Freon 113 | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Hexachlorobutadiene | 0.5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Isopropyl acetate | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Isopropylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| m + p Xylene | 10 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | < 2.0 |
| Methyl Tertiary Butyl Ether | 10 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Methylene Chloride | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 19 B | 19 B | 19 B | 5.2 B | 5.0 B | 8.5 B | 5.6 B | 4.0 B |
| Naphthalene | 10 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Butyl acetate | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Butylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Propyl acetate | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Propylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o Xylene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p-Diethylbenzene | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p-Ethyltoluene | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| p-Isopropyltoluene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| sec-Butylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Styrene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| t-butyl alcohol | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| tert-Butylbenzene | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Tetrachloroethene | 5 | **1,700** | **11,000** | **12,000** | **2,300** | **11,000** | **23,000** | < 1.0 | < 1.0 | **25** | 3.2 | 2.0 | **6.7** | < 1.0 | < 1.0 |
| Toluene | 5 | **15** | **680** | **430** | < 1.0 | **21** | **100** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| trans-1,2-Dichloroethene | 5 | **23** | **110** | **110** | < 1.0 | < 1.0 | **21** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| trans-1,3-Dichloropropene | 0.04 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichloroethene | 5 | **79** | **530** | **590** | < 1.0 | **22** | **110** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Trichlorofluoromethane | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Vinyl acetate | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Vinyl Chloride | 2 | < 1.0 | **28** | **19** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2-propanol | NS | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 |
| 2-Butanone | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2-Chloroethyl vinyl ether | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 2-Hexanone | 50 G | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 4-Methyl-2-pentanone | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Acrolein | 5 G | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Acrylonitrile | 5 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Carbon Disulfide | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Chlorodifluoromethane | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Freon-114 | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| n-Amyl acetate | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| **Total VOCs** | | **2,487** | **19,784** | **21,080** | **2,300** | **11,138** | **23,771** | **0** | **0** | **35** | **3.2** | **2** | **6.7** | **0** | **0** |

**Notes:**
1 - NYSDEC Class GA Groundwater Standards, TOGS 1.1.1, June 1998
NS - Not specified.
Bold text denotes concentration exceeding the Groundwater Standard.
All units are µg/L.
B - Compound detected in the associated method blank.
G - NYSDEC Guidance Value.

ONE SHORE ROAD
GLENWOOD LANDING, NEW YORK

TABLE 5

HISTORICAL GROUNDWATER MONITORING WELL ANALYTICAL RESULTS
VOCs - EPA METHOD 8260

| Compound | NYSDEC | MW-1 | | | MW-2 | | | MW-3 | | | | MW-4 | | | MW-5 | | MW-6 | | MW-7 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Standards(1) | 11/13/01 | 1/19/05 | 9/6/06 | 11/13/01 | 1/19/05 | 9/6/06 | 11/13/01 | 1/19/05 | 2/11/05 | 9/6/06 | 11/13/01 | 1/19/05 | 9/6/06 | 1/19/05 | 9/5/06 | 1/19/05 | 9/6/06 | 1/19/05 | 9/6/06 |
| 1,1,1,2-Tetrachloroethane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,1,1-Trichloroethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3 | ND |
| 1,1,2,2-Tetrachloroethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3 | ND |
| 1,1-Dichloroethene | 5 | ND | ND | ND | ND | ND | ND | 3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloropropene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2,3-Trichlorobenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2,3-Trichloropropane | 0.04 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2,4,5-Tetramethylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2,4-Trichlorobenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2,4-Trimethylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2-Dibromo-3-chloropropane | 0.04 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2-Dibromoethane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2-Dichlorobenzene | 3 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,2-Dichloroethane | 0.6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,3-Dichlorobenzene | 3 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,3-Dichloropropane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 1,4-Dichlorobenzene | 3 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 2,2-Dichloropropane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 2-Chlorotoluene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 4-Chlorotoulene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 4-Isoproplytoluene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Acetone | 50 | ND | ND | ND | ND | ND | ND | ND | 43 | 15 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromobenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Bromodichloromethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | NS | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorodibromomethane | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Chloroethane | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | NS | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| cis-1,2-Dichloroethene | 5 | ND | 1 | ND | **11** | ND | ND | **97** | **14** | ND | ND | 3 | ND | ND | ND | ND | ND | ND | ND | **27** |
| cis-1,3-Dichloropropene | 0.04 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | NS | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromomethane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Dichlorodifluoromethane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Diisopropyl ether | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Ethanol | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Ethyl acetate | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Ethyl Benzene | 5 | ND | ND | ND | ND | ND | ND | ND | **79** | **27** | **26** | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Freon 113 | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Hexachlorobutadiene | 0.5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Isopropyl acetate | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Isopropylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| m + p Xylene | 10 | ND | ND | ND | ND | ND | ND | ND | ND | **124** | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Tertiary Butyl Ether | 10 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Methylene Chloride | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 10 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| n-Butyl acetate | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| n-Butylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| n-Propyl acetate | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| n-Propylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| o Xylene | 5 | ND | ND | ND | ND | ND | ND | ND | ND | **57** | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| p-Diethylbenzene | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| p-Ethyltoluene | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| p-Isopropyltoluene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| sec-Butylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Styrene | 5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| t-butyl alcohol | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| tert-Butylbenzene | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Tetrachloroethene | 5 | **100** | **83** | **120** | **11** | **14** | ND | **54** | ND | ND | ND | **65** | ND | ND | **11** | ND | 2 | ND | **267** | **530** |
| Toluene | 5 | ND | ND | ND | ND | ND | ND | ND | **11000** | **2310** | ND | ND | **11** | ND | ND | ND | 4.9 | ND | ND | ND |
| trans-1,2-Dichloroethene | 5 | ND | ND | ND | ND | ND | ND | ND | 1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| trans-1,3-Dichloropropene | 0.04 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethene | 5 | 4 | 2 | ND | 3 | ND | ND | **9** | 0.7 | ND | ND | **7** | ND | ND | **6** | ND | ND | ND | **16.5** | ND |
| Trichlorofluoromethane | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Vinyl acetate | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Vinyl Chloride | 2 | ND | ND | ND | ND | ND | ND | **5** | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-propanol | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 2-Butanone | NS | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloroethyl vinyl ether | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| 2-Hexanone | 50 G | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-pentanone | NS | ND | ND | ND | ND | ND | ND | ND | ND | 107 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Acrolein | 5 G | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Acrylonitrile | 5 | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Carbon Disulfide | NS | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorodifluoromethane | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| Freon-114 | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |
| n-Amyl acetate | NS | NA | NA | ND | NA | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND |

**Notes:**

1 - NYSDEC Class GA Groundwater Standards, TOGS 1.1.1, June 1998
NS - Not specified.
ND - Not detected.
NA - Not analyzed.
Bold text denotes concentrations exceeding the Groundwater Standards.
All units are µg/L.
G - Guidance value.

**TABLE 6**

**Soil-Gas Analytical Results**
**Volatile Organic Compounds - Method TO-15**
**1 Shore Road, Glenwood Landing, New York**

| Compound | Target Soil Gas Concentrations (1) | SG-1 | Q | SG-2 | Q |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 2,000 | 5.0 | U | 5.0 | U |
| Chloromethane | 240 | 0.83 | U | 0.83 | U |
| Vinyl Chloride | 28 | 1.3 | U | 1.3 | U |
| Bromomethane | 50 | 3.9 | U | 3.9 | U |
| Chloroethane | 100,000 | 5.3 | U | 5.3 | U |
| Trichlorofluoromethane | 7,000 | 1.1 | U | 1.1 | U |
| Freon TF | 300,000 | 48 | | 13 | |
| 1,1-Dichloroethene | 5,000 | 0.79 | U | 0.79 | U |
| Methylene Chloride | 520 | 0.69 | U | 0.69 | U |
| 1,1-Dichloroethane | 5,000 | 11 | | 8.1 | U |
| cis-1,2-Dichloroethene | 350 | 1.6 | U | 1.6 | U |
| Chloroform | 11 | **13** | | 6.3 | |
| 1,1,1-Trichloroethane | 22,000 | 34 | | 8.2 | |
| Carbon Tetrachloride | 16 | 1.3 | U | 1.3 | U |
| Benzene | 31 | 3.5 | | 7.0 | |
| 1,2-Dichloroethane | 9.4 | 0.81 | U | 0.81 | U |
| Trichloroethene | 2.2 | **29** | | **240** | |
| 1,2-Dichloropropane | 40 | 0.92 | U | 0.92 | U |
| cis-1,3-Dichloropropene | NG | 0.91 | U | 0.91 | U |
| Toluene | 4,000 | 35 | | 64 | |
| trans-1,3-Dichloropropene | NS | 0.91 | U | 0.91 | U |
| 1,1,2-Trichloroethane | 15 | 1.1 | U | 1.1 | U |
| Tetrachloroethene | 81 | **430** | | 75 | |
| Chlorobenzene | 600 | 0.92 | U | 0.92 | U |
| Ethylbenzene | 220 | 15 | | 24 | |
| Xylene (m,p) | 70,000 | 65 | | 100 | |
| Styrene | 10,000 | 0.85 | U | 0.85 | U |
| Xylene (o) | 70,000 | 25 | | 37 | |
| 1,1,2,2-Tetrachloroethane | 4.2 | 1.4 | U | 1.4 | U |
| 1,3-Dichlorobenzene | 1,100 | 1.2 | U | 1.2 | U |
| 1,4-Dichlorobenzene | 8,000 | 1.2 | U | 1.2 | U |
| 1,2-Dichlorobenzene | 2,000 | 1.2 | U | 1.2 | U |
| Hexachlorobutadiene | 11 | 2.1 | U | 2.1 | U |
| 1,3,5-Trimethylbenzene | 60 | 12 | | 10 | |
| 1,2,4-Trimethylbenzene | 60 | 36 | | 25 | |
| 1,2-Dichlorotetrafluoroethane | NS | 1.4 | U | 1.4 | U |
| 1,2-Dibromoethane | 1.1 | 1.5 | U | 1.5 | U |
| 1,3-Butadiene | 0.87 | 2.2 | U | 2.2 | U |
| Carbon Disulfide | 7,000 | 3.7 | | 3.7 | |
| Acetone | 3,500 | 62 | | 140 | |
| Isopropyl Alcohol | NS | 12 | U | 12 | U |
| Methyl tert-Butyl Ether | 30,000 | 0.70 | U | 0.70 | U |
| Cyclohexane | NS | 1.7 | U | 1.7 | U |
| Dibromochloromethane | 10 | 1.7 | | 3.4 | |
| Methyl Ethyl Ketone | 10,000 | 3.0 | U | 3.0 | U |
| 1,4-Dioxane | NS | 3.6 | U | 3.6 | U |
| Methyl Isobutyl Ketone | 800 | 4.1 | U | 4.1 | U |
| Bromoform | 220 | 2.1 | U | 2.1 | U |
| Bromodichloromethane | 14.0 | 4.6 | | 4.6 | |
| trans-1,2-Dichloroethene | 700 | 0.79 | U | 0.79 | U |
| 4-Ethyltoluene | NS | 32 | | 35 | |
| 3-Chloropropene | NS | 1.6 | U | 1.6 | U |
| 2,2,4-Trimethylpentane | NS | 200 | | 370 | |
| n-Hexane | 2,000 | 4.2 | | 5.6 | |
| Tetrahydrofuran | NS | 5.9 | U | 5.9 | U |
| n-Heptane | NS | 3.7 | | 4.5 | |
| 1,2-Dichloroethene (total) | NS | 0.79 | U | 0.79 | U |
| Xylene (total) | 70,000 | 90 | | 140 | |
| tert-Butyl Alcohol | NS | 6.1 | U | 6.1 | U |

**Notes:**
USEPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soil (Subsurface Vapor Intrusion Guidance) Table 2b Risk = $1 \times 10^{-5}$
NS - Not Specified.
All units are $\mu g/m^3$.
**Bold** text denotes exceedance of guidance value.
Q - Qualifier
U - Compound not detected at a concentration above the reporting limit.

# APPENDIX A

## NYSDEC Correspondence

**New York State Department of Environmental Conservation**
**Division of Environmental Remediation**
Remedial Bureau A
**625 Broadway, 11th Floor**
**Albany, New York 12233-7015**
Phone: (518) 402-9621 • Fax: (518) 402-9022
**Website:** www.dec.state.ny.us

Denise M. Sheehan
Acting
Commissioner

September 14, 2005

Mr. James P. Rhodes, C.P.G.
P.W. Grosser Consulting Engineers P.C.
630 Johnson Avenue, Suite 7
Bohemia, NY 11716

Re: Penetrex Processing Company
Site No. 130034
Nassau County

Dear Mr. Rhodes:

The New York State Department of Environmental Conservation, NYSDEC, has reviewed your April 2005 Final Groundwater Investigation/Soil Gas Sampling Report. The monitoring wells currently in place are not sufficient to fully monitor or evaluate groundwater contamination at the site. The downgradient well does not provide enough information to characterize all downgradient concentrations of site related contamination. The site will not be reclassified at this time. Please address the following comments:

- Please remove the word "Final" from the title of the April 2005 Investigation Report.
- Please remove Nathan Putnam's name from the Investigation Report and state "NYSDEC Personnel" were on site during the GW-7 groundwater sampling and chemical inventory.
- Please remove the last sentence from the third paragraph in section 6.0 Conclusions and Recommendations.
- Please remove the first sentence of the last paragraph in section 6.0. The presence of an on-site source of contamination has not been ruled out.
- Please change the units in the figures to the appropriate values for the media; micrograms per liter for water, ppbv or micrograms per cubic meter for soil vapor.

Please develop a work plan that describes the following investigation activities:

- Please reevaluate groundwater flow direction by measuring the water level in all wells over the same tidal cycle.

- Please collect groundwater samples from at least four on-site profiles. Based on the latest groundwater flow direction these profiles must be located downgradient of DW-5, and MW-7. One profile must be located between MW-1 and MW-7. The fourth profile must be located at SG-3. The profiles must be completed to one hundred feet below grade. Groundwater must be collected utilizing a submersible pump at ten foot intervals starting at the groundwater interface. Collection of samples must follow EPA low flow groundwater sampling procedures. Groundwater parameters such as dissolved oxygen, conductivity, turbidity, and pH must stabilize before groundwater samples are collected. The water samples collected must be analyzed at an ELAP certified laboratory by EPA Method 8260.

- Please conduct one soil profile from the ground surface to the groundwater table at the SG-3 location to determine if impacted soil may be present at this location. The soil cores must be screened with an organic vapor monitoring device. At least two samples must be sent to an ELAP certified laboratory to be analyzed for volatile contamination by EPA Method 8260. The samples collected for laboratory analysis must be collected from the portions of the profile with the highest response from the organic vapor monitoring device and from the deepest interval.

- Please collect groundwater samples from the monitoring wells during the same sampling event as the groundwater profiles.

- Please inspect the disposal conduit from the former Penetrex area to DW-5 for areas that may have discharged wastes between the building and the dry well. If areas are uncovered that may have caused contaminated soil then a soil profile must be conducted in that area.

- Please indicate a Data Usability Summary Report will be prepared for all analytical sampling using Category B deliverables.

Please submit a work plan that describes the additional investigation activities to the NYSDEC within 20 business days of your receipt of this letter.

Sincerely,

Nathan E. Putnam
Project Manager
Section A

cc: D. Yudelson, Esq.
R. Weitzman, NCDOH

ec: G. Bobersky, NYSDEC
W. Parish, NYSDEC
J. Nealon, NYSDOH

P.W. GROSSER
CONSULTING, INC

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October 26, 2005

Mr. Nathan E. Putnam
New York State Department of Environmental Conservation
Division of Environmental Remediation – Bureau A
625 Broadway, 11th Floor
Albany, New York 12233-7015

**Re: Former Penetrex Processing Company**
**Site No. 130034**
**1 Shore Road,**
**Glenwood Landing, New York**

Dear Mr. Putnam:

P.W. Grosser Consulting, Inc. (PWGC) has prepared this letter to respond to your Departments September 14, 2005 comments to our April 2005 Final Groundwater Investigation/Soil Gas Sampling Report. PWGC acknowledges the changes your Department indicates to the existing report and will resubmit a final version of the report under separate cover.

In your correspondence it is indicated that the Department believes that the existing monitoring wells are not sufficient to fully monitor or evaluate groundwater contamination at the site. Additionally, it is indicated that the down-gradient well does not provide enough information to characterize all down-gradient concentrations of site related contamination. Based on these issues, your Department has requested additional investigation activities.

PWGC acknowledges the validity of the comments however, we feel that modifications to the investigation activities described in the correspondence is appropriate. PWGC's proposed approach is designed to thoroughly investigate the potential for residual soil impact in the vicinity of DW-1 and DW-5 as it relates to the potential to cause sub-slab volatile organic compound (VOC) vapor issues. Although, PWGC believes additional groundwater investigation is appropriate, the extent detailed and the focus on the vertical migration of contamination is not supported by the existing hydrogeologic conditions and the historical sample results obtained from the site.

The former Penetrex site is situated in close proximity to Hempstead Harbor. Based on the Nassau County Department of Health (NCDH) Water Table Elevation Map ( March 2000), the groundwater elevation at the site is 10 feet above mean sea level (MSL) or less and groundwater flow is west – northwest directly toward Hempstead Harbor. Also, as indicated in past reports, there is a significant difference in groundwater elevations at the site from west to east as the topography slopes down toward the surface water body. Tides may also have an influence on groundwater elevation in the western most wells. Therefore, from the published information there is no indication that groundwater moves vertically downward at the former Penetrex site and the predominant direction of groundwater flow is horizontal toward Hempstead Harbor. Additionally, as you move closer to the harbor, groundwater likely moves upward as it discharges to the surface water body. Therefore, PWGC believes the only mechanism for vertical migration in the groundwater would be if dense non aqueous phase liquid (DNAPL) exists and DNAPL has never been identified at the site.

ACEC

Historic groundwater sampling results reflect the groundwater flow conditions described in the previous section. Prior to installing the three most recent monitoring wells, PWGC conducted eight vertical profile groundwater borings. In generally, these borings extended to 50 feet below the water table. In seven of these borings, only low levels of contaminants of concern were detected, with the detections noted in the shallowest interval at the water table. One location (GW-7) showed uncharacteristically high concentrations in the vertical profile boring. However, of note, the greatest concentration was detected within 10 feet of the water table. A subsequent confirmatory vertical profile boring performed at the same location did not depict significant contamination, as tetrachloroethene (PCE) was detected at 7 ug/l at the water table. The boring was conducted to 85 feet below grade (approximately 60 feet below the water table) and no other compounds were detected.

Following the vertical profile sampling, PWGC received approval to finalize the three locations for the additional monitoring wells with their screens intersecting the water table and extending to approximately 10 feet below. The complete sampling round conducted after the installation of the additional monitoring wells detected the greatest concentration at MW-7 ( 267 ug/l) however, overall groundwater impact was relatively minor when considering the surrounding properties. Down-gradient wells shows evidence that the PCE is degrading by natural means, with the most down-gradient well depicting PCE concentrations within New York State (NYS) Groundwater Standards. Furthermore, the down-gradient sites are industrial in nature and include several major oil storage facilities and a municipal power station. Glenwood Oil Terminal Corp. is located northwest, diagonally across from the property and is believed that free phase petroleum product exists beneath this site.

Based on the above discussion, PWGC proposes the following scope of work:

PWGC will locate and trace the discharge line to DW-5 and conduct a geophysical survey using a split-box metal detector ( Fisher Model TW-6) and ground penetrating radar in the vicinity of DW-5 and DW-1 to verify that no additional subsurface structures exist.

PWGC will update the monitoring well survey to determine the existing direction of groundwater flow. PWGC will collect water level measurements over a complete tidal cycle to evaluate the potential tidal influence on groundwater flow especially along the western boundary of the site. PWGC will complete this work prior to finalizing groundwater profile locations.

PWGC will conduct soil borings using a Geoprobe in the vicinity of the above referenced structures to determine if residual impact exists. It is anticipated that 6-8 borings will be conducted. A soil boring will be placed at the former location of SG-3 as indicated in your Departments comments. Additional borings will be placed along the drainage line, in the vicinity of MW-7, and a boring will be conducted through DW-5 to verify the previous soil boring program results. The soil borings will be conducted in accordance with the procedures described in your correspondence. However, PWGC will extend the soil sampling to 10 feet below the water table to determine if residual impact exists below the water table. If there is any indication that DNAPL is present, the boring will be continued until clean conditions exist or the depth capabilities of the equipment are reached.

As specified, two soil samples will be collected for laboratory analysis from each boring (the sample exhibiting the greatest PID response and the deepest sample from the boring). The samples will be analyzed by a New York State ELAP certified laboratory for volatile organic compounds (VOC's) by EPA Method 8260. In accordance with previously agreed upon procedures, the analysis will include the normal laboratory summary package and a Data Usability summary will be provided in the report. Decontamination and quality assurance/quality control (QA/QC) procedures established in previous soil boring programs performed at the site under the Remedial Investigation/Feasibility Study (RI/FS) will be followed.

Following the soil boring program, PWGC will conduct additional groundwater investigation using a Geoprobe. PWGC will conduct a minimum of four groundwater sampling profiles. Two locations will coincide with the areas

indicated in your Departments comment letter (between MW-1 and MW-7 and at the former SG-3 location), while the remaining two will be placed down-gradient (northwest) of DW-5. Three groundwater samples will be collected from each boring including the depth coinciding with the water table interface, 15 feet below the water tabled and 30 feet below the water table. Each sample will be analyzed for VOC's by EPA Method 8260 as described in the previous paragraph. Actual groundwater sampling locations and final depths will be determined following the results of the soil boring program.

As indicated, PWGC will conduct a complete groundwater sampling round of existing wells (MW-1 through MW-7) at the same time the groundwater profiles are being performed. The collection of groundwater samples from the monitoring wells will follow EPA low flow groundwater sampling procedures and will include the evaluation of groundwater parameters dissolved oxygen, conductivity, and pH. Again the groundwater samples will be analyzed for VOC's by EPA Method 8260 in accordance with the procedures described above. Decontamination and quality assurance/quality control (QA/QC) procedures established in previous groundwater sampling programs performed at the site under this RI/FS will be followed.

PWGC has attached Figure 1, which depicts the proposed soil and groundwater sampling locations. Following the completion of above specified investigation, PWGC will prepare a comprehensive report documenting sampling and QA/QC procedures, sample results and will include the use of tables and figures for ease of interpretation. The report will also include conclusions and recommendations and will consider results from the sub-slab and indoor air investigation performed at the site.

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

Very truly yours,
**P.W. Grosser Consulting, Inc.**

James P. Rhodes

James Rhodes, CPG
Vice President

Cc: G. Bobersky, NYSDEC
J. Nealon, NYSDOH
W. Parrish, NYSDEC
D. Yudelson, ESQ.
L. Weinberger

Roslyn Heights
516-484-1234

**New York State Department of Environmental Conservation**
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Denise M. Sheehan
Commissioner

December 22, 2005

Mr. James P. Rhodes C.P.G.
P.W. Grosser Consulting Engineers P.C.
630 Johnson Avenue, Suite 7
Bohemia, NY 11716

RE: Penetrex Processing
Site No. 130034
Nassau County

Dear Mr. Rhodes:

The New York State Department of Environmental Conservation has reviewed your October 26, 2005 soil and ground water sampling proposal. Please address the following comments:

- Please indicate that groundwater samples from the profiles will be collected utilizing EPA low flow sampling procedures. This includes collecting samples only after the stabilization of groundwater parameters and the use of a submersible pump.

- Please indicate that at least one groundwater profile will be conducted downgradient of MW-7.

The November 18, 2005 Sub-Slab Vapor and Indoor Air Investigation Report has been reviewed. Please develop a work plan to address the following comments:

- Please indicate an active sub-slab depressurization system will be utilized to reduce or eliminate current or potential indoor air impacts to the residence and commercial structure from the contaminated sub-slab soil vapor.

- Please indicate vapor sampling will be conducted during the heating season to determine the effect cold weather conditions have on vapor intrusion.

- Please indicate a soil vapor intrusion investigation will be conducted for the building to the south of DW-4 in Figure 2 of the Sub-Slab Vapor and Indoor Air Investigation Report.

Please submit a revised groundwater and soil sampling proposal and a plan to address vapor intrusion to the NYSDEC within 20 business days of your receipt of this letter.

Sincerely,

Nathan E. Putnam
Project Manager
Section A

cc: D. Yudelson, Esq.
L. Weinberger
R. Weitzman, NCDOH

ec: G. Bobersky, NYSDEC
W. Parish, NYSDEC
J. Nealon, NYSDOH

# APPENDIX B

## Geophysical Investigation and Tide Evaluation Report

P.W. GROSSER
CONSULTING, INC

P.W. GROSSER
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August 1, 2006

Mr. Nathan E. Putnam
New York State Department of Environmental Conservation
Division of Environmental Remediation – Bureau A
625 Broadway, 11th Floor
Albany, New York 12233-7015

Re: Former Penetrex Processing Company
Site No. 130034
1 Shore Road, Glenwood Landing, New York

Dear Mr. Putnam:

P.W. Grosser Consulting, Inc. (PWGC) has prepared this letter to present the preliminary findings of the geophysical survey and water table elevation monitoring conducted at the site on June 23, 2006. The complete results will be included in a formal sub-surface investigation report following the completion of the remaining tasks including soil borings, soil gas sampling, vertical profile groundwater sampling, and groundwater monitoring well sampling activities.

*Groundwater Elevation Contours*

Figures 1 and 2 depict the groundwater elevation contours collected on June 23, 2006 at low tide and high tide, respectively. Groundwater levels were collected from each monitoring well every hour. PWGC then obtained the tide information from the NOAA to generate the groundwater elevation contours representing low and high tide. A copy of the NOAA tide chart is included in Appendix A.

The result of this analysis demonstrates that the groundwater levels along the western portion of the site are tidally influenced. As shown on Figure 3, wells MW-2 and MW-6 showed the greatest fluctuation as water level changes of nearly a foot was observed. The tidal influence does not significantly change the direction of groundwater flow as groundwater still flows from east to west toward the harbor. However, the tidal influence does slightly alter the direction. As shown on Figure 1, groundwater flow from the area of DW-5 flows west with a slight northwest component during low tide. Groundwater flow is more directly west during high tide as shown of Figure 2.

As a result of the tidal influence, PWGC believes that this confirms that groundwater flow does not possess a vertical component of flow as shallow groundwater discharges into the harbor. In most cases groundwater at depth will move upward in the vicinity of the surface water body to discharge in the harbor. Additionally, PWGC believes that the groundwater profile location GW-3 as presented in our May 2, 2006 correspondence is in an appropriate position to evaluate the area down-gradient from DW-5.

*Geophysical Results*

PWGC conducted a geophysical investigation on June 23, 2006 in accordance with our May 2, 2006 correspondence and as detailed in our October 26, 2005 and February 9, 2006 follow-up work plans. PWGC subcontracted Naeva Geophysical Inc. (Naeva). As indicated in the work plans, the geophysical investigation was conducted using a fisher TW-6 Pipe and

Cable Locator (hand-held electromagnetic metal detector) and a Sensors & Software Smart Cart ground penetrating radar (GPR) with a 250 MHz antenna.

The main objective of the geophysical investigation was to trace the line from the building to DW-5 to verify that no additional sanitary system structures, that could be acting as a residual source of tetrachloroethene (PCE) contamination, exist. In addition, the investigation was expanded to verify that no additional subsurface structures (including drywells or underground storage tanks) exist in the upper parking lot area in the vicinity of the former Penetrex building as well as the lower parking lot area.

A total of 16 anomalies were detected within the paved parking lot at the site (the anomalies are depicted on Figure 4). Anomalies 3 and 4 are associated with abandoned drywells DW-2 and DW-3 documented at the site. In addition, anomalies 7 and 11 are associated with sanitary leaching structure DW-5 and storm drain DW-1, respectively. Anomalies identified as 1, 8, 9, 12, 13, 14, 15, and 16 are too small to be reasonably expected as being an underground structure or underground storage tank (UST) of environmental significance. Anomalies identified as 2, 4, 6, and 10 are large enough to warrant further investigation. It is important to point out that according to Naeva, anomalies 2, 4, and 6 appear rectangular, the results of the GPR survey was not indicative of USTs. Anomaly 10, although fairly large is irregular in shape making identification from the surface improbable.

Naeva was successful in tracing the sanitary line from the former Penetrex building towards DW-5, however due to interference they were unable to trace the line all the way to the structure. No other interconnecting piping was detected during the Naeva investigation (a copy of the Naeva report is included in Appendix B).

*Recommendations*

To identify the source of anomalies 2, 4, 6, and 10, PWGC recommends performing test pits adjacent to each anomaly. The objective of the test pits is to identify the source of the anomaly. Further investigation, if appropriate, can be added to the approved subsurface investigation. The test pits will be performed using a backhoe and will be supervised by PWGC personnel. The PWGC representative will screen the soils obtained from the test pit using a Photoionization detector (PID). If PID readings in excess of 10 parts per million are obtained, the soils exhibiting these reading will be retained and transferred into laboratory supplied glassware. The samples will be hand delivered under proper chain of custody to a NYSDOH ELAP certified laboratory and analyzed for volatile organic compounds (VOC's) by EPA Method 8260. The backhoe will also be used to expose the cover of DW-5 which has been paved over with asphalt.

Following the performance of the test pits and the identification of the anomalies, PWGC will prepare a letter report documenting the results. Additional investigation activities will be added to the approved subsurface investigation, if appropriate. These activities may include additional soil borings or soil gas sampling points as described in the above referenced work plans. Should below grade underground injection control (UIC) structures, such as drywells, sanitary tanks, or sanitary leaching pools be discovered and access to their bottoms obtained, PWGC may collect representative samples from these structures at the time of the test pitting activities. Bottom soil/sediment samples will be collected from such structures using a stainless steel hand auger that will be properly decontaminated prior to and between samples using a non-phosphate detergent scrub and a tap water rinse. The samples will be transferred into laboratory supplied glassware and analyzed for VOC's by EPA method 8260, semi-VOC's by EPA Method 8270, and total 8 RCRA metals in accordance with the Nassau County Department of Health (NCDH) Private Sewer System Abandonment Procedures. The results of the samples will be compared to the soil cleanup objectives contained in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM -4046). Following the review of these results, should additional investigation or remediation activities be warranted, PWGC will contact the NCDH and follow the guidance specified above.

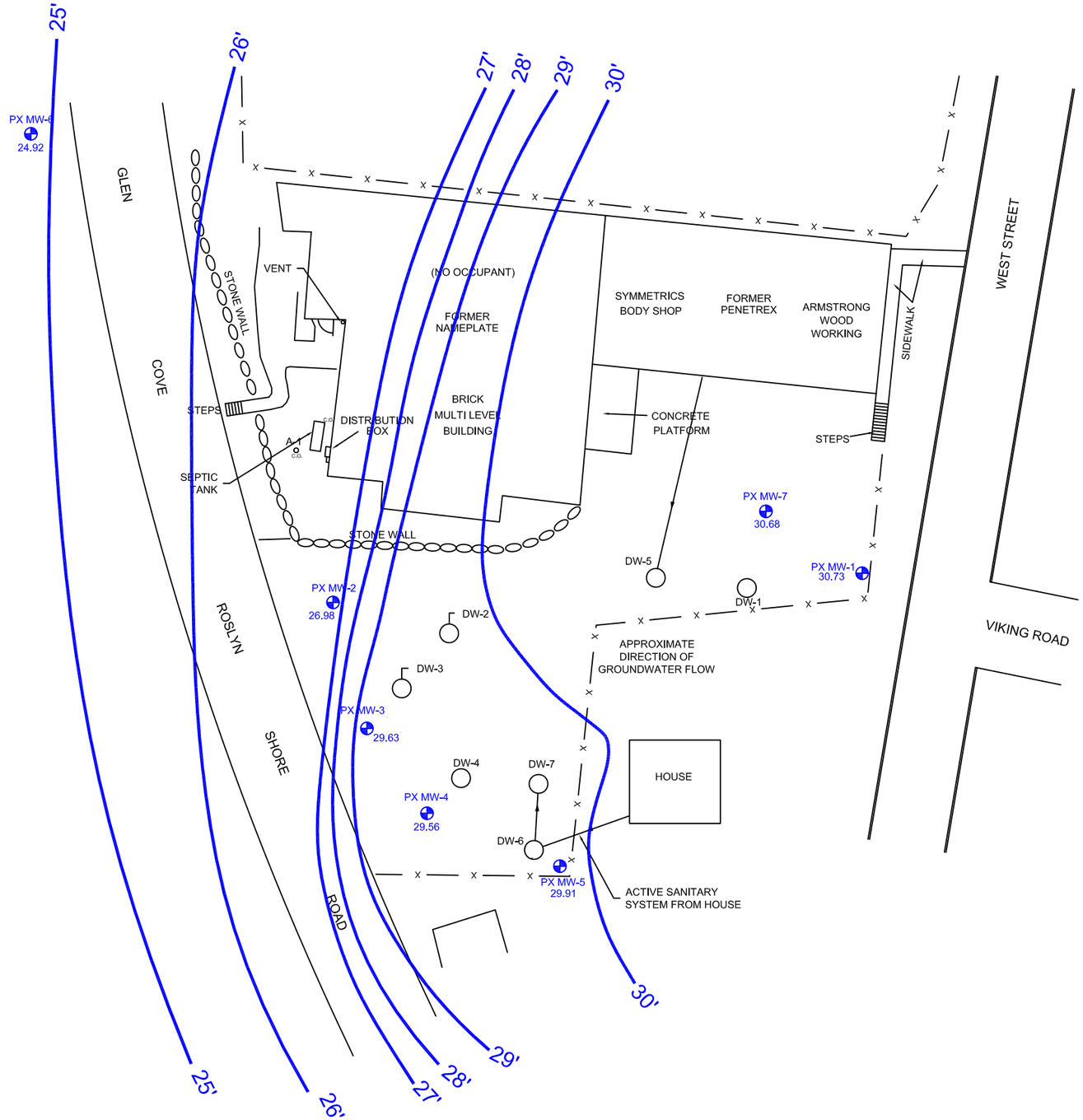
Should you have any questions or require further information, please do not hesitate to contact this office.

Very truly yours,
P.W. Grosser Consulting, Inc.

James Rhodes, CPG
Vice President

Cc: G. Bobersky, NYSDEC
S. McLelland, NYSDOH
W. Parrish, NYSDEC
D. Yudelson, ESQ.
L. Weinberger

FIGURES




LEGEND

- MONITORING WELL
- DRY WELL / LEACHING STRUCTURE
- 30' GROUNDWATER CONTOUR
- 30.68 GROUNDWATER ELEVATION

NOTE:
GROUNDWATER ELEVATIONS BASED ON ARBITRARY BENCHMARK

0 40 80

SCALE: 1" = 40'

SOURCE: YEC, INC., SURVEY MAP 10, JULY 1992

# GROUNDWATER ELEVATION CONTOURS
## LOW TIDE - JUNE 23, 2006
## FORMER PENETREX PROCESSING NYSDEC I.D. No. 130034


P.W. GROSSER CONSULTING
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| Project: | Designed By: | Figure No: |
|---|---|---|
| PEN0001 | JPR | 1 |
| CADD Operator: LLG | Approved By: JPR | Date: 7/13/06 |



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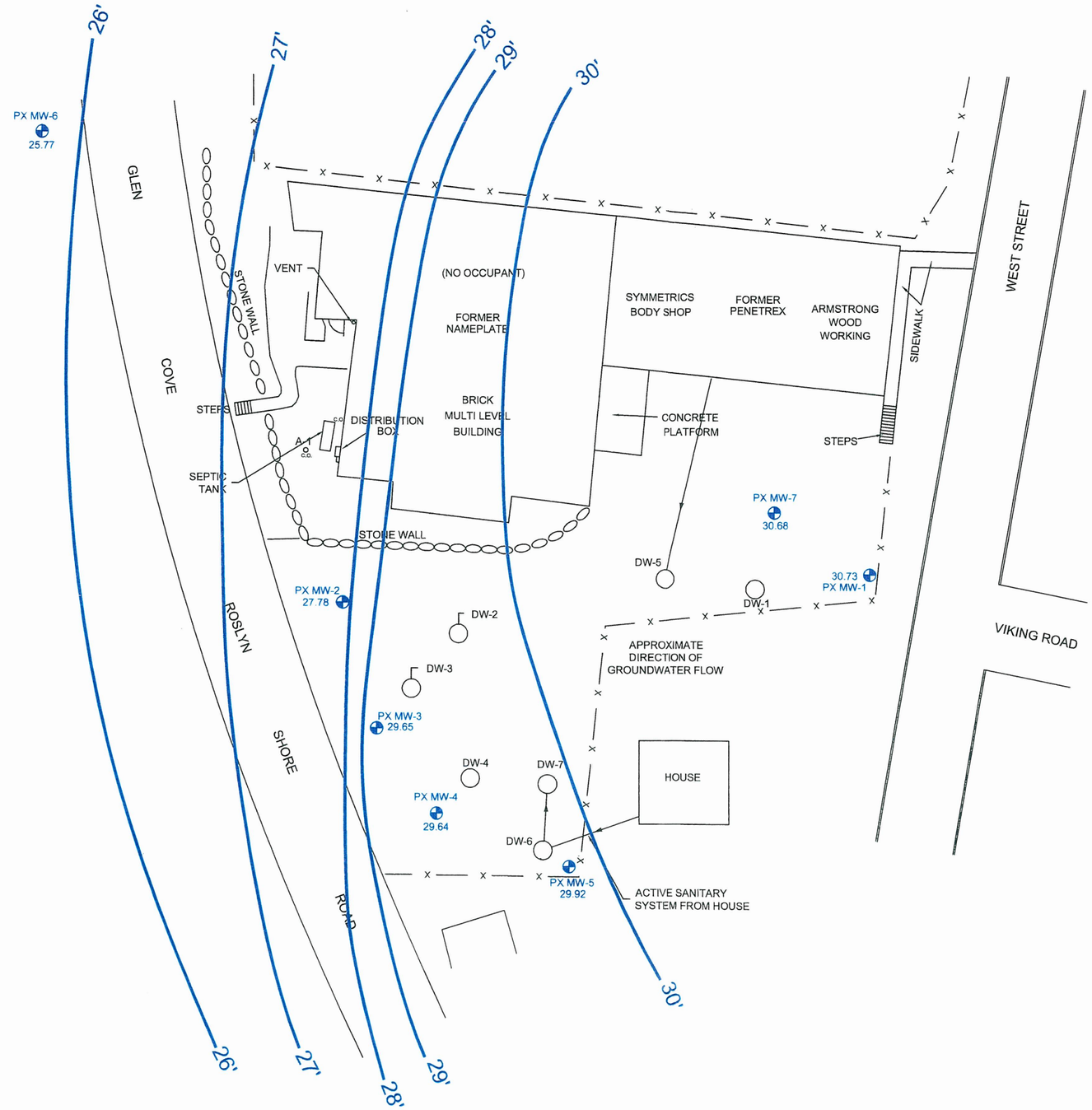


LEGEND

- MONITORING WELL
- DRY WELL / LEACHING STRUCTURE
- 30' GROUNDWATER CONTOUR
- 30.68 GROUNDWATER ELEVATION

NOTE:
GROUNDWATER ELEVATIONS BASED ON ARBITRARY BENCHMARK

0 40 80

SCALE: 1" = 40'

SOURCE: YEC, INC., SURVEY MAP 10, JULY 1992

# GROUNDWATER ELEVATION CONTOURS
## HIGH TIDE - JUNE 23, 2006
## FORMER PENETREX PROCESSING NYSDEC I.D. No. 130034


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| Project: | Designed By: | Figure No: |
|---|---|---|
| PEN0001 | JPR | 2 |
| CADD Operator: LLG | Approved By: JPR | Date: 7/13/06 |



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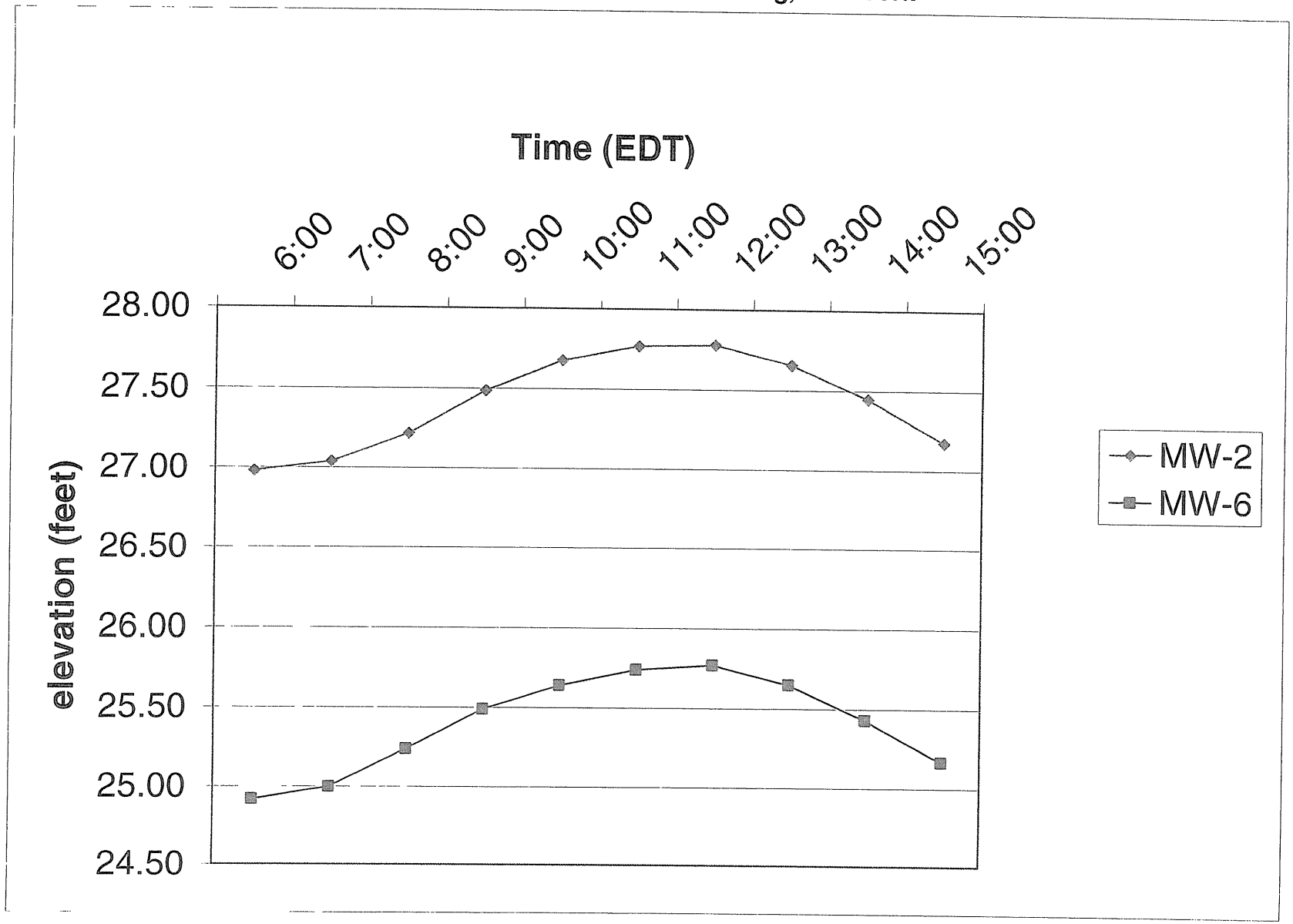
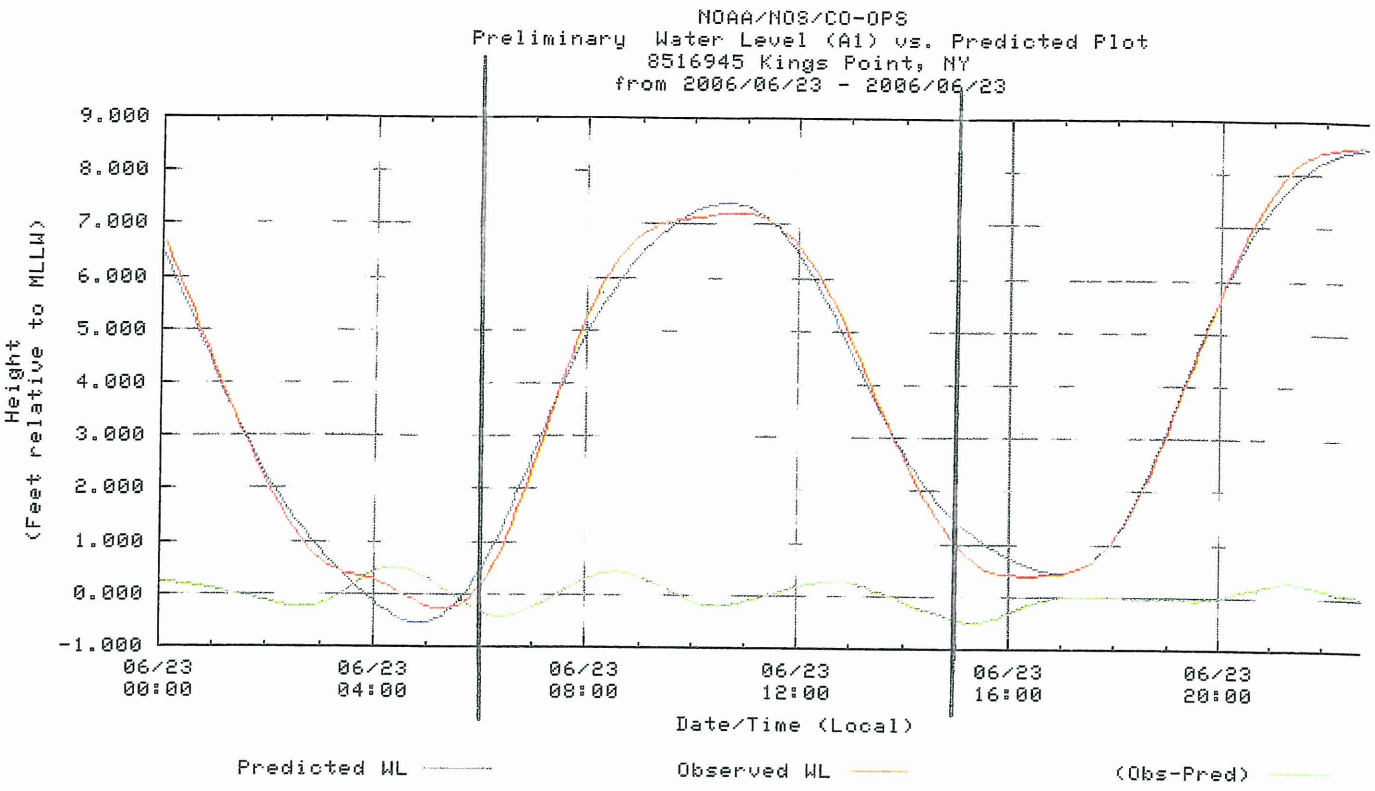
**Figure 3**
**Groundwater Elevations - June 23, 2006**
**MW-2 and MW-6**
**1 Shore Road, Glenwood Landing, New York**



# APPENDIX A


NOAA/NOS/CO-OPS
Preliminary Water Level (A1) vs. Predicted Plot
8516945 Kings Point, NY
from 2006/06/23 - 2006/06/23
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height
(Feet relative to MLLW)
06/23
00:00
06/23
04:00
06/23
08:00
06/23
12:00
06/23
16:00
06/23
20:00
Date/Time (Local)
Predicted WL
Observed WL
(Obs-Pred)

PWGC
Strategic Environmental & Engineering Solutions

APPENDIX B

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
*Subsurface Geophysical Surveys*

GPR
MAGNETICS
ELECTROMAGNETICS
SEISMICS
RESISTIVITY
UTILITY LOCATION
UXO DETECTION
BOREHOLE CAMERA
STAFF SUPPORT

July 24, 2006

Mr. John Eichler
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630 Johnson Avenue, Suite 7
Bohemia, NY 11716-2618
631.589.6353(p)
631.589.8705(f)

Dear Mr. Eichler:

This letter is written to inform you of the results of a geophysical investigation that NAEVA Geophysics conducted on June 23, 2006, at a property located at 1 Shore Road in Glenwood Landing, New York. The purpose of the investigation was to search for a buried sanitary sewer line that runs through the parking lot and into a drywell and any other buried structures that were in the area of investigation. The area of investigation was approximately 16,500 square feet in area. The cover material was mostly asphalt.

The equipment selected for this investigation included a Fisher TW-6 Pipe and Cable Locator (a type of hand-held electromagnetic metal-detector), a Sensors & Software Smart Cart ground penetrating radar (GPR) with a 250 MHz antenna, and utility locating instruments.

The TW-6 metal detector was carried over the site in a series of closely spaced parallel traverses to look for evidence of buried metallic features. The TW-6 could not be used in close proximity to above ground metallic objects such as chain linked fencing. Metal-detector anomalies (MDAs) were marked on the ground and further investigated using GPR. The sewer line was found by connecting the transmitter of a utility locating instrument to the sewer vent. A receiver was used to trace the signal.

Sixteen MDAs of varying sizes were identified within the area of investigation (See Figure 1: Area of Geophysical Investigation). The GPR depth profiles collected over these anomalies provided no conclusive evidence as to their sources. GPR showed that anomalies 2 and 4 were 4 feet deep while anomaly number 6 was believed to be 3 feet deep.

NAEVA was able to trace the sewer line on the upper parking lot for approximately 45 feet. The sewer line runs south and appears to heading in the direction of MDA number 7, which we believe to be a buried manhole cover due to its circular shape and its shallow depth as determined by GPR.

MARYLAND
4707 Benson Ave.
Suite 104
Baltimore
Maryland 21227
(410) 536-7600
(410) 536-7602 Fax

NEW YORK
50 N. Harrison Avenue
Suite 11
Congers
New York 10920
(845) 268-1800
(845) 268-1802 Fax

VIRGINIA
P.O. Box 7325
Charlottesville
Virginia 22906
(434) 978-3187
(434) 973-9791 Fax

Please note that a comprehensive utility mark-out was not performed as part of this investigation as we did not have access to the interiors of the building. We recommend that you mark any proposed excavations on the ground and notify the regional "one-call" center prior to breaking ground at this site.

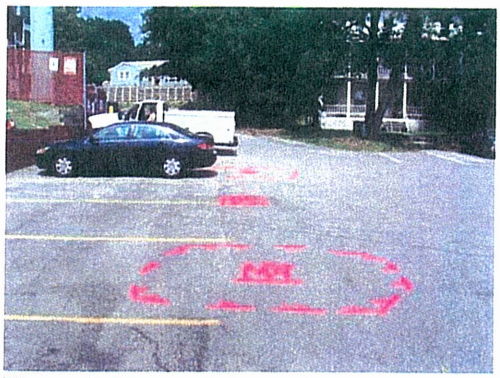


**Figure 2: MDA's 2, 3, and 4 (from front to back) located on lower parking lot.**

**Figure 3: Large MDA (10) found on upper parking lot. Sewer line visible to the left of MDA (10).**

**Figure 4: Small MDA (13) located in South-East corner of upper parking lot.**

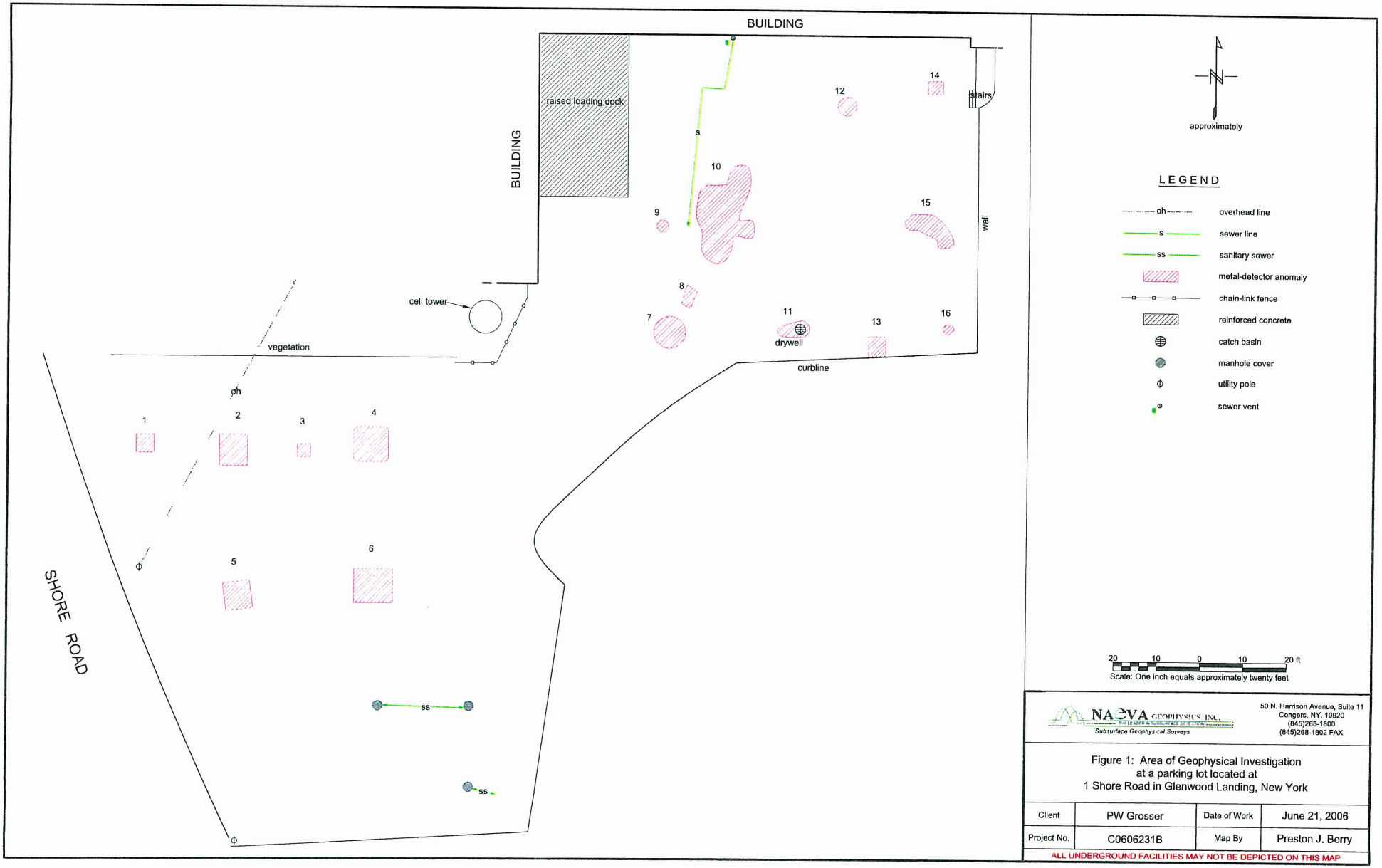
**Figure 5: MDA's 5 and 6 (front to back) located in center of lower parking lot.**

Thank you for giving us the opportunity to work with you on this project. Please call me if you have any questions or require additional information. We look forward to providing subsurface locating services to you in the future.

Sincerely,

*Preston J. Berry*

Preston J. Berry
Project Manager
NAEVA Geophysics, Inc.




NAEVA GEOPHYSICS, INC.
Subsurface Geophysical Surveys
50 N. Harrison Avenue, Suite 11
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Figure 1: Area of Geophysical Investigation
at a parking lot located at
1 Shore Road in Glenwood Landing, New York

| Client | PW Grosser | Date of Work | June 21, 2006 |
|---|---|---|---|
| Project No. | C0606231B | Map By | Preston J. Berry |

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP

# APPENDIX C

## Laboratory Data

AMERICAN ANALYTICAL LABORATORIES

NYSDOH 11418
NJDEP NY050
CTDOH PH-0205
PADEP 68-00573

Friday, September 01, 2006

Jim Rhodes
P.W. Grosser Consulting
630 Johnson Avenue
Suite 7
Bohemia, NY 11716

TEL: (631) 589-6353
FAX (631) 589-8705

RE: PEN-Glenwood Landing

Order No.: 0608273

Dear Jim Rhodes:

American Analytical Laboratories, LLC. received 5 sample(s) on 8/24/2006 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report.

The limits provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Lori Beyer
Lab Director

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

**CLIENT:** P.W. Grosser Consulting
**Project:** PEN-Glenwood Landing
**Lab Order:** 0608273

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Tag Number | Date Collected | Date Received |
|---|---|---|---|---|
| 0608273-01A | DW-8 | 10005 | 8/24/2006 11:25:00 AM | 8/24/2006 |
| 0608273-02A | DW-10 | 10005 | 8/24/2006 12:50:00 PM | 8/24/2006 |
| 0608273-03A | MDA-10 | 10005 | 8/24/2006 10:30:00 AM | 8/24/2006 |
| 0608273-04A | Trip Blank | 10005 | 8/24/2006 | 8/24/2006 |
| 0608273-05A | Field Blank | 10005 | 8/24/2006 11:10:00 AM | 8/24/2006 |

AMERICAN ANALYTICAL LABORATORIES
56 TOLEDO STREET • FARMINGDALE, NEW YORK 11735
(631) 454-6100 • FAX (631) 454-8027

TAG # / COC 10005

| | |
|---|---|
| NYSDOH | 11418 |
| CTDOH | PH-0205 |
| NJDEP | NY050 |
| PADEP | 68-573 |

# CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS
PWGC
630 Johnson Ave, Ste. 7
Bohemia, NY 11716

CONTACT: Jim Rhodes

SAMPLER (SIGNATURE): John Eichler

SAMPLER NAME (PRINT): John Eichler

SAMPLE(S) SEALED: YES / NO

CORRECT CONTAINER(S): YES / NO

PROJECT LOCATION:
PEN - Glenwood Landing

| LABORATORY ID # | MATRIX | # CONTAINERS | SAMPLING DATE/ TIME | SAMPLE # - LOCATION | ANALYSIS REQUIRED: 8260 | 8260 Nassau | 8270 Nassau | Metals Nassau | FOR METHANOL PRESERVED SAMPLES [ VOLATILE VIAL # ] |
|---|---|---|---|---|---|---|---|---|---|
| 0608273-3A | S | 1 | 8/24/06 1030 | MDA-10 | X | | | | |
| 1A | S | 2 | 1125 | DW-8 | | X | X | X | |
| 2A | S | 2 | 1250 | DW-10 | | X | X | X | |
| 4A | L | 2 | | Trip Blank | X | | | | |
| 5A | L | 2 | 1110 | Field Blank | X | | | | |

COOLER TEMPERATURE:

**MATRIX** S=SOIL; L=LIQUID; SL=SLUDGE; A-AIR; W=WIPE; P=PAINT CHIPS; B=BULK MATERIAL
**TYPE** G=GRAB; C=COMPOSITE, SS=SPLIT SPOON

TURNAROUND REQUIRED: NORMAL ☑ STAT ☐ BY / /

COMMENTS / INSTRUCTIONS: QA/QC summary include in report

| RELINQUISHED BY (SIGNATURE) | DATE / TIME | PRINTED NAME | RECEIVED BY LAB (SIGNATURE) | DATE / TIME | PRINTED NAME |
|---|---|---|---|---|---|
| John Eichler | 8-24-06 1635 | John Eichler | | 08/24/06 16:35 | J. Gray |
| RELINQUISHED BY (SIGNATURE) | DATE / TIME | PRINTED NAME | RECEIVED BY LAB (SIGNATURE) | DATE / TIME | PRINTED NAME |
| | | | | | |

WHITE-OFFICE / CANARY-LAB / PINK-SAMPLE CUSTODIAN / GOLDENROD-CLIENT

**AMERICAN ANALYTICAL LABORATORIES, LLC**
*56 TOLEDO STREET*
*FARMINGDALE, NEW YORK 11735*
*TELEPHONE: (631) 454-6100 FAX: (631) 454-8027*

## DATA REPORTING QUALIFIERS

For reporting results, the following "Results Qualifiers" are used:

| | |
|---|---|
| **Value** | If the result is greater than or equal to the detection limit, report the value |
| **U** | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required. |
| **J** | Indicates an estimated value. The flag is used:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3ug/L was calculated report as 3J. This flag is used when similar situations arise on any organic parameter i.e. Pesticide, PCBs and others. |
| **B** | Indicates the analyte was found in the blank as well as the sample report "10B". |
| **E** | Indicates the analytes concentration exceeds the calibrated range of the instrument for that specific analysis. |
| **D** | This flag identifies all compounds identified in an analysis at a secondary dilution factor. |
| **P** | This flag is used for Pesticide / PCB target analyte when there is >25% difference for detected concentrations between the two GC Columns. The higher of the two values is reported on Form I and flagged with a "P". |
| **N** | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used. |
| **H** | Indicates sample was received and/or analyzed outside of The method allowable holding time |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-8 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:25:00 AM |
| **Lab ID:** | 0608273-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **MERCURY** | | **SW7471B** | | | | Analyst: **WN** |
| Mercury | 0.174 | 0.0114 | | mg/Kg-dry | 1 | 8/29/2006 3:34:17 PM |
| **PERCENT MOISTURE** | | **D2216** | | | | Analyst: **PA** |
| Percent Moisture | 16.9 | 0 | | wt% | 1 | 8/28/2006 |
| **NCDH METALS** | | **SW6010B** | | | | Analyst: **JP** |
| Arsenic | 3.42 | 0.592 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| Barium | 35.9 | 0.474 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| Cadmium | 0.651 | 0.237 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| Chromium | 10.5 | 0.474 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| Lead | 94.3 | 0.355 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| Selenium | U | 0.592 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| Silver | U | 0.474 | | mg/Kg-dry | 1 | 8/29/2006 10:53:25 AM |
| **SEMIVOLATILE SW-846 METHOD 8270** | | **SW8270D** | | **SW3550A** | | Analyst: **RN** |
| 1,2,4-Trichlorobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 1,2-Dichlorobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 1,3-Dichlorobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 1,4-Dichlorobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,4,5-Trichlorophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,4,6-Trichlorophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,4-Dichlorophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,4-Dimethylphenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,4-Dinitrophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,4-Dinitrotoluene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2,6-Dinitrotoluene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2-Chloronaphthalene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2-Chlorophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2-Methylnaphthalene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2-Methylphenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2-Nitroaniline | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 2-Nitrophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 3,3'-Dichlorobenzidine | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 3+4-Methylphenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 3-Nitroaniline | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 4,6-Dinitro-2-methylphenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 4-Bromophenyl phenyl ether | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 4-Chloro-3-methylphenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 4-Chloroaniline | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 4-Chlorophenyl phenyl ether | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| 4-Nitroaniline | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-8 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:25:00 AM |
| **Lab ID:** | 0608273-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE SW-846 METHOD 8270** | | **SW8270D** | | **SW3550A** | | Analyst: **RN** |
| 4-Nitrophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Acenaphthene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Acenaphthylene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Aniline | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Anthracene | 76 | 140 | J | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Azobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzidine | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzo(a)anthracene | 180 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzo(a)pyrene | 210 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzo(b)fluoranthene | 250 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzo(g,h,i)perylene | 130 | 140 | J | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzo(k)fluoranthene | 87 | 140 | J | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzoic acid | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Benzyl alcohol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Bis(2-chloroethoxy)methane | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Bis(2-chloroethyl)ether | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Bis(2-chloroisopropyl)ether | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Bis(2-ethylhexyl)phthalate | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Butyl benzyl phthalate | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Carbazole | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Chrysene | 200 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Dibenzo(a,h)anthracene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Dibenzofuran | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Diethyl phthalate | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Dimethyl phthalate | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Di-n-butyl phthalate | 110 | 140 | J | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Di-n-octyl phthalate | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Fluoranthene | 390 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Fluorene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Hexachlorobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Hexachlorobutadiene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Hexachlorocyclopentadiene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Hexachloroethane | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Indeno(1,2,3-c,d)pyrene | 120 | 140 | J | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Isophorone | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Naphthalene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Nitrobenzene | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| N-Nitrosodimethylamine | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| N-Nitrosodi-n-propylamine | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-8 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:25:00 AM |
| **Lab ID:** | 0608273-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE SW-846 METHOD 8270** | | **SW8270D** | | **SW3550A** | | Analyst: **RN** |
| N-Nitrosodiphenylamine | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Pentachlorophenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Phenanthrene | 280 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Phenol | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Pyrene | 430 | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| Pyridine | U | 140 | | µg/Kg-dry | 1 | 8/29/2006 11:52:00 PM |
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| 1,1,1,2-Tetrachloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1,1-Trichloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1,2,2-Tetrachloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1,2-Trichloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1-Dichloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1-Dichloroethene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,1-Dichloropropene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2,3-Trichlorobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2,3-Trichloropropane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2,4,5-Tetramethylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2,4-Trichlorobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2,4-Trimethylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2-Dibromo-3-chloropropane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2-Dibromoethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2-Dichlorobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2-Dichloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,2-Dichloropropane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,3,5-Trimethylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,3-Dichlorobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,3-dichloropropane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 1,4-Dichlorobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 2,2-Dichloropropane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 2-Butanone | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 2-Chloroethyl vinyl ether | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 2-Chlorotoluene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 2-Hexanone | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 2-Propanol | U | 62 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 4-Chlorotoluene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 4-Isopropyltoluene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| 4-Methyl-2-pentanone | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Acetone | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-8 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:25:00 AM |
| **Lab ID:** | 0608273-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| Acrolein | U | 31 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Acrylonitrile | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Benzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Bromobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Bromochloromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Bromodichloromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Bromoform | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Bromomethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Carbon disulfide | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Carbon tetrachloride | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Chlorobenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Chlorodifluoromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Chloroethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Chloroform | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Chloromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| cis-1,2-Dichloroethene | 7.7 | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| cis-1,3-Dichloropropene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Dibromochloromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Dibromomethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Dichlorodifluoromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Diisopropyl ether | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Ethanol | U | 31 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Ethyl acetate | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Ethylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Freon-114 | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Hexachlorobutadiene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Isopropyl acetate | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Isopropylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| m,p-Xylene | U | 12 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Methyl tert-butyl ether | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Methylene chloride | 37 | 6.2 | B | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| n-Amyl acetate | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Naphthalene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| n-Butyl acetate | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| n-Butylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| n-Propyl acetate | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| n-Propylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| o-Xylene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| p-Diethylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
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| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
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# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-8 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:25:00 AM |
| **Lab ID:** | 0608273-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| p-Ethyltoluene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| sec-Butylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Styrene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| t-Butyl alcohol | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| tert-Butylbenzene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Tetrachloroethene | 52 | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Toluene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| trans-1,2-Dichloroethene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| trans-1,3-Dichloropropene | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Trichloroethene | 11 | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Trichlorofluoromethane | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Vinyl acetate | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |
| Vinyl chloride | U | 6.2 | | µg/Kg-dry | 1 | 8/29/2006 8:09:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
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# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 12:50:00 PM |
| **Lab ID:** | 0608273-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **MERCURY** | | **SW7471B** | | **SW7471B** | | Analyst: **WN** |
| Mercury | 0.0664 | 0.0112 | | mg/Kg-dry | 1 | 8/29/2006 3:36:25 PM |
| **PERCENT MOISTURE** | | **D2216** | | | | Analyst: **PA** |
| Percent Moisture | 20.7 | 0 | | wt% | 1 | 8/28/2006 |
| **NCDH METALS** | | **SW6010B** | | **SW3050A** | | Analyst: **JP** |
| Arsenic | 1.06 | 0.621 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| Barium | 7.32 | 0.497 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| Cadmium | 0.643 | 0.248 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| Chromium | 5.96 | 0.497 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| Lead | 62.4 | 0.373 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| Selenium | 0.664 | 0.621 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| Silver | U | 0.497 | | mg/Kg-dry | 1 | 8/29/2006 10:56:07 AM |
| **SEMIVOLATILE SW-846 METHOD 8270** | | **SW8270D** | | **SW3550A** | | Analyst: **RN** |
| 1,2,4-Trichlorobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 1,2-Dichlorobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 1,3-Dichlorobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 1,4-Dichlorobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,4,5-Trichlorophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,4,6-Trichlorophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,4-Dichlorophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,4-Dimethylphenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,4-Dinitrophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,4-Dinitrotoluene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2,6-Dinitrotoluene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2-Chloronaphthalene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2-Chlorophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2-Methylnaphthalene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2-Methylphenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2-Nitroaniline | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 2-Nitrophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 3,3´-Dichlorobenzidine | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 3+4-Methylphenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 3-Nitroaniline | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 4,6-Dinitro-2-methylphenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 4-Bromophenyl phenyl ether | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 4-Chloro-3-methylphenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 4-Chloroaniline | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 4-Chlorophenyl phenyl ether | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| 4-Nitroaniline | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
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| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
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# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 12:50:00 PM |
| **Lab ID:** | 0608273-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE SW-846 METHOD 8270** | | **SW8270D** | | **SW3550A** | | Analyst: **RN** |
| 4-Nitrophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Acenaphthene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Acenaphthylene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Aniline | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Anthracene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Azobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzidine | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzo(a)anthracene | 190 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzo(a)pyrene | 180 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzo(b)fluoranthene | 250 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzo(g,h,i)perylene | 120 | 150 | J | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzo(k)fluoranthene | 99 | 150 | J | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzoic acid | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Benzyl alcohol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Bis(2-chloroethoxy)methane | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Bis(2-chloroethyl)ether | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Bis(2-chloroisopropyl)ether | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Bis(2-ethylhexyl)phthalate | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Butyl benzyl phthalate | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Carbazole | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Chrysene | 230 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Dibenzo(a,h)anthracene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Dibenzofuran | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Diethyl phthalate | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Dimethyl phthalate | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Di-n-butyl phthalate | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Di-n-octyl phthalate | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Fluoranthene | 500 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Fluorene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Hexachlorobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Hexachlorobutadiene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Hexachlorocyclopentadiene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Hexachloroethane | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Indeno(1,2,3-c,d)pyrene | 120 | 150 | J | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Isophorone | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Naphthalene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Nitrobenzene | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| N-Nitrosodimethylamine | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| N-Nitrosodi-n-propylamine | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
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# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 12:50:00 PM |
| **Lab ID:** | 0608273-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE SW-846 METHOD 8270** | | **SW8270D** | | **SW3550A** | | Analyst: **RN** |
| N-Nitrosodiphenylamine | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Pentachlorophenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Phenanthrene | 340 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Phenol | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Pyrene | 480 | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| Pyridine | U | 150 | | µg/Kg-dry | 1 | 8/30/2006 12:17:00 AM |
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| 1,1,1,2-Tetrachloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1,1-Trichloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1,2,2-Tetrachloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1,2-Trichloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1-Dichloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1-Dichloroethene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,1-Dichloropropene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2,3-Trichlorobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2,3-Trichloropropane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2,4,5-Tetramethylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2,4-Trichlorobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2,4-Trimethylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2-Dibromo-3-chloropropane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2-Dibromoethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2-Dichlorobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2-Dichloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,2-Dichloropropane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,3,5-Trimethylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,3-Dichlorobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,3-dichloropropane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 1,4-Dichlorobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 2,2-Dichloropropane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 2-Butanone | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 2-Chloroethyl vinyl ether | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 2-Chlorotoluene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 2-Hexanone | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 2-Propanol | U | 64 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 4-Chlorotoluene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 4-Isopropyltoluene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| 4-Methyl-2-pentanone | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Acetone | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 12:50:00 PM |
| **Lab ID:** | 0608273-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| Acrolein | U | 32 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Acrylonitrile | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Benzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Bromobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Bromochloromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Bromodichloromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Bromoform | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Bromomethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Carbon disulfide | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Carbon tetrachloride | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Chlorobenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Chlorodifluoromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Chloroethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Chloroform | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Chloromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| cis-1,2-Dichloroethene | 67 | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| cis-1,3-Dichloropropene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Dibromochloromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Dibromomethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Dichlorodifluoromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Diisopropyl ether | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Ethanol | U | 32 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Ethyl acetate | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Ethylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Freon-114 | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Hexachlorobutadiene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Isopropyl acetate | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Isopropylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| m,p-Xylene | U | 13 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Methyl tert-butyl ether | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Methylene chloride | 26 | 6.4 | B | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| n-Amyl acetate | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Naphthalene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| n-Butyl acetate | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| n-Butylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| n-Propyl acetate | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| n-Propylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| o-Xylene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| p-Diethylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | DW-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 12:50:00 PM |
| **Lab ID:** | 0608273-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| p-Ethyltoluene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| sec-Butylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Styrene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| t-Butyl alcohol | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| tert-Butylbenzene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Tetrachloroethene | 240 | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Toluene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| trans-1,2-Dichloroethene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| trans-1,3-Dichloropropene | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Trichloroethene | 34 | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Trichlorofluoromethane | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Vinyl acetate | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |
| Vinyl chloride | U | 6.4 | | µg/Kg-dry | 1 | 8/29/2006 8:46:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | MDA-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 10:30:00 AM |
| **Lab ID:** | 0608273-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **PERCENT MOISTURE** | | **D2216** | | | | Analyst: **PA** |
| Percent Moisture | 20.2 | 0 | | wt% | 1 | 8/28/2006 |
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| 1,1,1,2-Tetrachloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1,1-Trichloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1,2,2-Tetrachloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1,2-Trichloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1-Dichloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1-Dichloroethene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,1-Dichloropropene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2,3-Trichlorobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2,3-Trichloropropane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2,4,5-Tetramethylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2,4-Trichlorobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2,4-Trimethylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2-Dibromo-3-chloropropane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2-Dibromoethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2-Dichlorobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2-Dichloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,2-Dichloropropane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,3,5-Trimethylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,3-Dichlorobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,3-dichloropropane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 1,4-Dichlorobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 2,2-Dichloropropane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 2-Butanone | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 2-Chloroethyl vinyl ether | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 2-Chlorotoluene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 2-Hexanone | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 2-Propanol | U | 65 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 4-Chlorotoluene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 4-Isopropyltoluene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| 4-Methyl-2-pentanone | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Acetone | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Acrolein | U | 32 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Acrylonitrile | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Benzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Bromobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Bromochloromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | MDA-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 10:30:00 AM |
| **Lab ID:** | 0608273-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| Bromodichloromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Bromoform | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Bromomethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Carbon disulfide | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Carbon tetrachloride | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Chlorobenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Chlorodifluoromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Chloroethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Chloroform | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Chloromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| cis-1,2-Dichloroethene | 920 | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| cis-1,3-Dichloropropene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Dibromochloromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Dibromomethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Dichlorodifluoromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Diisopropyl ether | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Ethanol | U | 32 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Ethyl acetate | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Ethylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Freon-114 | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Hexachlorobutadiene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Isopropyl acetate | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Isopropylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| m,p-Xylene | U | 13 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Methyl tert-butyl ether | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Methylene chloride | 21 | 6.5 | B | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| n-Amyl acetate | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Naphthalene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| n-Butyl acetate | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| n-Butylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| n-Propyl acetate | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| n-Propylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| o-Xylene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| p-Diethylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| p-Ethyltoluene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| sec-Butylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Styrene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| t-Butyl alcohol | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| tert-Butylbenzene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | MDA-10 |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 10:30:00 AM |
| **Lab ID:** | 0608273-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| Tetrachloroethene | 410 | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Toluene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| trans-1,2-Dichloroethene | 55 | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| trans-1,3-Dichloropropene | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Trichloroethene | 56 | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Trichlorofluoromethane | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Vinyl acetate | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |
| Vinyl chloride | U | 6.5 | | µg/Kg-dry | 1 | 8/29/2006 9:23:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | Trip Blank |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 |
| **Lab ID:** | 0608273-04A | **Matrix:** | LIQUID |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| 1,1,1,2-Tetrachloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1,1-Trichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1,2,2-Tetrachloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1,2-Trichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1-Dichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1-Dichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,1-Dichloropropene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2,3-Trichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2,3-Trichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2,4,5-Tetramethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2,4-Trichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2,4-Trimethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2-Dibromo-3-chloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2-Dibromoethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2-Dichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2-Dichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,2-Dichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,3,5-Trimethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,3-Dichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,3-dichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 1,4-Dichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 2,2-Dichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 2-Butanone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 2-Chloroethyl vinyl ether | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 2-Chlorotoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 2-Hexanone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 2-Propanol | U | 50 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 4-Chlorotoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 4-Isopropyltoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| 4-Methyl-2-pentanone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Acetone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Acrolein | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Acrylonitrile | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Benzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Bromobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Bromochloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Bromodichloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Bromoform | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | Trip Blank |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 |
| **Lab ID:** | 0608273-04A | **Matrix:** | LIQUID |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| Bromomethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Carbon disulfide | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Carbon tetrachloride | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Chlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Chlorodifluoromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Chloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Chloroform | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Chloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| cis-1,2-Dichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| cis-1,3-Dichloropropene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Dibromochloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Dibromomethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Dichlorodifluoromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Diisopropyl ether | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Ethanol | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Ethyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Ethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Freon-114 | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Hexachlorobutadiene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Isopropyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Isopropylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| m,p-Xylene | U | 2.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Methyl tert-butyl ether | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Methylene chloride | 16 | 1.0 | B | µg/L | 1 | 8/29/2006 6:16:00 AM |
| n-Amyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Naphthalene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| n-Butyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| n-Butylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| n-Propyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| n-Propylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| o-Xylene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| p-Diethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| p-Ethyltoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| sec-Butylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Styrene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| t-Butyl alcohol | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| tert-Butylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Tetrachloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Toluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | Trip Blank |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 |
| **Lab ID:** | 0608273-04A | **Matrix:** | LIQUID |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| trans-1,2-Dichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| trans-1,3-Dichloropropene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Trichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Trichlorofluoromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Vinyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |
| Vinyl chloride | U | 1.0 | | µg/L | 1 | 8/29/2006 6:16:00 AM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| | ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| | U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | Field Blank |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:10:00 AM |
| **Lab ID:** | 0608273-05A | **Matrix:** | LIQUID |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| 1,1,1,2-Tetrachloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1,1-Trichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1,2,2-Tetrachloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1,2-Trichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1-Dichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1-Dichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,1-Dichloropropene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2,3-Trichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2,3-Trichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2,4,5-Tetramethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2,4-Trichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2,4-Trimethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2-Dibromo-3-chloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2-Dibromoethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2-Dichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2-Dichloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,2-Dichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,3,5-Trimethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,3-Dichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,3-dichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 1,4-Dichlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 2,2-Dichloropropane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 2-Butanone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 2-Chloroethyl vinyl ether | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 2-Chlorotoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 2-Hexanone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 2-Propanol | U | 50 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 4-Chlorotoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 4-Isopropyltoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| 4-Methyl-2-pentanone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Acetone | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Acrolein | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Acrylonitrile | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Benzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Bromobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Bromochloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Bromodichloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Bromoform | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | Field Blank |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:10:00 AM |
| **Lab ID:** | 0608273-05A | **Matrix:** | LIQUID |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| Bromomethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Carbon disulfide | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Carbon tetrachloride | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Chlorobenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Chlorodifluoromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Chloroethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Chloroform | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Chloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| cis-1,2-Dichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| cis-1,3-Dichloropropene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Dibromochloromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Dibromomethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Dichlorodifluoromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Diisopropyl ether | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Ethanol | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Ethyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Ethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Freon-114 | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Hexachlorobutadiene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Isopropyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Isopropylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| m,p-Xylene | U | 2.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Methyl tert-butyl ether | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Methylene chloride | 18 | 1.0 | B | µg/L | 1 | 8/29/2006 6:53:00 AM |
| n-Amyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Naphthalene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| n-Butyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| n-Butylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| n-Propyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| n-Propylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| o-Xylene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| p-Diethylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| p-Ethyltoluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| sec-Butylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Styrene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| t-Butyl alcohol | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| tert-Butylbenzene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Tetrachloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Toluene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

# American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | P.W. Grosser Consulting | **Client Sample ID:** | Field Blank |
| **Lab Order:** | 0608273 | **Tag Number:** | 10005 |
| **Project:** | PEN-Glenwood Landing | **Collection Date:** | 8/24/2006 11:10:00 AM |
| **Lab ID:** | 0608273-05A | **Matrix:** | LIQUID |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE SW-846 METHOD 8260** | | **SW8260B** | | **SW5030A** | | Analyst: **LDS** |
| trans-1,2-Dichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| trans-1,3-Dichloropropene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Trichloroethene | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Trichlorofluoromethane | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Vinyl acetate | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |
| Vinyl chloride | U | 1.0 | | µg/L | 1 | 8/29/2006 6:53:00 AM |

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits |
| | ND | Not Detected at the Reporting Limit | S | Spike Recovery outside accepted recovery limits |
| | U | Indicates the compound was analyzed for but not detecte | X | Value exceeds Maximum Contaminant Level |

American Analytical Laboratories, LLC.

**Date:** 01-Sep-06

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing
**Test No:** SW8260B **Matrix:** W

# QC SUMMARY REPORT
# SURROGATE RECOVERIES

## VOLATILE SW-846 METHOD 8260

| Sample ID | BR4FBZ | BZMED8 | DBFM |
|---|---|---|---|
| 0608273-01A | 97.2 | 99.1 | 134 |
| 0608273-02A | 96.3 | 94.5 | 137 |
| 0608273-03A | 88.9 | 88.1 | 114 |
| 0608273-04A | 88.5 | 99.3 | 124 |
| 0608273-05A | 130 | 101 | 130 |
| LCS082806BY | 92.7 | 96.0 | 88.2 |
| VBLK082806BY | 96.6 | 96.2 | 95.7 |

| Acronym | | Surrogate | QC Limits |
|---|---|---|---|
| BR4FBZ | = | Surr: 4-Bromofluorobenzene | 69-134 |
| BZMED8 | = | Surr: Toluene-d8 | 71-123 |
| DBFM | = | Surr: Dibromofluoromethane | 70-135 |

*** Surrogate recovery outside acceptance limits**

American Analytical Laboratories, LLC.

**Date:** *01-Sep-06*

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

Sample ID: **VBLK082806BY** SampType: **MBLK** TestCode: **DryFull8260_** Units: **µg/Kg** Prep Date: RunNo: **20119**
Client ID: **PBS** Batch ID: **R20119** TestNo: **SW8260B** Analysis Date: **8/29/2006** SeqNo: **244607**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | U | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | U | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | U | 5.0 | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | U | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | U | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | U | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | U | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | U | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | U | 5.0 | | | | | | | | | |
| 1,2,4,5-Tetramethylbenzene | U | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | U | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | U | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | U | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | U | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | U | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | U | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | U | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | U | 5.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | U | 5.0 | | | | | | | | | |
| 1,3-dichloropropane | U | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | U | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | U | 5.0 | | | | | | | | | |
| 2-Butanone | U | 5.0 | | | | | | | | | |
| 2-Chloroethyl vinyl ether | U | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | U | 5.0 | | | | | | | | | |
| 2-Hexanone | U | 5.0 | | | | | | | | | |
| 2-Propanol | U | 50 | | | | | | | | | |
| 4-Chlorotoluene | U | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | U | 5.0 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

Sample ID: **VBLK082806BY** SampType: **MBLK** TestCode: **DryFull8260_** Units: **µg/Kg** Prep Date: RunNo: **20119**
Client ID: **PBS** Batch ID: **R20119** TestNo: **SW8260B** Analysis Date: **8/29/2006** SeqNo: **244607**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-Methyl-2-pentanone | U | 5.0 | | | | | | | | | |
| Acetone | U | 5.0 | | | | | | | | | |
| Acrolein | U | 25 | | | | | | | | | |
| Acrylonitrile | U | 5.0 | | | | | | | | | |
| Benzene | U | 5.0 | | | | | | | | | |
| Bromobenzene | U | 5.0 | | | | | | | | | |
| Bromochloromethane | U | 5.0 | | | | | | | | | |
| Bromodichloromethane | U | 5.0 | | | | | | | | | |
| Bromoform | U | 5.0 | | | | | | | | | |
| Bromomethane | U | 5.0 | | | | | | | | | |
| Carbon disulfide | U | 5.0 | | | | | | | | | |
| Carbon tetrachloride | U | 5.0 | | | | | | | | | |
| Chlorobenzene | U | 5.0 | | | | | | | | | |
| Chlorodifluoromethane | U | 5.0 | | | | | | | | | |
| Chloroethane | U | 5.0 | | | | | | | | | |
| Chloroform | U | 5.0 | | | | | | | | | |
| Chloromethane | U | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | U | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | U | 5.0 | | | | | | | | | |
| Dibromochloromethane | U | 5.0 | | | | | | | | | |
| Dibromomethane | U | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | U | 5.0 | | | | | | | | | |
| Diisopropyl ether | U | 5.0 | | | | | | | | | |
| Ethanol | U | 25 | | | | | | | | | |
| Ethyl acetate | U | 5.0 | | | | | | | | | |
| Ethylbenzene | U | 5.0 | | | | | | | | | |
| Freon-114 | U | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | U | 5.0 | | | | | | | | | |
| Isopropyl acetate | U | 5.0 | | | | | | | | | |
| Isopropylbenzene | U | 5.0 | | | | | | | | | |
| m,p-Xylene | U | 10 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation li
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted reco
U Indicates the compound was analyzed for but not detecte

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

Sample ID: **VBLK082806BY** SampType: **MBLK** TestCode: **DryFull8260_** Units: **µg/Kg** Prep Date: RunNo: **20119**
Client ID: **PBS** Batch ID: **R20119** TestNo: **SW8260B** Analysis Date: **8/29/2006** SeqNo: **244607**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | U | 5.0 | | | | | | | | | |
| Methylene chloride | 15 | 5.0 | | | | | | | | | |
| n-Amyl acetate | U | 5.0 | | | | | | | | | |
| Naphthalene | U | 5.0 | | | | | | | | | |
| n-Butyl acetate | U | 5.0 | | | | | | | | | |
| n-Butylbenzene | U | 5.0 | | | | | | | | | |
| n-Propyl acetate | U | 5.0 | | | | | | | | | |
| n-Propylbenzene | U | 5.0 | | | | | | | | | |
| o-Xylene | U | 5.0 | | | | | | | | | |
| p-Diethylbenzene | U | 5.0 | | | | | | | | | |
| p-Ethyltoluene | U | 5.0 | | | | | | | | | |
| sec-Butylbenzene | U | 5.0 | | | | | | | | | |
| Styrene | U | 5.0 | | | | | | | | | |
| t-Butyl alcohol | U | 5.0 | | | | | | | | | |
| tert-Butylbenzene | U | 5.0 | | | | | | | | | |
| Tetrachloroethene | U | 5.0 | | | | | | | | | |
| Toluene | U | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | U | 5.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | U | 5.0 | | | | | | | | | |
| Trichloroethene | U | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | U | 5.0 | | | | | | | | | |
| Vinyl acetate | U | 5.0 | | | | | | | | | |
| Vinyl chloride | U | 5.0 | | | | | | | | | |

Sample ID: **LCS082806BY** SampType: **LCS** TestCode: **DryFull8260_** Units: **µg/Kg** Prep Date: RunNo: **20119**
Client ID: **LCSS** Batch ID: **R20119** TestNo: **SW8260B** Analysis Date: **8/28/2006** SeqNo: **244608**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 46 | 5.0 | 50.00 | 0 | 92.5 | 42 | 138 | | | | |
| Benzene | 56 | 5.0 | 50.00 | 0 | 111 | 45 | 137 | | | | |
| Chlorobenzene | 64 | 5.0 | 50.00 | 0 | 128 | 41 | 143 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation li
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted reco
U Indicates the compound was analyzed for but not detecte

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

| Sample ID: LCS082806BY | SampType: LCS | TestCode: DryFull8260_ | Units: µg/Kg | Prep Date: | RunNo: 20119 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R20119 | TestNo: SW8260B | | Analysis Date: 8/28/2006 | SeqNo: 244608 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | 59 | 5.0 | 50.00 | 0 | 118 | 38 | 141 | | | | |
| Trichloroethene | 48 | 5.0 | 50.00 | 0 | 95.6 | 39 | 136 | | | | |

| Sample ID: VBLK082806BY | SampType: MBLK | TestCode: Full8260_W | Units: µg/L | Prep Date: | RunNo: 20119 |
|---|---|---|---|---|---|
| Client ID: PBW | Batch ID: R20119 | TestNo: SW8260B | | Analysis Date: 8/29/2006 | SeqNo: 244603 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | U | 1.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | U | 1.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | U | 1.0 | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 1.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | U | 1.0 | | | | | | | | | |
| 1,1-Dichloroethane | U | 1.0 | | | | | | | | | |
| 1,1-Dichloroethene | U | 1.0 | | | | | | | | | |
| 1,1-Dichloropropene | U | 1.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | U | 1.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | U | 1.0 | | | | | | | | | |
| 1,2,4,5-Tetramethylbenzene | U | 1.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | U | 1.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | U | 1.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | U | 1.0 | | | | | | | | | |
| 1,2-Dibromoethane | U | 1.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | U | 1.0 | | | | | | | | | |
| 1,2-Dichloroethane | U | 1.0 | | | | | | | | | |
| 1,2-Dichloropropane | U | 1.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | U | 1.0 | | | | | | | | | |
| 1,3-Dichlorobenzene | U | 1.0 | | | | | | | | | |
| 1,3-dichloropropane | U | 1.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | U | 1.0 | | | | | | | | | |
| 2,2-Dichloropropane | U | 1.0 | | | | | | | | | |
| 2-Butanone | U | 1.0 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

Sample ID: **VBLK082806BY** SampType: **MBLK** TestCode: **Full8260_W** Units: **µg/L** Prep Date: RunNo: **20119**
Client ID: **PBW** Batch ID: **R20119** TestNo: **SW8260B** Analysis Date: **8/29/2006** SeqNo: **244603**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Chloroethyl vinyl ether | U | 1.0 | | | | | | | | | |
| 2-Chlorotoluene | U | 1.0 | | | | | | | | | |
| 2-Hexanone | U | 1.0 | | | | | | | | | |
| 2-Propanol | U | 50 | | | | | | | | | |
| 4-Chlorotoluene | U | 1.0 | | | | | | | | | |
| 4-Isopropyltoluene | U | 1.0 | | | | | | | | | |
| 4-Methyl-2-pentanone | U | 1.0 | | | | | | | | | |
| Acetone | U | 1.0 | | | | | | | | | |
| Acrolein | U | 1.0 | | | | | | | | | |
| Acrylonitrile | U | 1.0 | | | | | | | | | |
| Benzene | U | 1.0 | | | | | | | | | |
| Bromobenzene | U | 1.0 | | | | | | | | | |
| Bromochloromethane | U | 1.0 | | | | | | | | | |
| Bromodichloromethane | U | 1.0 | | | | | | | | | |
| Bromoform | U | 1.0 | | | | | | | | | |
| Bromomethane | U | 1.0 | | | | | | | | | |
| Carbon disulfide | U | 1.0 | | | | | | | | | |
| Carbon tetrachloride | U | 1.0 | | | | | | | | | |
| Chlorobenzene | U | 1.0 | | | | | | | | | |
| Chlorodifluoromethane | U | 1.0 | | | | | | | | | |
| Chloroethane | U | 1.0 | | | | | | | | | |
| Chloroform | U | 1.0 | | | | | | | | | |
| Chloromethane | U | 1.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | U | 1.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | U | 1.0 | | | | | | | | | |
| Dibromochloromethane | U | 1.0 | | | | | | | | | |
| Dibromomethane | U | 1.0 | | | | | | | | | |
| Dichlorodifluoromethane | U | 1.0 | | | | | | | | | |
| Diisopropyl ether | U | 1.0 | | | | | | | | | |
| Ethanol | U | 1.0 | | | | | | | | | |
| Ethyl acetate | U | 1.0 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

| Sample ID: **VBLK082806BY** | SampType: **MBLK** | TestCode: **Full8260_W** | Units: **µg/L** | Prep Date: | RunNo: **20119** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **R20119** | TestNo: **SW8260B** | | Analysis Date: **8/29/2006** | SeqNo: **244603** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | U | 1.0 | | | | | | | | | |
| Freon-114 | U | 1.0 | | | | | | | | | |
| Hexachlorobutadiene | U | 1.0 | | | | | | | | | |
| Isopropyl acetate | U | 1.0 | | | | | | | | | |
| Isopropylbenzene | U | 1.0 | | | | | | | | | |
| m,p-Xylene | U | 2.0 | | | | | | | | | |
| Methyl tert-butyl ether | U | 1.0 | | | | | | | | | |
| Methylene chloride | 15 | 1.0 | | | | | | | | | |
| n-Amyl acetate | U | 1.0 | | | | | | | | | |
| Naphthalene | U | 1.0 | | | | | | | | | |
| n-Butyl acetate | U | 1.0 | | | | | | | | | |
| n-Butylbenzene | U | 1.0 | | | | | | | | | |
| n-Propyl acetate | U | 1.0 | | | | | | | | | |
| n-Propylbenzene | U | 1.0 | | | | | | | | | |
| o-Xylene | U | 1.0 | | | | | | | | | |
| p-Diethylbenzene | U | 1.0 | | | | | | | | | |
| p-Ethyltoluene | U | 1.0 | | | | | | | | | |
| sec-Butylbenzene | U | 1.0 | | | | | | | | | |
| Styrene | U | 1.0 | | | | | | | | | |
| t-Butyl alcohol | U | 1.0 | | | | | | | | | |
| tert-Butylbenzene | U | 1.0 | | | | | | | | | |
| Tetrachloroethene | U | 1.0 | | | | | | | | | |
| Toluene | U | 1.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | U | 1.0 | | | | | | | | | |
| trans-1,3-Dichloropropene | U | 1.0 | | | | | | | | | |
| Trichloroethene | U | 1.0 | | | | | | | | | |
| Trichlorofluoromethane | U | 1.0 | | | | | | | | | |
| Vinyl acetate | U | 1.0 | | | | | | | | | |
| Vinyl chloride | U | 1.0 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID:** R20119

Sample ID: **LCS082806BY** SampType: **LCS** TestCode: **Full8260_W** Units: **µg/L** Prep Date: RunNo: **20119**
Client ID: **LCSW** Batch ID: **R20119** TestNo: **SW8260B** Analysis Date: **8/28/2006** SeqNo: **244604**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,1,1-Trichloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,1,2,2-Tetrachloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,1,2-Trichloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,1-Dichloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,1-Dichloroethene | 46 | 1.0 | 50.00 | 0 | 92.5 | 51 | 139 | | | | |
| 1,1-Dichloropropene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2,3-Trichlorobenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2,3-Trichloropropane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2,4,5-Tetramethylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2,4-Trichlorobenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2,4-Trimethylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2-Dibromo-3-chloropropane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2-Dibromoethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2-Dichlorobenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2-Dichloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,2-Dichloropropane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,3,5-Trimethylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,3-Dichlorobenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,3-dichloropropane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 1,4-Dichlorobenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 2,2-Dichloropropane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 2-Butanone | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 2-Chloroethyl vinyl ether | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 2-Chlorotoluene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 2-Hexanone | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 2-Propanol | U | 50 | 0 | 0 | 0 | | | | | | |
| 4-Chlorotoluene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 4-Isopropyltoluene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| 4-Methyl-2-pentanone | U | 1.0 | 0 | 0 | 0 | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation li
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted reco
U Indicates the compound was analyzed for but not detecte

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

| Sample ID: LCS082806BY | SampType: LCS | TestCode: Full8260_W | Units: µg/L | Prep Date: | RunNo: 20119 |
|---|---|---|---|---|---|
| Client ID: LCSW | Batch ID: R20119 | TestNo: SW8260B | | Analysis Date: 8/28/2006 | SeqNo: 244604 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetone | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Acrolein | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Acrylonitrile | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Benzene | 56 | 1.0 | 50.00 | 0 | 111 | 53 | 135 | | | | |
| Bromobenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Bromochloromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Bromodichloromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Bromoform | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Bromomethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Carbon disulfide | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Carbon tetrachloride | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Chlorobenzene | 64 | 1.0 | 50.00 | 0 | 128 | 58 | 142 | | | | |
| Chlorodifluoromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Chloroethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Chloroform | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Chloromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| cis-1,2-Dichloroethene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| cis-1,3-Dichloropropene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Dibromochloromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Dibromomethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Dichlorodifluoromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Diisopropyl ether | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Ethanol | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Ethyl acetate | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Ethylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Freon-114 | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Hexachlorobutadiene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Isopropyl acetate | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Isopropylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| m,p-Xylene | U | 2.0 | 0 | 0 | 0 | | | | | | |
| Methyl tert-butyl ether | U | 1.0 | 0 | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20119**

| Sample ID: LCS082806BY | SampType: LCS | TestCode: Full8260_W | Units: µg/L | Prep Date: | RunNo: 20119 |
|---|---|---|---|---|---|
| Client ID: LCSW | Batch ID: R20119 | TestNo: SW8260B | | Analysis Date: 8/28/2006 | SeqNo: 244604 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene chloride | 19 | 1.0 | 0 | 0 | 0 | | | | | | B |
| Naphthalene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| n-Butyl acetate | U | 1.0 | 0 | 0 | 0 | | | | | | |
| n-Butylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| n-Propyl acetate | U | 1.0 | 0 | 0 | 0 | | | | | | |
| n-Propylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| o-Xylene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| p-Diethylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| p-Ethyltoluene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| sec-Butylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Styrene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| t-Butyl alcohol | U | 1.0 | 0 | 0 | 0 | | | | | | |
| tert-Butylbenzene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Tetrachloroethene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Toluene | 59 | 1.0 | 50.00 | 0 | 118 | 50 | 142 | | | | |
| trans-1,2-Dichloroethene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| trans-1,3-Dichloropropene | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Trichloroethene | 48 | 1.0 | 50.00 | 0 | 95.6 | 53 | 131 | | | | |
| Trichlorofluoromethane | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Vinyl acetate | U | 1.0 | 0 | 0 | 0 | | | | | | |
| Vinyl chloride | U | 1.0 | 0 | 0 | 0 | | | | | | |

**Qualifiers:**

- E Value above quantitation range
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- J Analyte detected below quantitation li
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted reco
- U Indicates the compound was analyzed for but not detecte

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID:** 11897

| Sample ID: MB-11897 | SampType: MBLK | TestCode: Dry8270_Soil | Units: µg/Kg | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/29/2006 | SeqNo: 243771 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | U | 120 | | | | | | | | | |
| 1,2-Dichlorobenzene | U | 120 | | | | | | | | | |
| 1,3-Dichlorobenzene | U | 120 | | | | | | | | | |
| 1,4-Dichlorobenzene | U | 120 | | | | | | | | | |
| 2,4,5-Trichlorophenol | U | 120 | | | | | | | | | |
| 2,4,6-Trichlorophenol | U | 120 | | | | | | | | | |
| 2,4-Dichlorophenol | U | 120 | | | | | | | | | |
| 2,4-Dimethylphenol | U | 120 | | | | | | | | | |
| 2,4-Dinitrophenol | U | 120 | | | | | | | | | |
| 2,4-Dinitrotoluene | U | 120 | | | | | | | | | |
| 2,6-Dinitrotoluene | U | 120 | | | | | | | | | |
| 2-Chloronaphthalene | U | 120 | | | | | | | | | |
| 2-Chlorophenol | U | 120 | | | | | | | | | |
| 2-Methylnaphthalene | U | 120 | | | | | | | | | |
| 2-Methylphenol | U | 120 | | | | | | | | | |
| 2-Nitroaniline | U | 120 | | | | | | | | | |
| 2-Nitrophenol | U | 120 | | | | | | | | | |
| 3,3'-Dichlorobenzidine | U | 120 | | | | | | | | | |
| 3+4-Methylphenol | U | 120 | | | | | | | | | |
| 3-Nitroaniline | U | 120 | | | | | | | | | |
| 4,6-Dinitro-2-methylphenol | U | 120 | | | | | | | | | |
| 4-Bromophenyl phenyl ether | U | 120 | | | | | | | | | |
| 4-Chloro-3-methylphenol | U | 120 | | | | | | | | | |
| 4-Chloroaniline | U | 120 | | | | | | | | | |
| 4-Chlorophenyl phenyl ether | U | 120 | | | | | | | | | |
| 4-Nitroaniline | U | 120 | | | | | | | | | |
| 4-Nitrophenol | U | 120 | | | | | | | | | |
| Acenaphthene | U | 120 | | | | | | | | | |
| Acenaphthylene | U | 120 | | | | | | | | | |
| Aniline | U | 120 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 11897**

| Sample ID: MB-11897 | SampType: MBLK | TestCode: Dry8270_Soil | Units: µg/Kg | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/29/2006 | SeqNo: 243771 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthracene | U | 120 | | | | | | | | | |
| Azobenzene | U | 120 | | | | | | | | | |
| Benzidine | U | 120 | | | | | | | | | |
| Benzo(a)anthracene | U | 120 | | | | | | | | | |
| Benzo(a)pyrene | U | 120 | | | | | | | | | |
| Benzo(b)fluoranthene | U | 120 | | | | | | | | | |
| Benzo(g,h,i)perylene | U | 120 | | | | | | | | | |
| Benzo(k)fluoranthene | U | 120 | | | | | | | | | |
| Benzoic acid | U | 120 | | | | | | | | | |
| Benzyl alcohol | U | 120 | | | | | | | | | |
| Bis(2-chloroethoxy)methane | U | 120 | | | | | | | | | |
| Bis(2-chloroethyl)ether | U | 120 | | | | | | | | | |
| Bis(2-chloroisopropyl)ether | U | 120 | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | U | 120 | | | | | | | | | |
| Butyl benzyl phthalate | U | 120 | | | | | | | | | |
| Carbazole | U | 120 | | | | | | | | | |
| Chrysene | U | 120 | | | | | | | | | |
| Dibenzo(a,h)anthracene | U | 120 | | | | | | | | | |
| Dibenzofuran | U | 120 | | | | | | | | | |
| Diethyl phthalate | U | 120 | | | | | | | | | |
| Dimethyl phthalate | U | 120 | | | | | | | | | |
| Di-n-butyl phthalate | U | 120 | | | | | | | | | |
| Di-n-octyl phthalate | U | 120 | | | | | | | | | |
| Fluoranthene | U | 120 | | | | | | | | | |
| Fluorene | U | 120 | | | | | | | | | |
| Hexachlorobenzene | U | 120 | | | | | | | | | |
| Hexachlorobutadiene | U | 120 | | | | | | | | | |
| Hexachlorocyclopentadiene | U | 120 | | | | | | | | | |
| Hexachloroethane | U | 120 | | | | | | | | | |
| Indeno(1,2,3-c,d)pyrene | U | 120 | | | | | | | | | |
| Isophorone | U | 120 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 11897**

| Sample ID: MB-11897 | SampType: MBLK | TestCode: Dry8270_Soil | Units: µg/Kg | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/29/2006 | SeqNo: 243771 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | U | 120 | | | | | | | | | |
| Nitrobenzene | U | 120 | | | | | | | | | |
| N-Nitrosodimethylamine | U | 120 | | | | | | | | | |
| N-Nitrosodi-n-propylamine | U | 120 | | | | | | | | | |
| N-Nitrosodiphenylamine | U | 120 | | | | | | | | | |
| Pentachlorophenol | U | 120 | | | | | | | | | |
| Phenanthrene | U | 120 | | | | | | | | | |
| Phenol | U | 120 | | | | | | | | | |
| Pyrene | U | 120 | | | | | | | | | |
| Pyridine | U | 120 | | | | | | | | | |

| Sample ID: **LCS-11897** | SampType: **LCS** | TestCode: **Dry8270_Soil** | Units: **µg/Kg** | Prep Date: **8/27/2006** | RunNo: **20070** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **11897** | TestNo: **SW8270D** | **SW3550A** | Analysis Date: **8/29/2006** | SeqNo: **243772** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 3000 | 120 | 3999 | 0 | 75.0 | 23 | 122 | | | | |
| 1,4-Dichlorobenzene | 3200 | 120 | 3999 | 0 | 79.6 | 22 | 124 | | | | |
| 2,4-Dinitrotoluene | 2300 | 120 | 3999 | 0 | 58.4 | 21 | 119 | | | | |
| 2-Chlorophenol | 3000 | 120 | 3999 | 0 | 75.6 | 23 | 125 | | | | |
| 4-Chloro-3-methylphenol | 3100 | 120 | 3999 | 0 | 77.2 | 28 | 121 | | | | |
| 4-Nitrophenol | 1500 | 120 | 3999 | 0 | 37.8 | 15 | 115 | | | | |
| Acenaphthene | 2900 | 120 | 3999 | 0 | 73.4 | 24 | 124 | | | | |
| N-Nitrosodi-n-propylamine | 3800 | 120 | 3999 | 0 | 95.9 | 25 | 127 | | | | |
| Pentachlorophenol | 850 | 120 | 3999 | 0 | 21.3 | 14 | 112 | | | | |
| Phenol | 2300 | 120 | 3999 | 0 | 58.5 | 19 | 125 | | | | |
| Pyrene | 3500 | 120 | 3999 | 0 | 88.3 | 31 | 125 | | | | |

| Sample ID: **MB-11897** | SampType: **MBLK** | TestCode: **Dry8270BN_S** | Units: **µg/Kg** | Prep Date: **8/27/2006** | RunNo: **20070** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **11897** | TestNo: **SW8270D** | **SW3550A** | Analysis Date: **8/29/2006** | SeqNo: **243841** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:**

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- S Spike Recovery outside accepted reco
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**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 11897**

| Sample ID: MB-11897 | SampType: MBLK | TestCode: Dry8270BN_S | Units: µg/Kg | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/29/2006 | SeqNo: 243841 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | U | 120 | | | | | | | | | |
| 1,2-Dichlorobenzene | U | 120 | | | | | | | | | |
| 1,3-Dichlorobenzene | U | 120 | | | | | | | | | |
| 1,4-Dichlorobenzene | U | 120 | | | | | | | | | |
| 2,4-Dinitrotoluene | U | 120 | | | | | | | | | |
| 2,6-Dinitrotoluene | U | 120 | | | | | | | | | |
| 2-Chloronaphthalene | U | 120 | | | | | | | | | |
| 2-Methylnaphthalene | U | 120 | | | | | | | | | |
| 2-Nitroaniline | U | 120 | | | | | | | | | |
| 3,3´-Dichlorobenzidine | U | 120 | | | | | | | | | |
| 3-Nitroaniline | U | 120 | | | | | | | | | |
| 4-Bromophenyl phenyl ether | U | 120 | | | | | | | | | |
| 4-Chloroaniline | U | 120 | | | | | | | | | |
| 4-Chlorophenyl phenyl ether | U | 120 | | | | | | | | | |
| 4-Nitroaniline | U | 150 | | | | | | | | | |
| Acenaphthene | U | 120 | | | | | | | | | |
| Acenaphthylene | U | 120 | | | | | | | | | |
| Aniline | U | 120 | | | | | | | | | |
| Anthracene | U | 120 | | | | | | | | | |
| Azobenzene | U | 120 | | | | | | | | | |
| Benzidine | U | 120 | | | | | | | | | |
| Benzo(a)anthracene | U | 120 | | | | | | | | | |
| Benzo(a)pyrene | U | 120 | | | | | | | | | |
| Benzo(b)fluoranthene | U | 120 | | | | | | | | | |
| Benzo(g,h,i)perylene | U | 120 | | | | | | | | | |
| Benzo(k)fluoranthene | U | 120 | | | | | | | | | |
| Benzyl alcohol | U | 120 | | | | | | | | | |
| Bis(2-chloroethoxy)methane | U | 120 | | | | | | | | | |
| Bis(2-chloroethyl)ether | U | 120 | | | | | | | | | |
| Bis(2-chloroisopropyl)ether | U | 120 | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | U | 120 | | | | | | | | | |

**Qualifiers:**

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- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted reco
- U Indicates the compound was analyzed for but not detecte

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 11897**

| Sample ID: MB-11897 | SampType: MBLK | TestCode: Dry8270BN_S | Units: µg/Kg | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/29/2006 | SeqNo: 243841 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Butyl benzyl phthalate | U | 120 | | | | | | | | | |
| Carbazole | U | 120 | | | | | | | | | |
| Chrysene | U | 120 | | | | | | | | | |
| Dibenzo(a,h)anthracene | U | 120 | | | | | | | | | |
| Dibenzofuran | U | 120 | | | | | | | | | |
| Diethyl phthalate | U | 120 | | | | | | | | | |
| Dimethyl phthalate | U | 120 | | | | | | | | | |
| Di-n-butyl phthalate | U | 120 | | | | | | | | | |
| Di-n-octyl phthalate | U | 120 | | | | | | | | | |
| Fluoranthene | U | 120 | | | | | | | | | |
| Fluorene | U | 120 | | | | | | | | | |
| Hexachlorobenzene | U | 120 | | | | | | | | | |
| Hexachlorobutadiene | U | 120 | | | | | | | | | |
| Hexachlorocyclopentadiene | U | 120 | | | | | | | | | |
| Hexachloroethane | U | 120 | | | | | | | | | |
| Indeno(1,2,3-c,d)pyrene | U | 120 | | | | | | | | | |
| Isophorone | U | 120 | | | | | | | | | |
| Naphthalene | U | 120 | | | | | | | | | |
| Nitrobenzene | U | 120 | | | | | | | | | |
| N-Nitrosodimethylamine | U | 120 | | | | | | | | | |
| N-Nitrosodi-n-propylamine | U | 120 | | | | | | | | | |
| N-Nitrosodiphenylamine | U | 120 | | | | | | | | | |
| Phenanthrene | U | 120 | | | | | | | | | |
| Pyrene | U | 120 | | | | | | | | | |
| Pyridine | U | 120 | | | | | | | | | |

| Sample ID: **LCS-11897** | SampType: **LCS** | TestCode: **Dry8270BN_S** | Units: **µg/Kg** | Prep Date: **8/27/2006** | RunNo: **20070** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **11897** | TestNo: **SW8270D** | **SW3550A** | Analysis Date: **8/29/2006** | SeqNo: **243842** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 3000 | 120 | 3999 | 0 | 75.0 | 23 | 122 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 11897**

| Sample ID: LCS-11897 | SampType: LCS | TestCode: Dry8270BN_S | Units: µg/Kg | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/29/2006 | SeqNo: 243842 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 3200 | 120 | 3999 | 0 | 79.6 | 22 | 124 | | | | |
| 2,4-Dinitrotoluene | 2300 | 120 | 3999 | 0 | 58.4 | 21 | 119 | | | | |
| Acenaphthene | 2900 | 120 | 3999 | 0 | 73.4 | 24 | 124 | | | | |
| N-Nitrosodi-n-propylamine | 3800 | 120 | 3999 | 0 | 95.9 | 25 | 127 | | | | |
| Pyrene | 3500 | 120 | 3999 | 0 | 88.3 | 31 | 125 | | | | |

| Sample ID: 0608210-19A-MS | SampType: MS | TestCode: Dry8270BN_S | Units: µg/Kg-dry | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/30/2006 | SeqNo: 243844 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 3300 | 120 | 4125 | 0 | 79.7 | 23 | 122 | | | | |
| 1,4-Dichlorobenzene | 3400 | 120 | 4125 | 0 | 82.9 | 22 | 124 | | | | |
| 2,4-Dinitrotoluene | 2500 | 120 | 4125 | 0 | 61.7 | 21 | 119 | | | | |
| Acenaphthene | 3400 | 120 | 4125 | 0 | 82.4 | 24 | 124 | | | | |
| N-Nitrosodi-n-propylamine | 4300 | 120 | 4125 | 0 | 104 | 25 | 127 | | | | |
| Pyrene | 3900 | 120 | 4125 | 0 | 94.3 | 31 | 125 | | | | |

| Sample ID: 0608210-19A-MSD | SampType: MSD | TestCode: Dry8270BN_S | Units: µg/Kg-dry | Prep Date: 8/27/2006 | RunNo: 20070 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 11897 | TestNo: SW8270D | SW3550A | Analysis Date: 8/30/2006 | SeqNo: 243845 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 3200 | 120 | 4125 | 0 | 78.7 | 23 | 122 | 3286 | 1.22 | 20 | |
| 1,4-Dichlorobenzene | 3400 | 120 | 4125 | 0 | 81.5 | 22 | 124 | 3421 | 1.70 | 20 | |
| 2,4-Dinitrotoluene | 2600 | 120 | 4125 | 0 | 62.2 | 21 | 119 | 2546 | 0.802 | 20 | |
| Acenaphthene | 3200 | 120 | 4125 | 0 | 78.6 | 24 | 124 | 3399 | 4.66 | 20 | |
| N-Nitrosodi-n-propylamine | 4200 | 120 | 4125 | 0 | 101 | 25 | 127 | 4299 | 3.19 | 20 | |
| Pyrene | 3800 | 120 | 4125 | 0 | 91.2 | 31 | 125 | 3891 | 3.30 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20053**

| Sample ID: PBS | SampType: MBLK | TestCode: TAGM_MET_ | Units: mg/Kg | Prep Date: | RunNo: 20053 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R20053 | TestNo: SW6010B | | Analysis Date: 8/29/2006 | SeqNo: 243065 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | U | 0.500 | | | | | | | | | |
| Barium | U | 0.400 | | | | | | | | | |
| Cadmium | U | 0.200 | | | | | | | | | |
| Chromium | U | 0.400 | | | | | | | | | |
| Lead | U | 0.300 | | | | | | | | | |
| Selenium | U | 0.500 | | | | | | | | | |
| Silver | U | 0.400 | | | | | | | | | |

| Sample ID: **LCSS** | SampType: **LCS** | TestCode: **TAGM_MET_** | Units: **mg/Kg** | Prep Date: | RunNo: **20053** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **R20053** | TestNo: **SW6010B** | | Analysis Date: **8/29/2006** | SeqNo: **243066** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 40.8 | 0.500 | 40.00 | 0 | 102 | 68 | 125 | | | | |
| Barium | 41.3 | 0.400 | 40.00 | 0 | 103 | 69 | 123 | | | | |
| Cadmium | 40.7 | 0.200 | 40.00 | 0 | 102 | 67 | 123 | | | | |
| Chromium | 41.8 | 0.400 | 40.00 | 0 | 105 | 68 | 124 | | | | |
| Lead | 41.5 | 0.300 | 40.00 | 0 | 104 | 66 | 125 | | | | |
| Selenium | 41.2 | 0.500 | 40.00 | 0 | 103 | 67 | 124 | | | | |
| Silver | 39.6 | 0.400 | 40.00 | 0 | 99.0 | 69 | 121 | | | | |

| Sample ID: **0608214-11A MS** | SampType: **MS** | TestCode: **TAGM_MET_** | Units: **mg/Kg-dry** | Prep Date: | RunNo: **20053** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **R20053** | TestNo: **SW6010B** | | Analysis Date: **8/29/2006** | SeqNo: **243095** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 21.5 | 0.549 | 21.95 | 3.658 | 81.3 | 68 | 125 | | | | |
| Barium | 85.9 | 0.439 | 21.95 | 76.02 | 44.9 | 69 | 123 | | | | S |
| Cadmium | 18.5 | 0.220 | 21.95 | 0.6971 | 81.3 | 67 | 123 | | | | |
| Chromium | 33.2 | 0.439 | 21.95 | 18.30 | 68.0 | 68 | 124 | | | | |
| Lead | 74.1 | 0.329 | 21.95 | 65.24 | 40.6 | 66 | 125 | | | | S |
| Selenium | 15.3 | 0.549 | 21.95 | 0 | 69.5 | 67 | 124 | | | | |
| Silver | 17.6 | 0.439 | 21.95 | 0 | 80.3 | 69 | 121 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20053**

| Sample ID: 0608214-11A MSD | SampType: MSD | TestCode: TAGM_MET_ | Units: mg/Kg-dry | Prep Date: | RunNo: 20053 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R20053 | TestNo: SW6010B | | Analysis Date: 8/29/2006 | SeqNo: 243096 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 21.9 | 0.549 | 21.95 | 3.658 | 83.2 | 68 | 125 | 21.50 | 1.97 | 20 | |
| Barium | 86.3 | 0.439 | 21.95 | 76.02 | 46.9 | 69 | 123 | 85.87 | 0.507 | 20 | S |
| Cadmium | 18.6 | 0.220 | 21.95 | 0.6971 | 81.5 | 67 | 123 | 18.53 | 0.264 | 20 | |
| Chromium | 33.5 | 0.439 | 21.95 | 18.30 | 69.4 | 68 | 124 | 33.23 | 0.893 | 20 | |
| Lead | 74.3 | 0.329 | 21.95 | 65.24 | 41.3 | 66 | 125 | 74.14 | 0.228 | 20 | S |
| Selenium | 15.0 | 0.549 | 21.95 | 0 | 68.3 | 67 | 124 | 15.26 | 1.74 | 20 | |
| Silver | 17.5 | 0.439 | 21.95 | 0 | 79.7 | 69 | 121 | 17.62 | 0.686 | 20 | |

S Qualifier - Sample matrix interference KBK

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation li |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits | S | Spike Recovery outside accepted reco |
| U | Indicates the compound was analyzed for but not detecte | | | | |

**CLIENT:** P.W. Grosser Consulting
**Work Order:** 0608273
**Project:** PEN-Glenwood Landing

# ANALYTICAL QC SUMMARY REPORT

**BatchID: R20064**

| Sample ID: PBS | SampType: MBLK | TestCode: DRYHG_S | Units: mg/Kg | Prep Date: | RunNo: 20064 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R20064 | TestNo: SW7471B | | Analysis Date: 8/29/2006 | SeqNo: 243646 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | U | 0.0100 | | | | | | | | | |

| Sample ID: LCSS | SampType: LCS | TestCode: DRYHG_S | Units: mg/Kg | Prep Date: | RunNo: 20064 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R20064 | TestNo: SW7471B | | Analysis Date: 8/29/2006 | SeqNo: 243647 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.194 | 0.0100 | 0.2000 | 0 | 96.8 | 71.1 | 126 | | | | |

| Sample ID: 0608206-06A MS | SampType: MS | TestCode: DRYHG_S | Units: mg/Kg-dry | Prep Date: | RunNo: 20064 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R20064 | TestNo: SW7471B | | Analysis Date: 8/29/2006 | SeqNo: 243665 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.762 | 0.0175 | 0.3496 | 0.4942 | 76.7 | 71.1 | 126 | | | | |

| Sample ID: 0608206-06A MSD | SampType: MSD | TestCode: DRYHG_S | Units: mg/Kg-dry | Prep Date: | RunNo: 20064 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R20064 | TestNo: SW7471B | | Analysis Date: 8/29/2006 | SeqNo: 243666 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.775 | 0.0175 | 0.3496 | 0.4942 | 80.5 | 71.1 | 126 | 0.7623 | 1.71 | 20 | |

**Qualifiers:**

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation li
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted reco
- U Indicates the compound was analyzed for but not detecte

# APPENDIX D

## Soil Boring Logs

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 28, 2006 | | | | DATE FINISHED: August 28, 2006 | | | | BORING NUMBER: **SB-1** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 16' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 2.1 | | | | 24" | | | Dry, medium-coarse, brown sand. Little pebbles. No odor. |
| 2.5' - 5' | 13.8 | | | | | | | Dry, medium-fine, dark brown sand. No odor. |
| 5' - 7.5' | 16.8 | | | | 48" | | | Dry, medium-fine, brown sand. Trace pebbles. No odor. |
| 7.5' - 10' | 15.8 | | | | | | | Dry, medium-coarse, light brown sand. Trace pebbles. No odor. |
| 10' - 12.5' | 16.0 | | | | 48" | | | Dry, medium, light sand. Trace pebbles. No odor. |
| 12.5' - 15' | 15.4 | | | | | | | Dry, fine, very light sand. No odor. |
| 15' - 17.5' | 14.5 | | | | 57" | | | Wet, fine, very light sand. No odor. Groundwater at 16'. |
| 17.5' - 20' | 14.0 | | | | | | | Wet, fine, very light sand. No odor. |
| 20' - 22.5' | 7.8 | | | | 58" | | | Wet, fine, light grey sand. No odor. |
| 22.5' - 25' | 325 | | | | | | | Wet, fine, light sand. No odor. |
| 25' - 27.5' | 10.2 | | | | 60" | | | Wet, fine, light sand. No odor. |
| 27.5' - 30' | 10.4 | | | | | | | Wet, fine, light sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 28, 2006 | | | | DATE FINISHED: August 28, 2006 | | | | BORING NUMBER: **SB-2** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 18' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 20.2 | | | | 48" | | | Dry, medium-fine, dark brown sand. No odor. |
| 2.5' - 5' | 15.2 | | | | | | | Dry, medium-fine, dark brown sand. Little pebbles. No odor. |
| 5' - 7.5' | | | | | none | | | No recovery. |
| 7.5' - 10' | | | | | | | | No recovery. |
| 10' - 12.5' | 6.0 | | | | 60" | | | Dry, medium-fine, brown sand. No odor. |
| 12.5' - 15' | 6.9 | | | | | | | Dry, medium-fine, light brown sand. No odor. |
| 15' - 17.5' | 6.9 | | | | 52" | | | Dry, medium-fine, brown sand. Little pebbles. No odor. |
| 17.5' - 20' | 8.0 | | | | | | | Wet, medium-fine, light brown sand. No odor. Groundwater at 18'. |
| 20' - 22.5' | 17.8 | | | | 60" | | | Wet, fine, light sand. No odor. |
| 22.5' - 25' | 14 | | | | | | | Wet, fine, light brown sand. No odor. |
| 25' - 27.5' | 10.8 | | | | 60" | | | Wet, medium-fine, light sand. No odor. |
| 27.5' - 30' | 14.2 | | | | | | | Wet, medium-fine, light sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 28, 2006 | | | | DATE FINISHED: August 28, 2006 | | | | BORING NUMBER: **SB-3** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 18' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 9.2 | | | | 36" | | | Dry, medium-fine, brown sand. No odor. |
| 2.5' - 5' | 11.5 | | | | | | | Dry, medium-coarse, dark brown sand. No odor. |
| 5' - 7.5' | 10.8 | | | | 50" | | | Dry, medium-fine, dark brown sand. Trace pebbles. No odor. |
| 7.5' - 10' | 11.5 | | | | | | | Moist, brown clay. No odor. |
| 10' - 12.5' | 14.1 | | | | 44" | | | Moist, medium-fine, light brown sand. Trace pebbles. No odor. |
| 12.5' - 15' | 14.4 | | | | | | | Moist, medium-fine, light brown sand. No odor. |
| 15' - 17.5' | 10.5 | | | | 48" | | | Moist, medium-fine, light brown sand. No odor. |
| 17.5' - 20' | 12.0 | | | | | | | Wet, medium-fine, light sand. No odor. Groundwater at 18'. |
| 20' - 22.5' | 12.1 | | | | 36" | | | Wet, medium-fine, light sand. No odor. |
| 22.5' - 25' | 12.1 | | | | | | | Wet, medium-fine, light sand. No odor. |
| 25' - 27.5' | 9.1 | | | | 60" | | | Wet, fine, light sand. No odor. |
| 27.5' - 30' | 9.2 | | | | | | | Wet, fine, light sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 28, 2006 | | | | DATE FINISHED: August 30, 2006 | | | | BORING NUMBER: **SB-4** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 20' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 7.6 | | | | 36" | | | Dry, medium-fine, brown sand. Some brick. Trace pebbles. No odor. |
| 2.5' - 5' | 8.0 | | | | | | | Moist, medium-fine, brown sand. Little pebbles. No odor. |
| 5' - 7.5' | 9.4 | | | | 12" | | | Moist, medium-fine, dark brown sand. No odor. |
| 7.5' - 10' | 9.5 | | | | | | | Moist, medium-fine, dark brown sand. No odor. |
| 10' - 12.5' | 7.1 | | | | 56" | | | Dry, medium-fine, dark brown sand. Trace pebbles. No odor. |
| 12.5' - 15' | 7.8 | | | | | | | Dry, medium-fine, light brown sand. No odor. |
| 15' - 17.5' | 12.2 | | | | 54" | | | Moist, medium-fine, brown sand. Trace pebbles. No odor. |
| 17.5' - 20' | 12.1 | | | | | | | Moist, medium-fine, light sand. No odor. |
| 20' - 22.5' | 0.0 | | | | 56" | | | Wet, medium-fine, light sand. No odor. Groundwater at 20'. |
| 22.5' - 25' | 0.0 | | | | | | | Wet, medium-fine, light sand. No odor. |
| 25' - 27.5' | 8.9 | | | | 60" | | | Wet, medium-fine, light sand. No odor. |
| 27.5' - 30' | 15.8 | | | | | | | Wet, fine, light red sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 30, 2006 | | | | DATE FINISHED: August 30, 2006 | | | | BORING NUMBER: **SB-5** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 17' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 4.5 | | | | 30" | | | Dry, medium-fine, brown sand. Little pebbles. No odor. |
| 2.5' - 5' | 5.1 | | | | | | | Dry, medium-fine, light brown sand. Some brick. Trace pebbles. No odor. |
| 5' - 7.5' | 6.7 | | | | 46" | | | Dry, medium-fine, brown sand. Trace brick. Trace pebbles. No odor. |
| 7.5' - 10' | 5.0 | | | | | | | Dry, medium-fine, brown sand. No odor. |
| 10' - 12.5' | 10.7 | | | | 3" | | | Dry, medium-fine, brown sand. No odor. |
| 12.5' - 15' | 36.7 | | | | | | | Dry, medium-fine, brown sand. No odor. |
| 15' - 17.5' | 28.2 | | | | 56" | | | Wet, medium-fine, light sand. No odor. Groundwater at 17' |
| 17.5' - 20' | 8.6 | | | | | | | Wet, medium-fine, light sand. No odor. |
| 20' - 22.5' | 15.6 | | | | 60" | | | Wet, fine, light sand. No odor. |
| 22.5' - 25' | 10.2 | | | | | | | Wet, fine, light sand. No odor. |
| 25' - 27.5' | 10.0 | | | | 58" | | | Wet, medium-fine, light sand. No odor. |
| 27.5' - 30' | 9.2 | | | | | | | Wet, fine, light red sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 30, 2006 | | | | DATE FINISHED: August 30, 2006 | | | | BORING NUMBER: **SB-6** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 20' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 5.6 | | | | 34" | | | Dry, medium-fine, brown sand. Little pebbles. No odor. |
| 2.5' - 5' | 0.0 | | | | | | | Dry, medium-fine, dark brown sand. Little pebbles. No odor. |
| 5' - 7.5' | 0.0 | | | | 14" | | | Dry, medium-fine, brown sand. Trace pebbles. No odor. |
| 7.5' - 10' | 0.0 | | | | | | | Dry, medium-fine, brown sand. Trace pebbles. No odor. |
| 10' - 12.5' | 0.0 | | | | 60" | | | Dry, medium-fine, light brown sand. No odor. |
| 12.5' - 15' | 0.0 | | | | | | | Dry, medium-fine, light sand. No odor. |
| 15' - 17.5' | 0.0 | | | | 46" | | | Moist, medium-fine, brown sand. No odor. |
| 17.5' - 20' | 0.0 | | | | | | | Moist, medium-fine, light sand. No odor. |
| 20' - 22.5' | 0.0 | | | | 55" | | | Wet, medium-fine, light sand. No odor. Groundwater at 20'. |
| 22.5' - 25' | 0.0 | | | | | | | Wet, medium-fine, light sand. No odor. |
| 25' - 27.5' | 0.0 | | | | 60" | | | Wet, medium-fine, light brown sand. No odor. |
| 27.5' - 30' | 0.0 | | | | | | | Wet, medium-fine, light sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 30, 2006 | | | | DATE FINISHED: August 30, 2006 | | | | BORING NUMBER: **SB-7** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Asphalt | | | | |
| WATER LEVEL: 15' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | 0.0 | | | | 30" | | | Dry, medium-fine, brown sand. Trace pebbles. No odor. |
| 2.5' - 5' | 0.0 | | | | | | | Dry, medium-fine, dark brown sand. No odor. |
| 5' - 7.5' | 0.0 | | | | 16" | | | Dry, medium-fine, brown sand. No odor. |
| 7.5' - 10' | 0.0 | | | | | | | Dry, medium-fine, brown sand. Slight septic odor. |
| 10' - 12.5' | 0.0 | | | | 36" | | | Dry, medium-fine, brown sand. No odor. |
| 12.5' - 15' | 8.1 | | | | | | | Moist, medium-fine, light sand. Slight septic odor. |
| 15' - 17.5' | 8.1 | | | | 48" | | | Wet, fine, light sand. Slight septic odor. Groundwater at 15'. |
| 17.5' - 20' | 20.1 | | | | | | | Wet, fine, light grey sand. Septic odor. |
| 20' - 22.5' | 0.0 | | | | 60" | | | Wet, fine, light sand. Slight septic odor. |
| 22.5' - 25' | 0.0 | | | | | | | Wet, fine, light sand. No odor. |
| 25' - 27.5' | 0.0 | | | | 60" | | | Wet, fine, light sand. No odor. |
| 27.5' - 30' | 0.0 | | | | | | | Wet, fine, light sand. No odor. Boring terminated at 30'. |

N/A - Not Applicable
NA - Not Available

**BORING REPORT**

**P.W. Grosser Consulting**
**630 Johnson Avenue, Suite 7**
**Bohemia, New York 11716**

**SHEET 1 OF 1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE STARTED: August 30, 2006 | | | | DATE FINISHED: August 30, 2006 | | | | BORING NUMBER: **SB-8** |
| CLIENT: Realty Management | | | | | | | | PROJECT NUMBER: PEN 0001 |
| PROJECT NAME & LOCATION: Subsurface Investigation - 1 Shore Road, Glenwood Landing, New York | | | | | | | | PREPARED BY: John Eichler |
| DRILLING CONTRACTOR: Associated Environmental, Inc. | | | | LOGGED BY: John Eichler | | | | DRILLER: John Schretzmeier |
| | | SOIL SAMPLER: | | CORE | | MON. WELL (MW) | | METHOD: Track-mounted Geoprobe® |
| EQUIPMENT | CASING: | NA | | BARREL | AUGER | PIPE | CAP | |
| TYPE: | N/A | macro-core | | | | | | |
| SIZE: | N/A | 2" x 60" | | | | | | |
| HAMMER WT/FALL | N/A | | | BIT: | | | | |
| SURFACE ELEVATION: NA | | | | SURFACE CONDITIONS: Open Leaching Pool | | | | |
| WATER LEVEL: 9' | | AFTER | | HRS. | | FT. AFTER | | HRS. |

| DEPTH BELOW GRADE | PID READINGS (ppm) | SAMPLE TYPE AND NO. | SAMPLE DEPTH (FROM-TO) | MOISTURE CONTENT | RECOVERY | BLOWS/6" OR CORE TIME | UNIFIED SOIL CLASS. | DESCRIPTION & REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=30-50% |
|---|---|---|---|---|---|---|---|---|
| 0' - 2.5' | | | | | | | | Boring advanced through leaching pool which had been filled to 5' below grade. |
| 2.5' - 5' | | | | | | | | |
| 5' - 7.5' | 0.0 | | | | 24" | | | Dry, medium-coarse, brown sand and gravel. No odor. |
| 7.5' - 10' | 0.0 | | | | | | | Wet, medium-coarse, brown sand. No odor. Groundwater at 9'. |
| 10' - 13' | 0.0 | | | | 50" | | | Wet, medium-coarse, dark brown sand. Little pebbles. Slight septic odor. |
| 13' - 15' | 0.0 | | | | | | | Wet, fine, light sand. Slight septic odor. |
| 15' - 17.5' | 0.0 | | | | 60" | | | Wet, fine, light sand. Slight septic odor. |
| 17.5' - 20' | 0.0 | | | | | | | Wet, fine, light sand. No odor. Boring terminated at 20'. |

N/A - Not Applicable
NA - Not Available

# APPENDIX E

## Groundwater Sampling Sheets

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-1, 45'-50'** | | |
| SAMPLING POINT | GW-1, 45'-50' | SAMPLED BY | JE |
| DATE SAMPLED | 9/1/2006 | TIME SAMPLED | 10:35 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 50 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 23 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 11.5 |
| SAMPLE APPEARANCE | slightly turbid | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/1/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min | 15 min | 20 min |
|---|---|---|---|---|---|
| pH | 7.13 | 7.07 | 6.71 | 6.46 | 6.32 |
| Cond (mS) | 0.9 | 31.6 | 32.0 | 32.2 | 31.9 |
| ORP | 131 | 140 | 125 | 134 | 136 |
| D.O. | 12.01 | 12.56 | 12.71 | 13.00 | 12.97 |
| Turb (NTU) | NR | 347 | 51.8 | 36.9 | 50.4 |
| Temp (°C) | 17.51 | 17.32 | 17.02 | 16.34 | 16.17 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-1, 30'-35'** | | |
| SAMPLING POINT | GW-1, 30'-35' | SAMPLED BY | JE |
| DATE SAMPLED | 9/1/2006 | TIME SAMPLED | 11:40 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 35 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 21 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 10.5 |
| SAMPLE APPEARANCE | turbid brown | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/1/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min | 15 min | 20 min |
|---|---|---|---|---|---|
| pH | 6.85 | 6.62 | 6.51 | 6.36 | 6.29 |
| Cond (mS) | 33.4 | 39.4 | 61.0 | 69.3 | 70.2 |
| ORP | 193 | 30 | -40 | -36 | -30 |
| D.O. | 12.67 | 12.45 | 12.08 | 11.94 | 11.90 |
| Turb (NTU) | 520 | NR | NR | NR | 427 |
| Temp (°C) | 17.59 | 17.92 | 18.41 | 18.56 | 18.98 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-1, 15'-20'** | | |
| SAMPLING POINT | GW-1, 15'-20' | SAMPLED BY | JE |
| DATE SAMPLED | 9/1/2006 | TIME SAMPLED | 12:30 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 20 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 15 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 7.5 |
| SAMPLE APPEARANCE | turbid brown | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/1/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.42 | 6.48 | 6.5 |
| Cond (mS) | 77.1 | 70.1 | 70.8 |
| ORP | -8 | -2 | -7 |
| D.O. | 12.91 | 12.11 | 12.00 |
| Turb (NTU) | NR | NR | NR |
| Temp (°C) | 18.11 | 18.2 | 18.25 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-2, 45'-50'** | | |
| SAMPLING POINT | GW-2, 45'-50' | SAMPLED BY | JE |
| DATE SAMPLED | 9/1/2006 | TIME SAMPLED | 15:15 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 50 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 17 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 8.5 |
| SAMPLE APPEARANCE | slightly turbid | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/1/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min | 15 min |
|---|---|---|---|---|
| pH | 6.81 | 6.98 | 6.90 | 6.90 |
| Cond (mS) | 45.5 | 40.2 | 44.0 | 41.8 |
| ORP | 208 | 72 | 180 | 180 |
| D.O. | 13.7 | 13.51 | 15.24 | 14.15 |
| Turb (NTU) | NR | NR | 233 | 162 |
| Temp (°C) | 15.45 | 15.41 | 14.81 | 15.10 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-2, 30'-35'** | | |
| SAMPLING POINT | GW-2, 30'-35' | SAMPLED BY | JE |
| DATE SAMPLED | 9/1/2006 | TIME SAMPLED | 15:35 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 35 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 14 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 7 |
| SAMPLE APPEARANCE | turbid brown | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/1/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.51 | 6.44 | 6.46 |
| Cond (mS) | 37.5 | 36.5 | 36.4 |
| ORP | 195 | 187 | 185 |
| D.O. | 12.9 | 12.93 | 12.89 |
| Turb (NTU) | NR | NR | NR |
| Temp (°C) | 16.44 | 16.35 | 16.39 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-2, 15'-20'** | | |
| SAMPLING POINT | GW-2, 15'-20' | SAMPLED BY | JE |
| DATE SAMPLED | 9/1/2006 | TIME SAMPLED | 15:55 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 20 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 11 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 5.5 |
| SAMPLE APPEARANCE | turbid brown | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/1/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.51 | 6.51 | 6.51 |
| Cond (mS) | 32.1 | 31.2 | 30.8 |
| ORP | 182 | 181 | 181 |
| D.O. | 12.08 | 12.09 | 12.22 |
| Turb (NTU) | NR | NR | NR |
| Temp (°C) | 16.85 | 16.81 | 16.82 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-3, 45'-50'** | | |
| SAMPLING POINT | GW-3, 45'-50' | SAMPLED BY | JE |
| DATE SAMPLED | 9/5/2006 | TIME SAMPLED | 11:05 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 50 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 15 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 7.5 |
| SAMPLE APPEARANCE | turbid brown | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/5/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.84 | 6.81 | 6.79 |
| Cond (mS) | 34.5 | 32.6 | 32.5 |
| ORP | 191 | 185 | 184 |
| D.O. | 13.47 | 13.31 | 13.3 |
| Turb (NTU) | 659 | 408 | 400 |
| Temp (°C) | 16.59 | 16.52 | 16.51 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-3, 30'-35'** | | |
| SAMPLING POINT | GW-3, 30'-35' | SAMPLED BY | JE |
| DATE SAMPLED | 9/5/2006 | TIME SAMPLED | 11:50 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 35 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 28 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 14 |
| SAMPLE APPEARANCE | slightly turbid | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/5/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min | 15 min | 20 min | 25 min |
|---|---|---|---|---|---|---|
| pH | 6.58 | 6.42 | 6.31 | 6.26 | 6.25 | 6.24 |
| Cond (mS) | 31.6 | 28.9 | 28.5 | 27.9 | 27.4 | 27.5 |
| ORP | 197 | 148 | 152 | 161 | 164 | 167 |
| D.O. | 12.62 | 12.81 | 13.17 | 13.17 | 13.16 | 13.06 |
| Turb (NTU) | 319 | NR | NR | 198 | 50.4 | 33.1 |
| Temp (°C) | 17.58 | 17.33 | 16.61 | 16.37 | 16.25 | 16.33 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-3, 15'-20'** | | |
| SAMPLING POINT | GW-3, 15'-20' | SAMPLED BY | JE |
| DATE SAMPLED | 9/5/2006 | TIME SAMPLED | 12:12 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 18 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 20 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 13 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 6.5 |
| SAMPLE APPEARANCE | turbid brown | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/5/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.27 | 6.21 | 6.20 |
| Cond (mS) | 28.3 | 30.8 | 30.6 |
| ORP | 192 | 190 | 190 |
| D.O. | 11.37 | 11.26 | 11.24 |
| Turb (NTU) | NR | NR | NR |
| Temp (°C) | 20.01 | 20.16 | 20.08 |

Note: NR - No reading. Parameter was outside the meter's detection limit

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-4, 42'-47'** | | |
| SAMPLING POINT | GW-4, 42'-47' | SAMPLED BY | JE |
| DATE SAMPLED | 8/31/2006 | TIME SAMPLED | 12:15 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | 37 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 47 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | NM Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | NM |
| SAMPLE APPEARANCE | slightly turbid | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 8/31/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min | 15 min |
|---|---|---|---|---|
| pH | 6.84 | 6.76 | 6.67 | 6.75 |
| Cond (mS) | 37 | 37.8 | 38.2 | 38.4 |
| ORP | 155 | 168 | 198 | 192 |
| D.O. | 11.05 | 13.20 | 12.07 | 11.60 |
| Turb (NTU) | 80.3 | 66.7 | 109 | 128 |
| Temp (°C) | 17.16 | 17.16 | 17.27 | 17.32 |

Notes:
NR - No reading. Parameter was outside the meter's detection limit
NM - Not measured. Very slow recharge. Flow could not be maintained.

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-4, 32'-37'** | | |
| SAMPLING POINT | GW-4, 32'-37' | SAMPLED BY | JE |
| DATE SAMPLED | 8/31/2006 | TIME SAMPLED | 12:37 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | NM feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 37 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | NM Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | NM |
| SAMPLE APPEARANCE | slightly turbid | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 8/31/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial |
|---|---|
| pH | 6.76 |
| Cond (mS) | 38.8 |
| ORP | 224 |
| D.O. | 10.65 |
| Turb (NTU) | 153 |
| Temp (°C) | 19.98 |

Notes:
NR - No reading. Parameter was outside the meter's detection limit
NM - Not measured. Very slow recharge. Flow could not be maintained.

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **GW-4, 17'-22'** | | |
| SAMPLING POINT | GW-4, 17'-22' | SAMPLED BY | JE |
| DATE SAMPLED | 8/31/2006 | TIME SAMPLED | 13:05 |
| WELL USE | Vertical profile groundwater sampling | | |
| STATIC WATER DEPTH | NM feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 22 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | NM Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | NM |
| SAMPLE APPEARANCE | slightly turbid | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 8/31/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial |
|---|---|
| pH | 6.75 |
| Cond (mS) | 38.6 |
| ORP | 206 |
| D.O. | 9.81 |
| Turb (NTU) | 106.1 |
| Temp (°C) | 19.21 |

Notes:
NR - No reading. Parameter was outside the meter's detection limit
NM - Not measured. Very slow recharge. Flow could not be maintained.

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-1** | | |
| SAMPLING POINT | MW-1 | SAMPLED BY | JE |
| DATE SAMPLED | 9/6/2006 | TIME SAMPLED | 12:41 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 18.76 feet | | |
| WELL DIAMETER | 4 Inches | | |
| TOTAL WELL DEPTH | 27.1 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 12 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 6 |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/6/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.46 | 6.50 | 6.49 |
| Cond (mS) | 23.9 | 24.8 | 25.2 |
| ORP | 160 | 151 | 150 |
| D.O. | 15.00 | 14.59 | 14.51 |
| Turb (NTU) | 16.5 | 21.8 | 23.5 |
| Temp (°C) | 16.30 | 16.30 | 16.30 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-2** | | |
| SAMPLING POINT | MW-2 | SAMPLED BY | JE |
| DATE SAMPLED | 9/6/2006 | TIME SAMPLED | 11:05 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 10.88 feet | | |
| WELL DIAMETER | 4 Inches | | |
| TOTAL WELL DEPTH | 18.2 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 12 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 6 |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/6/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.87 | 6.71 | 6.69 |
| Cond (mS) | 23.3 | 23.2 | 23.2 |
| ORP | 42 | 45 | 46 |
| D.O. | 12.78 | 12.61 | 12.6 |
| Turb (NTU) | 17.8 | 40.5 | 21.2 |
| Temp (°C) | 18.65 | 18.62 | 18.62 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-3** | | |
| SAMPLING POINT | MW-3 | SAMPLED BY | JE |
| DATE SAMPLED | 9/6/2006 | TIME SAMPLED | 10:35 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 9.48 feet | | |
| WELL DIAMETER | 4 Inches | | |
| TOTAL WELL DEPTH | 19.7 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 12 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 6 |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/6/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.56 | 6.54 | 6.53 |
| Cond (mS) | 25.6 | 26.2 | 28.1 |
| ORP | -106 | -95 | -94 |
| D.O. | 11.65 | 11.71 | 11.78 |
| Turb (NTU) | 41.2 | 52.3 | 50.1 |
| Temp (°C) | 19.65 | 19.45 | 19.31 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-4** | | |
| SAMPLING POINT | MW-4 | SAMPLED BY | JE |
| DATE SAMPLED | 9/6/2006 | TIME SAMPLED | 10:08 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 10.02 feet | | |
| WELL DIAMETER | 4 Inches | | |
| TOTAL WELL DEPTH | 19 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 12 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 6 |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/6/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.49 | 6.50 | 6.50 |
| Cond (mS) | 49.2 | 48.7 | 48.6 |
| ORP | 2 | 13 | 8 |
| D.O. | 11.62 | 11.71 | 11.78 |
| Turb (NTU) | 49.0 | 62 | 57 |
| Temp (°C) | 18.30 | 18.18 | 18.05 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-5** | | |
| SAMPLING POINT | MW-5 | SAMPLED BY | JE |
| DATE SAMPLED | 9/5/2006 | TIME SAMPLED | 10:20 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 10.78 feet | | |
| WELL DIAMETER | 4 Inches | | |
| TOTAL WELL DEPTH | 20.1 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 14 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 7 |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/5/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.12 | 6.18 | 6.25 |
| Cond (mS) | 55.1 | 54.2 | 55.8 |
| ORP | 142 | 140 | 146 |
| D.O. | 12.01 | 11.85 | 11.91 |
| Turb (NTU) | 34.5 | 38.1 | 31.2 |
| Temp (°C) | 19.24 | 19.02 | 19.10 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-6** | | |
| SAMPLING POINT | MW-6 | SAMPLED BY | JE |
| DATE SAMPLED | 9/6/2006 | TIME SAMPLED | 12:10 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 12.08 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 19.7 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | disposable bailer | SAMPLE METHOD | disposable bailer |
| PURGE RATE | NA L/min | PURGE TIME | 12 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | NA |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/6/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.82 | 6.79 | 6.79 |
| Cond (mS) | 30.6 | 30.1 | 29.8 |
| ORP | 88 | 86 | 86 |
| D.O. | 15.86 | 15.7 | 15.65 |
| Turb (NTU) | 47.5 | 52.3 | 55.8 |
| Temp (°C) | 18.91 | 18.92 | 18.99 |

# P.W. GROSSER CONSULTING, INC.

## WELL SAMPLING LOG

| | | | |
|---|---|---|---|
| SITE / PROJECT No. | 1 Shore Road., Glenwood Landing, NY / PEN 0001 | | |
| OWNER | Realty Management | | |
| SAMPLE I.D. | **MW-7** | | |
| SAMPLING POINT | MW-7 | SAMPLED BY | JE |
| DATE SAMPLED | 9/6/2006 | TIME SAMPLED | 13:09 |
| WELL USE | monitoring / observation | | |
| STATIC WATER DEPTH | 18.93 feet | | |
| WELL DIAMETER | 2 Inches | | |
| TOTAL WELL DEPTH | 29.2 feet | | |

### SAMPLING INFORMATION

| | | | |
|---|---|---|---|
| PURGE METHOD | submersible pump | SAMPLE METHOD | submersible pump |
| PURGE RATE | 0.5 L/min | PURGE TIME | 13 Min |
| CASING VOLUMES REMOVED | N/A | Liters purged | 6.5 |
| SAMPLE APPEARANCE | clear | ODORS OBSERVED | None |
| PID | NA | %LEL | NA |
| LABORATORY | American Analytical | DATE SHIPPED | 9/6/2006 |
| ANALYSIS | VOCs by EPA method 8260 | | |

### SAMPLING PARAMETERS

| | Initial | 5 min | 10 min |
|---|---|---|---|
| pH | 6.46 | 6.51 | 6.51 |
| Cond (mS) | 11.4 | 11.8 | 12.1 |
| ORP | 127 | 125 | 125 |
| D.O. | 14.25 | 14.18 | 14.18 |
| Turb (NTU) | 15.2 | 20.5 | 22.3 |
| Temp (°C) | 16.58 | 16.41 | 16.41 |

# APPENDIX F

## Soil Gas Canister Sampling Data Sheets

ECOTEST LABORATORIES INC.

377 Sheffield Ave.
North Babylon, NY 11703
tel. 631-422-5777, fax 631-422-5770, Email ECOTESTLAB@aol.com

# CANISTER SAMPLING DATA SHEET

CANISTER SERIAL NO. EcoTest 27

SAMPLE TRAIN SERIAL NO. 21

FLOW 80 sccm

This above referenced Summa can and sample train was received in good condition

DATE: 8/28/2006

CLIENT: P.W. Grosser

CLIENTS AGENT: John Eichler

SIGNED: John Eichler

Client agrees to pay all replacement costs associated with loss or damage of canister and sample train. Client acknowledges that this canister is valid for a maximum of 30 days from the date of evacuation. Client is responsibe for any vacuum loss or contamination while in clients custody.

VAC leaving EcoTest: 29" vac

Date Evacuated: 8/28/2006

VAC/PRES returned EcoTest: -5"

**CANISTER SERIAL NO.** 27

**SAMPLE TRAIN SERIAL NO.** 21

RETURNED IN GOOD CONDITION TO ECOTEST LABORATORIES INC.

**DATE:** 8/31/06 16:55

**SIGNED:** **for ECOTEST LABS.**

**ALL INFORMATION BELOW MUST BE PROVIDED BY CLIENT:**

CLIENT PW Grosser

SOURCE PEN - 1 Shore Rd, Glenwood Landing

SAMPLE SG-1

DATE SAMPLED 8-31-06

TIME SAMPLING STARTED: 0835

TIME SAMPLING FINISHED: 0935

TEMPERATURE SAMPLING STARTED: 65°

TEMPERATURE SAMPLING FINISHED: 70°

DATE: 8-31-06

CLIENT: PW Grosser

CLIENTS AGENT: John Eichler

SIGNED: John Eichler

| **SAMPLE TYPE CHECK ONE** | |
|---|---|
| AMBIENT AIR | |
| SUB SLAB VAPOR | |
| VAPOR WELL | ✓ |

| **EXPECTED CONC CHECK ONE** | |
|---|---|
| LOW | ✓ |
| MEDIUM | |
| HIGH | |

ECOTEST LABORATORIES INC.

377 Sheffield Ave.
North Babylon, NY 11703
tel. 631-422-5777, fax 631-422-5770, Email ECOTESTLAB@aol.com

# CANISTER SAMPLING DATA SHEET

| CANISTER SERIAL NO. | SAMPLE TRAIN SERIAL NO. | FLOW |
|---|---|---|
| EcoTest 29 | 14 | 80 sccm |

This above referenced Summa can and sample train was received in good condition

DATE: 8/28/2006
CLIENT: P.W. Grosser
CLIENTS AGENT: John Eichler
SIGNED: John Eichler

Client agrees to pay all replacement costs associated with loss or damage of canister and sample train. Client acknowledges that this canister is valid for a maximum of 30 days from the date of evacuation. Client is responsibe for any vacuum loss or contamination while in clients custody.

VAC leaving EcoTest: 29" vac
Date Evacuated: 8/28/2006
VAC/PRES returned EcoTest: -3"

**CANISTER SERIAL NO.** 29
**SAMPLE TRAIN SERIAL NO.** 14
RETURNED IN GOOD CONDITION TO ECOTEST LABORATORIES INC.
**DATE:** 8/31/06 16:55
**SIGNED:** **for ECOTEST LABS.**

**ALL INFORMATION BELOW MUST BE PROVIDED BY CLIENT:**

| | |
|---|---|
| CLIENT PW Grosser | **SAMPLE TYPE** |
| SOURCE PEN- 1 Shore Rd., Glenwood Landing | **CHECK ONE** |
| SAMPLE SG-2 | AMBIENT AIR |
| DATE SAMPLED 8-31-06 | SUB SLAB VAPOR |
| TIME SAMPLING STARTED: 0925 | VAPOR WELL ✓ |
| TIME SAMPLING FINISHED: 1025 | |
| TEMPERATURE SAMPLING STARTED: 68°F 70° | **EXPECTED CONC** |
| TEMPERATURE SAMPLING FINISHED: 70° | **CHECK ONE** |
| DATE: 8-31-06 | LOW ✓ |
| CLIENT: PW Grosser | MEDIUM |
| CLIENTS AGENT: John Eichler | HIGH |
| SIGNED: John Eichler | |