SUPPLEMENTAL INVESTIGATION SUMMARY REPORT

for

The DeLaval Property
Rinaldi Boulevard
City of Poughkeepsie, New York

Prepared For:

City of Poughkeepsie
62 Civic Center Plaza
P.O. Box 300
Poughkeepsie, New York 12602-0300

January 2005

Prepared By:

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle
Albany, New York 12205

(518) 453-4500
Fax: (518) 453-4773

CHA Project Number: 11205.1011.1102

M:\11205\Rpt\Supp_Invest-Final\11205_Supp_Invest_Final.doc

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS & ABBREVIATIONS

ADT	Aquifer Drilling & Testing, Inc.
AMSL	Above Mean Sea Level
AOC	Area of Concern
ASP	Analytical Services Protocol
AT	Archaeological Test Pit
ATV	All-Terrain Vehicle
BGS	Below the Ground Surface
C&D	Construction & Demolition
CHA	Clough, Harbour & Associates LLP
CLP	Contract Lab Protocol
CME	Central Mine Equipment
COC	Contaminant of Concern
DCE	Dichloroethene
DO	Dissolved Oxygen
ELAP	Environmental Laboratory Approval Program
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
HASP	Health and Safety Plan
IRM	Interim Remedial Measure
LEL	Lower Explosive Limit
MPH	Miles Per Hour
MS	Matrix Spike
MSD	Matrix Spike Duplicate
MW	Monitoring Well
NOAA	National Oceanic & Atmospheric Administration
NTU	Nephelometric Turbidity Unit
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation & Maintenance
O.D.	Outside Diameter
ORP	Oxidation-Reduction Potential
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
PPE	Personal Protection Equipment
PPM	Parts Per Million
PVC	Polyvinyl Chloride
QA	Quality Assurance
QC	Quality Control
RAR	Remedial Alternatives Report
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
SVOC	Semi- Volatile Organic Compound

LIST OF ACRONYMS & ABBREVIATIONS
(Continued)

TAGM	Technical & Administrative Guidance Memorandum
TCC	The Chazen Companies
TOGS	Technical and Operational Guidance Series
TP	Test Pit
UST	Underground Storage Tank
VOC	Volatile Organic Compound

1.0 INTRODUCTION

Clough, Harbour, & Associates LLP (CHA) has been retained by the City of Poughkeepsie to assist the City with the redevelopment of the DeLaval property located southwest of the intersection of Rinaldi Boulevard and Pine Street in the City of Poughkeepsie, New York. The site is approximately 13.4-acres in size and is currently vacant. The site is mainly unpaved and almost entirely covered by grass, scrub brush, small trees, and other vegetation. A dilapidated asphalt/gravel drive traverses the site from north to south, but the pathway transitions to a dirt path along the southern two-thirds of the parcel. The location of the site is illustrated in Figure 1.

The DeLaval property is one of the three parcels that the City is attempting to redevelop as part of the Southern Waterfront project. The other two parcels included as part of the redevelopment project include the City's former sewer treatment plant site and the PURA-14 property, an urban renewal property.

The history of the site is summarized below in Section 1.1. A summary of the historical environmental characterization activities as well as the site's current status of the City's NYSDEC funded Environmental Restoration Program (ERP) project for the site are presented in section 1.2. The purpose of the supplemental investigation is stated in Section 1.3.

The balance of the report is presented in the three remaining sections. The supplemental investigation methods, procedures and protocols are presented in section 2.0. The results of the investigation are presented in Section 3.0, and the conclusions derived from the supplemental investigation are presented as Section 4.0.

1.1 SITE HISTORY

Previously documented research of the DeLaval property development revealed that two dwellings, a tannery, a carpenter shop, and two coal sheds were located on the DeLaval site as early as 1887. A 1945 Sanborn Fire Insurance Map revealed that a rubber manufacturing plant owned by the DeLaval Separator Company was present on the site. The DeLaval Separator Company also manufactured

cream separators, milk machines, centrifuges to separate milk and cream, and other stainless steel farming equipment.

Sanborn maps for the DeLaval property indicated that sometime between 1922 and 1945, the Spoor Lasher Company, a supplier of construction materials (concrete, stone, asphalt), occupied a storehouse on the property. A 1952 Sanborn map indicated that two underground fuel oil storage tanks were located midway down the main plant building along the east side of the structure.

While a 1962 aerial photograph of the site indicated that a large rectangular, one-story building occupied majority of the parcel, a 1967 aerial photograph revealed that the DeLaval site was vacant and largely unvegetated. Some vegetation was visible on the site by the 1980 aerial photograph. According to the title search performed by The Chazen Companies (TCC) at the Dutchess County Real Property Tax Office, the City of Poughkeepsie purchased the DeLaval property from the DeLaval Separator Company in 1968. The 1990 Sanborn map and 1995 aerial photograph indicate that the site has remained vacant since the City obtained ownership of the site. Based upon the documents reviewed, it appears that there has been no development or significant activity on the DeLaval property since at least 1967.

1.2 SITE BACKGROUND & WORK COMPLETED

The City has identified the DeLaval property as an integral part of their waterfront revitalization program and is utilizing the New York State Department of Environmental Conservation's (NYSDEC's) Environmental Restoration Projects (Brownfields) Program to investigate the environmental condition of the site and implement appropriate remedial actions. A number of tasks associated with the redevelopment of the DeLaval property have been completed to date. The investigation of the DeLaval site began with TCC preparing a *Phase I Environmental Site Assessment (ESA) Report for the Procida Waterfront Property*, dated December 28, 1999. The Phase I report identified a number of potential environmental concerns associated with the DeLaval property, including, but not limited to, the following:

- As stated, a 1952 Sanborn Fire Insurance map of the DeLaval property showed that two underground fuel oil storage tanks were located midway down the former main plant building on the site, along the east side of the structure.

- Ten test borings installed on the DeLaval site in 1968 by Empire Soils Investigation, Inc. revealed that the site is covered with six to twenty feet of fill material. However, the soil and groundwater quality in the vicinity of the fill areas was unknown.

- Minor convenience dumping was observed at various locations on the property during TCC's site inspection. An area of construction debris and two rusted 55-gallon drums was observed near the southern border of the DeLaval site. TCC suspected that the construction debris was a remnant of a former small building located at the south end of the site, but the contents of the drums were not determined.

Based upon the recognized environmental conditions (RECs) identified in the Phase I, the City of Poughkeepsie retained TCC to characterize the soil and groundwater quality beneath the DeLaval site to define the potential environmental liability associated with the property. In May of 2001, TCC submitted a *Phase II Subsurface Investigation Report of the DeLaval Property* to the City that identified four areas of concern (AOCs) with potential environmental issues, including:

- **AOC-1:** An industrial landfill/construction & demolition debris disposal area located along the southern end of the property.

- **AOC-2:** An area of petroleum-impacted soil and groundwater in the central portion of the site that parallels the Hudson River.

- **AOC-3:** An area of petroleum-impacted soil located in the northeastern portion of the site, due east of AOC-2. TCC noted that this AOC may be an extension of the petroleum-impacted soil and groundwater which parallels the Hudson River and makes up AOC-2.

- **AOC-4:** An area adjacent to a former Paint Shop.

The contaminants of concern (COCs) identified on the subject property that would require remedial action include petroleum-related volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), contaminated fill material, and heavy metals, including lead, mercury, barium, and cadmium.

After reviewing the Phase I and II reports prepared by TCC, CHA developed a work plan for preparing a Remedial Alternatives Report (RAR) in August 2003 and submitted a revised work plan to the NYSDEC in December of 2003 to address NYSDEC comments. CHA submitted a Draft RAR report for NYSDEC review in January 2004 and submitted a revised RAR in July of 2004 that addressed NYSDEC comments.

As was stated in the July 2004 RAR, it is anticipated that Alternative 3, Source Removal and Installation of a Soil Cover, will likely be the preferred remedy for the DeLaval site. While some residual contaminants will remain at the site, grossly-stained soils and free product will be removed from the site for proper off-site disposal by implementing this alternative. Areas where residual contamination is left in placed will then be covered with a soil cover system to prevent direct exposure to the contaminants after the redevelopment of the property is complete.

Based upon the investigation data presented and discussed herein, a Final RAR was prepared in January 2005 in concert with this report. As is stated in the Final RAR, the data from the supplemental investigation support confirmed that a slightly modified version of Alternative 3 is likely the preferred remedial approach for the site.

1.3 PURPOSE OF SUPPLEMENTAL INVESTIGATION

Prior to the NYSDEC selecting a remedy for the DeLaval site and CHA proceeding with the remedial design, a number of data gaps were identified in the RAR that needed to be addressed based upon the site characterization work completed by others. Based upon the identified data gaps, CHA developed a Supplemental Investigation work plan to accomplish the following objectives:

- Evaluate the potential for direct exposure to residual contaminants through a surficial soil sampling program.
- Refine the limits of the AOCs so that the areas to be covered can be verified and minimized.
- Establish current impacts to groundwater.

- Determine if methane gas is actively being generated on-site.

The balance of this report summarized the results of the supplemental investigation program.

2.0 SUPPLEMENTAL INVESTIGATION METHODOLOGY

2.1 SURFACE SOIL SAMPLING

Based upon discussions between the City of Poughkeepsie, the NYSDEC, and CHA during a May 27, 2004 meeting, the first component of the supplemental investigation was the collection of surficial soil samples. The analytical data derived from the surficial soil sampling program has been utilized to evaluate the potential for direct exposure to residual surficial contamination at the DeLaval site and to aid in the determination of limits of the soil cover which will likely be placed over a portion of the site.

All of the surficial soil samples were collected on July 22, 2004 prior to completing any other tasks as the site to minimize potential disturbance to the surficial soils. As shown on Figure 2, a total of 29 discrete surface soil samples were collected across the site. While a majority of the samples were collected on a 100-foot by 300-foot grid, one additional surface soil sample was collected from each AOC to ensure representative coverage of each. The surface soil samples were collected by a CHA engineer and scientist from depths ranging between 0 to 2 inches below the ground surface. A new, clean pair of latex gloves were donned prior to collecting each sample and each soil sample was placed directly into the appropriate laboratory containers. After collecting the surface soil samples, the sample containers were immediately placed on ice to cool them to four degrees Celsius.

All soil samples were shipped via an overnight courier to Chemtech Consulting, Group, Inc.'s (Chemtech's) laboratory in Mountainside, New Jersey for analysis. A completed chain-of-custody was included in each laboratory cooler and each was sealed with a custody seal. Chemtech has been approved by the New York State Department of Health (NYSDOH) and is identified as Laboratory No. 11376 in the Environmental Laboratory Approval Program (ELAP) for performing analytical services in accordance with Contract Lab Protocol (CLP). All analyses and deliverable packages were provided in accordance with the NYSDEC's Analytical Services Protocol (ASP) Category B requirements.

Each of the surface soil samples was analyzed for the base/neutral fraction of semi-volatile organic compounds (SVOCs) via the Environmental Protection Agency's (EPA's) Method 8270, polychlorinated biphenyls (PCBs) via EPA Method 8082, and the eight toxicity characteristic metals identified by the Resource Conservation and Recovery Act (RCRA) protocol, commonly referred to as RCRA-8 metals. Arsenic, barium, cadmium, chromium, lead, silver, and selenium were analyzed for via EPA Method 6010, while the eighth metal, mercury, was analyzed for via EPA Method 7471.

For Quality Assurance/Quality Control (QA/QC) purposes, CHA submitted a matrix spike/matrix spike duplicate (MS/MSD) sample from sample location SS-26 to the laboratory for analysis. CHA also submitted a blind duplicate sample to the laboratory from surface soil sample location SS-14. No trip blanks were submitted to the laboratory as the samples were not analyzed for the presence of volatile organic compounds (VOCs). VOC analysis was omitted from the surface soil samples as these compounds readily volatilize into the atmosphere and would unlikely be present in surface soils after being vacant for several years with no activity. Also, since all samples were grab samples and new disposable latex were donned prior to the collection of each sample, no field blank/equipment rinsate samples were collected.

2.2 SUBSURFACE SOIL SAMPLING

To supplement the existing subsurface data compiled by TCC and further delineate the extent and composition of the contaminants at the DeLaval Site, a number of test pits and test borings were installed at the site.

2.2.1 Archeological Test Pits

As part of the overall development of the Southern Waterfront project, an archeological survey of the DeLaval site, the City's former wastewater treatment plant site, and the PURA-14 property was completed between July 26 and July 30, 2004 and between August 9 and August 13, 2004. The archeological survey consisted of excavating several test pits/trenches on all three parcels, eight (test pits AT-1 through AT-8) of which were installed on the DeLaval Property. The first seven test pits were excavated by Precision Industrial Maintenance, Inc. using a John Deere 310 E backhoe with

extendable boom. However, given the difficulty in advancing the excavations on the DeLaval property due to the presence of buried construction and demolition (C&D) debris at the site, a Kobelco SK 220 LC tracked excavator was mobilized to the site to complete the last archaeological test pit (TP-8) as well as the environmental test pits that are discussed in Section 2.2.2.

A CHA engineer or scientist provided oversight during the installation of all of the archaeological test pits. Although the archeological test pits were excavated at areas outside the four previously defined AOCs, CHA field screened the soils for evidence of contamination and provided air monitoring for all on-site workers during all intrusive operations. As the soils were excavated, CHA screened the soil for evidence of contamination including visual, olfactory, and/or photoionic evidence of contamination using a MiniRAE 2000 photoionic detector (PID) instrument. If evidence of contamination was identified in the archaeological test pits, CHA completed a test pit log to document the conditions encountered. However, out of the eight test pits excavated on the DeLaval Site, only test pits AT-4 and AT-7 exhibited evidence of contamination.

A soil sample was collected from test pit AT-7 and submitted to Chemtech for analysis. The sample was placed directly into the appropriate laboratory containers and placed on ice. As with the surficial soil samples, the test pit soil sample was shipped to the laboratory via an overnight courier, following proper chain-of-custody protocol. The sample was analyzed for VOCs via EPA Method 8260, base/neutral SVOCs via EPA Method 8270, PCBs via EPA Method 8082, and RCRA-8 metals via EPA Methods 6010 and 7471. No QA/QC samples were collected from the archeological test pits.

During the excavation activities, the PID instrument was also utilized to conduct air monitoring for health and safety purposes. If sustained PID readings of ten parts per million (PPM) or more were encountered for five (5) minutes in the breathing zone (including the cab of the excavating equipment), personnel would have been directed to move upwind of the excavation and an upgrade in personal protective equipment (PPE) would have been considered, in accordance with CHA's July 2004 Health and Safety Plan (HASP). However, at no point during the excavation of the test pits were sustained background PID readings encountered.

2.2.2 Environmental Test Pits

In addition to the archaeological test pits, forty-four test pits were excavated within or adjacent to the AOCs on the DeLaval property to further delineate the boundaries of the AOCs and to collect additional soil samples. CHA had originally also planned on performing the additional delineation work using a Geoprobe® hydraulic push drill rig; however, based upon the heavy C&D material encountered in the archaeological test pits, CHA determined that it would have been difficult for the Geoprobe® rig to advance the borings. Therefore, the drill was not mobilized and CHA worked with Precision Industrial Maintenance, Inc. to complete the delineation work by excavating additional test pits. All test pits were excavated using the Kobelco SK 220 LC tracked excavator that was used to complete the final archaeological test pits.

The test pits were typically excavated to a minimum depth of twelve feet below the ground surface unless the groundwater table or large debris (e.g. concrete foundations or bedrock) were encountered at a shallower depth. The test pits were six-foot wide trenches that varied in length from six to seventy feet in length. Most of the longer test pits were excavated in areas where CHA was trying to determine the horizontal extent of contamination. As the test pits were excavated, CHA screened the soils for visual, olfactory, and photoionic evidence of contamination, similar to the activities completed during the installation of the archaeological test pits. CHA also measured the approximate dimensions of each test pit, the depth at which groundwater was encountered (if encountered), and the types of soil and fill materials encountered in each pit. All field observations were documented on the Test Pit logs included in Appendix A. CHA also took photographs of each test pit and marked the location of each with a small orange flag mounted on a thin wire post.

Soil samples were collected from eighteen test pits and submitted to Chemtech for laboratory analysis. The samples were analyzed for the same VOC, SVOC, PCB, and RCRA-8 metals parameters as the archaeological test pit soil samples. A trip blank and temperature blank were included with the VOC samples submitted from the test pits excavated on August 5 and 6, 2004.

2.3 TEST BORINGS

As previously discussed, CHA had originally planned to use a Geoprobe® drill rig to install a number of test borings around the AOCs to delineate the limits of contamination. However, due to the presence of heavy C&D materials encountered in the archeological test pits/trenches, CHA decided to delineate the limits of contamination via additional test pits as opposed to test borings.

However, per the conditions of the work plan, CHA subcontracted Aquifer Drilling & Testing, Inc. (ADT) to install two deep test borings in AOC-1 as well as to install the six borings associated with the new monitoring wells installed on the site as part of the supplemental investigation. The test borings were installed at the following eight locations under the supervision of a CHA scientist:

- B1: Up-gradient of AOC-1 (well CHA-1)
- B2: Down-gradient of AOC-2 (well CHA-2)
- B3: Down-gradient of AOC-4 (well CHA-3)
- B4: Up-gradient of AOC-3 (well CHA-4)
- B5: Down-gradient side of AOC-3 (well CHA-5)
- B6: Down-gradient side of AOC-3 (well CHA-6)
- B7: Within AOC-1
- B8: Within AOC-1

CHA notes that borings B5 and B6 were installed along the down-gradient side of AOC-3; however, since the contamination likely extends to the existing bulkhead wall along the Hudson River, it was not possible to install the wells outside AOC-3. The first six borings were installed at the location at which six new monitoring wells were installed, while the last two borings were installed to verify the fill contents of AOC-1. ADT used a Central Mine Equipment (CME) Model 55 hollow-stem auger drill rig mounted on tracked all-terrain vehicle (ATV) to install the test borings. The borings were advanced to a depth ranging from twelve to twenty feet below the ground surface (BGS) at which point native materials were typically encountered.

The borings were sampled continuously using a two-inch outside diameter (O.D.) split-spoon sampler. The split spoon sampler was advanced by dropping a 140-pound hammer on the sampler from a height of thirty inches. During the sampling, the number of blows required to drive the split

spoon sampler in six-inch increments was recorded on boring logs (included in Appendix B) for geotechnical information necessary to evaluate future remedial designs. CHA also classified the soil samples and documented any visual, olfactory, or photoionic evidence of contamination on the boring logs. All soil samples were placed into labeled glass jars for future reference.

In addition to the field screening of the soils samples collected from the test borings, CHA also submitted a soil sample from boring B7 to Chemtech for laboratory analysis. The soil sample was analyzed for the sample parameters as the soil samples collected from the environmental test pits. The sample was shipped to the laboratory via an overnight courier following proper chain-of-custody protocols.

Upon completing borings B1 through B6, permanent monitoring wells were installed in each boring, as discussed in Section 2.4. Monitoring wells CHA-1 through CHA-6 were installed at boring locations B1 through B6, respectively. After completing borings B7 and B8, each was sealed by pressure injecting a cement-bentonite grout from the bottom of the borehole up to the surface. Additional grout was added to the borehole as the augers were removed to fill in any irregularities in the borehole. After grouting the borehole, ADT placed an approximately one-foot thick bentonite seal at the top of the borehole to accommodate potential settlement of the grout.

The soil cuttings from borings B7, CHA-2, CHA-5, and CHA-6 were identified as being heavily impacted during the field activities, and therefore, were containerized in steel fifty-five gallon drums. CHA is working with the City of Poughkeepsie to arrange for the off-site disposal of these four partially filled drums of impacted soils. All drilling equipment including augers, casing, drilling rods, and split-spoon samplers were decontaminated with a high velocity steam cleaner prior to the initiation of each test boring. The split-spoon sampler was washed with a non-phosphate containing detergent (Liqui-Nox® manufactured by Alconox, Inc.) after the retrieval of each sample from the borehole. All disposable and expendable equipment was properly disposed of off-site. All water generated from decontamination activities was collected on polyethylene sheeting and in five gallon buckets and placed into a single fifty-five gallon drum. As with soil drums, CHA is arranging for off-site disposal of the drum of decontamination ("decon") water.

2.4 GROUNDWATER SAMPLING

As discussed in Section 2.3, six new permanent monitoring wells were installed up- and down-gradient of the AOCs to evaluate the current groundwater quality beneath the DeLaval property. CHA attempted to install the well screens at an interval that would intercept the water table, based upon the observations made during the boring advancement at each well location. All wells were constructed of two-inch Schedule 40 polyvinyl chloride (PVC) with a ten foot section of factory slotted, 0.010-inch (No. 10) well screen. All monitoring well materials were new and remained covered until their installation.

Prior to setting the well or installing the sand filter pack, the borings were backfilled with bentonite pellets to the desired depth. A sand filter pack was then placed around the screen from the top of the bentonite chips to a level of at least one to two feet above the top of the screen. A minimum of a one-foot layer of medium-sized bentonite pellets was then placed on top of the filter pack to provide a watertight seal on top of the sandpack and prevent grout from migrating into the sandpack. The remaining borehole annulus was completed as a two to four-foot thick concrete surface seal. While it was desirable to extend the sand pack further above the well screen and install a thicker bentonite seal on top of the sandpack, the wells were relatively shallow and standard construction practices were not feasible.

The PVC riser on each well was extended thirty inches above the ground surface. An air vent was cut into the top of riser pipe, just below the locking gripper plug to vent the well and avoid the potential buildup of explosive gases within the well. A four-inch diameter protective steel casing with a lockable cover set in the concrete surface seal was placed over the PVC well riser to protect each well. The concrete surface seal was sloped away from the casing and extended to a depth of at least two feet below the ground surface to help reduce the likelihood of freeze/thaw damage. In addition, a weep hole was drilled at the base of the steel casing to drain condensation from the casing and to help reduce the likelihood of freeze/thaw damage. The well identification number was painted on exterior of the steel-casing using a permanent yellow paint pen.

Duplicate keys for the monitoring well locks were submitted to the City of Poughkeepsie for their use. All pertinent well information was recorded on the well construction diagram, included in Appendix C. The location and elevation of each monitoring well was surveyed by CHA relative to an assumed bench mark on August 26, 2004. For the purposes of this investigation, the bonnet bolt on the fire hydrant located immediately north of the entrance to the DeLaval property was assumed to have an elevation of approximately 12.5 feet above mean sea level (AMSL) based upon elevation data provided with site base mapping completed by TCC. This assumed datum elevation was determined by measuring the height of the bonnet bolt from the ground surface at the base of the hydrant and adding this value to ground elevation of the hydrant provided on TCC's survey prepared for the site.

After allowing the monitoring well seals and grout sufficient time to set, the six newly installed wells were developed in order to remove suspended fines and allow for the collection of representative groundwater samples. Well development was conducted with several cycles of surging and pumping, using a Whale Model II Super Purger pump. In order to agitate the monitoring well sandpack, the submersible pump was oscillated up and down rapidly several times. Well development continued until the turbidity level was reduced below 50 Nephelometric turbidity units (NTUs) or for a maximum period of two hours. All turbidity measurements were made using a HACH 2100P turbidity meter.

Upon completion of the monitoring well installation and development, CHA collected a groundwater sample from each well for laboratory analysis on September 1, 2004, two weeks after completing the well installation. CHA also collected a groundwater sample for the existing monitoring well (well MW-1) located north of AOC-3 and approximately fifty east of the Hudson River. CHA first measured the static water level in each well to the nearest 0.01-foot using a Solinst Model 122 Oil-Water interface probe and recorded the levels on the Groundwater Level Data Log (Appendix D) prior to the collection of any samples. Because no free product was detected in the monitoring wells during the August 26, 2004 well gauging event, subsequent water level measurements were made using a Solinst Model 101 Water Level Meter. The measured depth to groundwater and the surveyed elevations of the well riser pipes were then used to calculate the water elevation at each well and to construct a groundwater potentiometric contour map.

After calculating the amount of groundwater in the well casing, approximately three times the volume of stored water in the well casing was purged prior to obtaining a representative groundwater sample. The wells were purged using a 1.6-inch O.D. by 36-inch long dedicated polyethylene bailer. Care was taken during the purging process to minimize any disturbance to the water column in the well. All purge water was initially placed into five gallons buckets marked with one-gallon gradations so that CHA could record the volume of groundwater purged. Given the evidence of contamination observed in the purge water from monitoring wells CHA-2, CHA-5 and CHA-6 (e.g. sheen and petroleum odors), the purge water was then placed into steel, fifty-five gallon drums for off-site treatment and disposal. CHA notes that two drums of purge water were generated from well CHA-2, while one drum of purge water was generated from both wells CHA-5 and CHA-6. Since there was no evidence of impact to the purge water from the remaining wells, the purge water was discharged to the ground surface.

During the purging process, CHA measured field water quality parameters, including pH, temperature, specific conductance, dissolved oxygen (DO), and the oxidation-reduction potential (ORP) of the groundwater using a YSI 556 Multiprobe System with a flow-through cell and the turbidity using a HACH 2100P turbidity meter. After purging three well volumes, CHA had to occasionally purge additional groundwater from the wells to allow the groundwater quality parameters to stabilize and for the turbidity to be reduced below fifty NTUs.

After purging each well and allowing the water quality parameters to stabilize, CHA collected a water sample from each well using the dedicated disposable bailer. Although CHA attempted to minimize the disturbance to the water column during the insertion and removal of the bailer from the well, the turbidity was visibly increased during the sampling process. Therefore, after collecting the samples for VOCs and other organic analyses, CHA allowed the wells to sit undisturbed for at least one hour prior to collecting the samples for metal analyses. Well sampling logs documenting the field analyses and sampling effort are included in Appendix E.

The groundwater samples were submitted to Chemtech for analysis of VOCs, SVOCs, PCBs, and RCRA-8 metals via the same EPA methods utilized for the soil samples. For QA/QC purposes, CHA submitted a blind duplicate sample (CHA-10) from well MW-1 and a matrix spike/matrix

spike duplicate (MS/MSD) sample from well CHA-3 to the laboratory for analysis. In addition, a trip blank and temperature blank were shipped with the groundwater samples and analyzed for VOCs to ensure that the VOCs detected in the groundwater samples were not the result of shipping and handling procedures or cross-contamination in the form of VOC migration between the collected samples. Since only dedicated, disposal equipment was used to purge and sample each well, no field blanks/equipment rinsate samples were collected.

As will be discussed later in the report, monitoring well CHA-2 was re-sampled on October 15, 2004 in order to verify the presence of PCBs which were detected in the sample collected on September 1, 2004. The methods by which the sample was collected were consistent with those discussed above. This sample was only analyzed for the presence of PCBs.

2.5 SOIL GAS SURVEY

Based upon some of the putrescible wastes previously identified in AOC-1, a soil gas survey was performed around the perimeter of this area on July 30, 2004 to measure concentrations of combustible. The gas surveys included monitoring gas concentrations along a modified fifty-foot by fifty-foot grid in the vicinity of AOC-1. The grid began at the southern property boundary of the DeLaval property and extended northward three hundred feet. If explosive gas was detected along the perimeter of AOC-1 in concentrations exceeding five percent of the lower explosive limit (LEL), additional points would have been installed in twenty-five foot intervals until either explosive gas was detected or the property line had been reached. All gas readings were recorded on the Soil Gas Survey Log included in Appendix F.

Effort was made to perform the explosive gas investigation when the ground surface had been wet for several days and when the atmospheric pressure and wind velocity were low. According to the National Oceanic & Atmospheric Administration's (NOAA's) database of historical weather data for the Dutchess County Airport, located approximately seven miles south of the City of Poughkeepsie, approximately 0.00, 0.45, 0.51, 0.01, and 0.30 inches of precipitation occurred on July 26, 27, 28, 29, and 30, 2004, respectively. The average wind velocity was measured to be approximately four

miles per hour (MPH) at the airport; however, the site was calm at the time of the gas survey was conducted.

A VRAE 7800 multi-gas surveyor was used to measure the methane gas concentrations at each of the designated locations near AOC-1 in percent of the LEL. This portable gas detection instrument is designed to detect the presence of natural gas or other specified combustible gasses in the air. The VRAE 7800 instrument was calibrated using methane gas prior to being utilized in the field. At each gas survey point, a three-quarter (0.75) inch diameter probe hole was advanced approximately one to two feet into the ground using a manual soil punch. Immediately upon extracting the punch rod from the probe hole, a thirty-inch transparent probe, attached to the inlet of the gas meter, was inserted into the ground. A gas reading was then obtained from the meter after the vacuum pump had sufficient time collect a representative air sample from the probe hole, or typically thirty seconds to one minute.

3.0 SUMMARY OF RESULTS & DISCUSSION

The analytical results for all media have been summarized in the Tables section of the report and the end of the report body. Due to the volume of the full ASP Category B data package, CHA has only included the summary tables in this document. However, the complete Category B data package is maintained at CHA's office in Albany, New York and is available for review upon request. All completed chain-of-custody's have been included in Appendix G.

3.1 SURFACE SOILS

Table 1 provides a summary of the analytical results for all surface soil samples and Figure 2 illustrates the sampling locations at which each surface soil sample was collected from. All compounds detected at concentrations in excess of the NYSDEC's Recommended Soil Cleanup Objective concentrations listed in Technical and Guidance Memorandum (TAGM) No. 4046 have been shaded. As previously indicated, the surface soil samples were not analyzed for the presence of VOCs. The results of the surface soil sample analyses are discussed below and are summarized in the following table.

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected	Frequency of Samples Exceeding SCGs
SVOCs (units in micrograms per kilogram (µg/kg))			
Acenaphthylene	41,000	140-8,000	0 of 30
Acenaphthene	50,000	120-430	0 of 30
Anthracene	50,000	74-18,000	0 of 30
Benzo(a)anthracene	224	85-150,000	23 of 30
Benzo(a)pyrene	61	160-100,000	24 of 30
Benzo(b)fluoranthene	1,100	85-180,000	18 of 30
Benzo(g,h,i)perylene	50,000	110-25,000	0 of 30
Benzo(k)fluoranthene	1,100	150-64,000	10 of 30
Bis(2-Ethylhexyl)phthalate	50,000	220-6,100	0 of 30
Carbazole		79-490	Detected in 7 of 30
Chrysene	400	81-130,000	21 of 30
Dibenz(a,h)anthracene	14	100-120	2 of 30
Dibenzofuran	6,200	110-230	0 of 30
Fluoranthene	50,000	140-320,000	2 of 30

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected	Frequency of Samples Exceeding SCGs
Fluorene	50,000	80-280	0 of 30
Indeno(1,2,3-cd)pyrene	3,200	88-16,000	2 of 30
2-Methylnapthalene	36,400	160-310	0 of 30
Naphthalene	13,000	250-420	0 of 30
Phenanthrene	50,000	130-92,000	1 of 30
Pyrene	50,000	130-260,000	2 of 30
PCBs (units in micrograms per kilogram (µg/kg))			
Aroclor-1260	1,000	50-3600	3 of 30
METALS (units in milligrams per liter (mg/L))			
Arsenic	7.5	4.89-24.8	20 of 30
Barium	300	15.1-374	2 of 30
Cadmium	1 or SB (1.93)	0.973-8.7	25 of 30
Chromium	10 or SB (15.8)	5.94-627	17 of 30
Lead	500	22.8-908	22 of 30
Selenium	2	0.602-3.20	6 of 30
Silver	SB (0.117)	0.149-240	12 of 30
Mercury	0.1	0.02-1.30	21 of 30

A number of SVOCs were detected in the surface soil samples collected across the DeLaval property. Phenanthrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene, were detected in excess of the NYSDEC recommended soil cleanup objective concentrations. With the exception of the soil samples collected from location SS-11 down-gradient of AOC-4, sample locations SS-23, SS-24, and SS-25 collected at the east end of AOC-3, and sample location SS-29 near the northeast corner of the Property, at least one SVOC was detected in excess of the cleanup objective concentration in all samples collected across the site.

The highest levels of SVOC contamination in the surface soils was identified in surface soil sample SS-13 located south of AOC-4 and sample SS-27 in the most northwestern portion of the site. However, it appears that the contamination is fairly widespread across much of the DeLaval property, rather than being limited to a few isolated areas. CHA suspects that the SVOC contamination in the surface soil samples is attributable to the historical use of the property and site grading operations rather than individual spill events.

Aroclor-1260 was the only PCB congener detected in the surface soils on the DeLaval property. It was detected in eleven of the thirty surface soil samples collected from the DeLaval property, mainly along north side of AOC-1 and the northern one-third of the property. However, Aroclor-1260 was only detected at concentrations in excess of NYSDEC recommended soil cleanup objectives along the north end of AOC-1. Given that site is currently vacant and there are no current sources of PCBs on the ground surface, the origin of the PCB contamination in the surface soils is not clear.

A number of heavy metal contaminants were also identified in a majority of the surface soils collected from the DeLaval property. The metal concentrations were compared to the cleanup objective concentrations listed in TAGM 4046. However, as discussed in the TAGM, naturally occurring metal concentrations can vary significantly from area to area. Therefore, the results are typically compared to the metal concentrations in a background sample collected from a nearby, up-gradient site where the suspected impact is minimal. In the case of the DeLaval site, there are no adjoining properties that are expected to have no significant impact. In fact, both the former City of Poughkeepsie wastewater treatment plant and the PURA-14 parcels are known to be impacted.

Since no preferred background sampling locations were identified, CHA compared the metal concentrations in the subsurface soils to each other to see if any the samples could be considered an on-site background sample. While not an ideal method for determining background concentrations, CHA noted that the sample collected in the northeast corner of the DeLaval site (SS-29) had no detectable concentrations of SVOCs or PCBs, and that the metal concentrations in this sample were either near or below the Eastern Background Concentrations. Therefore, the metal concentrations detected in surface soil sample SS-29 is considered to represent "background" conditions and has been used as a basis of comparison for this investigation. The only exception to this determination is relative to mercury, which has a soil cleanup objective concentration of 0.1 milligrams per kilogram regardless of the background concentration.

Of the eight RCRA metals, arsenic, barium, and cadmium were the three metals that were most often detected in the surface soil samples at concentrations in excess of the background concentrations in sample SS-29. Arsenic was detected in excess of the background concentration in 26 out of 30 samples analyzed. Similarly, barium was detected in excess of the background concentration in 25

out of the 30 samples, and cadmium was detected in excess of the background concentration in 27 out of the 30 samples analyzed.

With the exception of the background sample SS-29 and surface soil sample SS-25, approximately three-hundred feet south of the background sample, there were at least three metals in excess of the background concentrations in all of the surface soil samples on the DeLaval property. In fact, all RCRA-8 metals were found in excess of the background concentrations in the surface soil samples collected from sampling locations SS-1, SS-4, SS-7, SS-10, SS-20, SS-22, SS-26, and SS-27. All but one of the RCRA-8 metals was found in excess of the background concentrations in surface soil samples SS-2, SS-3, SS-5, SS-6, SS-9, SS-17, SS-19, SS-23, and SS-24.

The concentration of arsenic in the surface soil samples SS-4, SS-7, SS-19, SS-26, and SS-27 was approximately four to five times the background concentration. The concentration of cadmium in sample SS-2 was over four times the concentration in the background sample. The concentration of chromium in sample SS-19 was approximately eight times the background concentration and nearly forty times the background concentration in sample SS-26. The concentration of lead was approximately seven and nine times the background concentration in surface soil samples SS-10 and SS-17, respectively. The concentration of silver was approximately seventeen times the background concentration in samples SS-4 and SS-26 and over 2,000 times the background concentration in sample SS-2. While the degree of heavy metal impact varies across the DeLaval site, the data indicates that heavy metal contamination in the surface soils is widespread across the property, as was the case with the semi-volatile organic contaminants.

As for the QA/QC sampling, CHA notes that the analytical results for soil sample SS-14 compared well with the results for the field duplicate sample, SS-14B. The primary difference was that cadmium and selenium were detected in excess of the background concentration in sample SS-14, but not in sample SS-14B, and mercury was detected at a concentration in excess of the background concentration in sample SS-14B, but not sample SS-14. However, the results were similar and well within the same order of magnitude.

It appears that impacted surficial soils, with both organic and inorganic contaminants, are spread across much of the DeLaval property, possibly due to past site grading operations.

3.2 SUBSURFACE SOILS

The following subsections provide a summary of the field and analytical results of the subsurface soils encountered in the archaeological test pits, the environmental test pits, and the test borings.

3.2.1 Field Results

3.2.1.1 Archaeological Test Pits

A variety of fill materials were encountered in the test pits excavated on the DeLaval property. The location of all test pits is shown on Figure 3. As shown on in the figure, CHA used the field screening results from the test pits to refine the limits of the AOCs. The first six test pits, AT-1 through AT-6, were excavated between AOC-1 and AOC-2. A variety of building structural elements were encountered in these test pits, including concrete floors, poured concrete piers, a brick wall, and brick piers. Large concrete buttressed walls and a poured concrete retaining wall were encountered in the test pits installed within twenty feet west of the existing access road that transverses the site from north to south.

Debris, including items such as steel guiderail, aluminum beverage cans, glass fragments from beverage containers, ceramics, tobacco pipes, etc. were found mixed with fill soils, including silt, sandy silt, and fine gravels. Industrial slag was encountered in test pits AT-4, AT-5, and AT-6, ranging in depth from three to twelve feet below the ground surface. The industrial slag material was typically less than three inches in diameter near the top two feet of the slag layer; however, slag fragments ranging from four to twelve inches in diameter and devoid of soil were encountered below. Ash, coal, peat, decaying bark, cow hours, and a pile of wooden beams were encountered in archaeological test pits AT-7 and AT-8.

3.2.1.2 Environmental Test Pits

As previously mentioned, test pits were used to further delineate the extent of petroleum contamination on the DeLaval site as well as to verify the contents of the fill material. While CHA had initially intended to delineate the limits of the petroleum contamination using a Geoprobe® drilling system, CHA decided that the Geoprobe® system would be ineffective in areas were structural walls and foundations or large construction and demolition (C&D) debris was encountered. Each environmental test pit location has been identified on Figure 3 and associated test pit logs are included as Appendix A.

AOC-1

Eighteen test pits (TP-1 through TP-18) were installed in and around AOC-1. Sixteen of the test pits were excavated along the perimeter of AOC-1 to delineate the horizontal extent of the contamination while test pits TP-17 and TP-18 were excavated near the center of the AOC to verify the contents of the fill material. Based upon the field screening results for the materials excavated from the test pits, including both waste materials and evidence of petroleum contamination, CHA has redefined the limits of AOC-1.

A variety of fill and waste materials were encountered in AOC-1, including silt, sands, cobbles, metal lathe millings, brick, fire brick, concrete, scrap metal, glass, ceramic tile, wood, asphalt roofing material, slag, and tires. While most of the materials were considered relatively inert, the most significant evidence of waste disposal was encountered at the north end of AOC-1 in test pits TP-8 and TP-17. Concrete, tires, steel tire rims, plastic, glass, scrap metal, a rusted and crushed drum, a plastic pool liner, wood, and metal shavings covered with a white grease-like lubricant were encountered in TP-8 at a depth of 0.7 to 14 feet below the ground surface. Wood, scrap metal, tires, pipes, plastic, and bricks were encountered from a depth of 1 to 19 feet below the ground surface in TP-17.

The most significant evidence of petroleum contamination was encountered along the western edge of AOC-1. CHA noted strong petroleum odors, heavy black staining of the soils, and PID readings

ranging up to 58 PPM in test pits TP-8, TP-9, TP-10, and TP-11. CHA also noted a petroleum odor and sheen on the groundwater observed in some of these test pits.

AOC-2 & AOC-3

While no excavations were installed through the access road which crosses the DeLaval property, CHA believes that there was sufficient evidence of contamination identified in test pits TP-32 and TP-38 to suggest that the AOC-2 and AOC-3 is one large area of impacted soils rather than individual AOCs as originally shown in TCC's Phase II investigation. Most of subsurface soils consisted of silt, sand, and cobbles mixed with a variety of fill materials, including concrete, brick, scrap metal, wood, and slag. No putrescible wastes were identified in the test pits excavated within AOC-2 and AOC-3. While brick, concrete, slag, and wood were identified mixed in with soils above the water table, there was typically no evidence of petroleum contamination in most of the test pits until a depth of one to two feet above the top of the water table.

The water table was typically encountered at a depth of four to eight feet below the ground surface depending upon the ground surface elevation and the tide in the Hudson River at the time that the test pits were installed. The vertical extent of the contamination was not verified in several of the test pits due to the concrete or brick structures encountered and the instability of the trench below the water table, especially where coarse slag material or cobbles were encountered.

Black groundwater with a moderate to strong petroleum odor and with sheen on the surface was encountered in a number of the test pits in AOC-2 and AOC-3. The sheen ranged from discoloration on the groundwater surface to the formation of small oil droplets on the water surface. It is unclear whether the black color observed in the groundwater was attributable to the petroleum contamination, the presence of slag and other fill materials in the subsurface or septic conditions associated with potential anaerobic breakdown of the contaminants. However, a petroleum odor typically coincided with the presence of the sheen.

As discussed further in Section 3.2.1.4 of this report, test pit TP-19 was excavated along the side of an underground pipeline once used to transfer fuel oil. While advancing the test pit, an underground

storage tank was also identified. An underground vault, boiler room, or other similar structure was found near test pit TP-31. CHA suspects that the room may be associated with some sort of boiler given the proximity to the underground storage tank and that the room was constructed with fire brick walls.

AOC-4

Several fill materials were also encountered in the test pits installed in AOC-4, including concrete, brick, slag, wood, and several cobbles. While no significant staining was observed on the soils in AOC-4, CHA obtained PID readings ranging from 23 to 31 PPM and noted a solvent-like odor emanating from the test pits. There was no field evidence of groundwater contamination in most of the test pits excavated in AOC-4; however, CHA did observe a slight sheen on the groundwater table in test pit TP-41.

3.2.1.3 Test Borings

The locations of all test borings and the monitoring wells are shown on Figure 4, and boring logs are included as Appendix B. As indicated in the logs, alternating layers of silt and sand were observed in a majority of the test borings. In addition, fire brick, metal filings, coal, ash, and slag were encountered in the fill materials encountered in the test borings. An approximately four to six foot layer of slag practically devoid of any soil was encountered in test borings B1, B3, and B5.

Boring B1, installed up-gradient of AOC-1, had no photoionic evidence of contamination, but a slight "tar-like" odor and slight staining of the soils was observed between two and five feet below the ground surface in this boring.

Boring B2 was installed down-gradient of AOC-1 and visual, olfactory, and photoionic evidence of contamination was encountered between six and fourteen feet below the ground surface. A clay and silt material was encountered at a depth of twelve feet below the ground surface that appeared to retard the vertical migration of the contamination, as there was no field evidence of contamination in the soil sample collected from fifteen to sixteen feet below the ground surface.

Boring B3 was installed between AOC-1 and AOC-2 and down-gradient of AOC-4. While slag and other fill materials were encountered in the test boring, no visual, olfactory, or photoionic evidence of contamination was identified in the soil samples collected from this boring. This condition is in line with the material type observed in the archeological test pits.

Boring B4 was installed up-gradient of AOC-2. Trace amounts of concrete, brick, and aluminum were identified in the fill materials in this boring; however, it appeared that a indigenous silty clay soil was encountered at a depth of approximately ten feet below the ground surface. No field evidence of contamination was identified in boring B4.

Boring B5 and B6 were installed along the down-gradient side of AOC-2; however, given that the contamination extents to the bulkhead along the Hudson River, the borings were installed within AOC-2 as opposed to in a truly down-gradient position. An approximately six foot layer of slag was encountered in boring B5, in which a heavy petroleum odor was noted in the field. A fine sand and silt layer was encountered below the slag layer that was stained black and had a slight petroleum odor. No PID readings were observed in boring B5 and no evidence of field contamination was identified in the top six foot layer of soil in the boring.

No slag was identified in boring B6 and there was no evidence of contamination in top eight feet of soil in the boring. However, a slight solvent-like odor was identified at eight feet below the ground surface and a petroleum odor was noted at fifteen feet below the ground surface. CHA also observed a sheen on the groundwater in this boring.

Borings B7 and B8 were installed within AOC-1 to verify the contents of the fill materials placed in the area. Silt with thin lenses of fine sand were identified in boring B7 along with other fill materials including ash, coal, brick , and slag. While slight petroleum odors were noted at approximately six feet and fourteen feet below the ground surface, a strong petroleum odor and heavy black staining was observed at a depth of fifteen feet below the ground surface, just above shale bedrock. The PID readings ranged from approximately 89 to 1,503 PPM at this depth.

Although varying amounts of slag and trace amounts of coal and ash were observed in boring B8, CHA identified no visual, olfactory, or photoionic evidence of contamination in the boring. A shale bedrock layer was encountered at a depth of eleven feet below the ground surface in this boring.

3.2.1.4 Underground Storage Tank & Buried Fuel Oil Pipeline

Given the uncertainty with respect to the condition of the six-inch diameter steel pipe observed by TCC during their Phase II investigation in AOC-2, CHA directed our excavation subcontractor to excavate a trench along the pipeline. Test pit TP-19 was excavated along the south side of the six-inch steel pipe in AOC-2 on August 4, 2004. As suspected, based upon review of TCC's report, the pipe was in relatively poor condition and the soils surrounding the pipe appeared saturated with fuel oil (reportedly No. 6 fuel oil). In addition to elevated readings measured with a PID instrument, CHA noted that the soils were stained black and had a relatively strong petroleum odor.

The fuel oil pipeline was located approximately four feet below grade and was apparently installed over a concrete slab. While the slab is believed to have reduced the vertical migration of the petroleum contamination, the pad was noted to be in poor condition or absent in some locations. During the test pit program, CHA determined that the top two feet of fill material was relatively free of petroleum contamination, while the approximately two feet of contaminated soil immediately above the pipe were stained and had a strong petroleum odor. In locations where the concrete slab was broken up or missing, the petroleum contamination was identified to be deeper than four feet.

The horizontal extent of contamination was estimated to be between fifteen to twenty-five feet north and south of the pipe line. While it appeared that most of the petroleum had migrated along the top of the concrete slab, some additional contamination was also found near the edges of the concrete pad. The contamination apparently extends along majority of the length of the pipeline, which extends from the bulkhead along the Hudson River eastward to a point approximately twenty feet east of the gravel access road that traverses the property from north to south.

While excavating along the pipe line, an approximately 4,000-gallon underground storage tank (UST) containing fuel oil, sludge, and/or groundwater was encountered along the south side of the pipeline. A majority of the tank was not unearthed at the time of the investigation, and therefore, the overall condition of the tank is unknown. Since the overall condition of the tank is unknown, the tank will not be unearthed until after all contents of the tank have been removed. CHA also encountered a number of brick-lined walls just north of the tank. While the purpose of these walls was not clear, CHA suspects that they may have been associated with a former furnace in a boiler room that was fueled from oil stored in the underground tank. The walls encountered are within the footprint of the former large on-site building.

Mr. Bradley Brown of the NYSDEC was on-site during the excavation along part of the pipeline, subsequent to the discovery of the UST. Given the presence of grossly-contaminated/oil-saturated soils, apparent free product on the surface of the water table, and the presence of an UST, the NYSDEC directed CHA to prepare a Interim Remedial Measures (IRMs) work plan to remove the pipeline, the UST, and any grossly-contaminated soils. While the removal of the pipeline and grossly-contaminated soils was incorporated into Alternative 3 in the RAR, the NYSDEC was interested in expediting these removals given the proximity of the contamination to the Hudson River and the periodic sheen which was noted on the surface of the Hudson River adjacent to the west side of the bulkhead during the excavation activities.

At the NYSDEC's direction and on behalf of the City of Poughkeepsie, CHA reported the observed conditions to the State Spills Hotline on August 5, 2004, and Spill Number 0404948, was assigned to the site.

On August 25, 2004, CHA submitted a IRM plan to the NYSDEC for their review and approval. However, after reviewing the IRM and realizing the complexity of the IRM, the NYSDEC decided that pursuing the IRM was not necessary at that time. Instead, the remedial work associated with removing the underground storage tank and buried fuel oil pipeline would be completed as part of the overall remedial design and construction program for the DeLaval site which will be initiated following the issuance of a record of decision (ROD) by NYSDEC.

3.2.2 Analytical Results

Table 2 provides a comprehensive summary of the analytical results for all subsurface soil samples collected from test pits and soil borings. CHA collected representative subsurface soil samples based upon the field screening of the test pits for contamination. All compounds detected at concentrations in excess of the NYSDEC's Recommended Soil Cleanup Objective concentrations listed in Technical and Guidance Memorandum (TAGM) No. 4046 have been shaded. The results of the subsurface soil sample analyses are discussed below and are summarized in the following table.

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected	Frequency of Samples Exceeding SCGs
VOCs (units in micrograms per kilogram (µg/kg))			
Acetone	200	34-3,500	4 of 22
Benzene	60	43-2,300	2 of 22
Carbon Disulfide	2,700	1.6-56	0 of 22
Chlorobenzene	1,700	13,000	1 of 22
Ethylbenzene	5,500	3.5-530	0 of 22
Methylene Chloride	100	2.6-67	0 of 22
Toluene	1,500	2.8-320	0 of 22
Tetrachloroethene	1,400	4.1-110	0 of 22
m/p-Xylene (Total)	1,200	1.1-4,900	2 of 22
o-Xylene	1,200	0.47-1300	1 of 22
SVOCs (units in micrograms per kilogram (µg/kg))			
Acenaphthylene	41,000	210-850	0 of 21
Acenaphthene	50,000	140-1500	0 of 21
Anthracene	50,000	62-3,300	0 of 21
Benzo(a)anthracene	224	130-11,000	13 of 21
Benzo(a)pyrene	61	96-14,000	11 of 21
Benzo(b)fluoranthene	1,100	77-19,000	5 of 21
Benzo(g,h,i)perylene	50,000	48-3,200	0 of 21
Benzo(k)fluoranthene	1,100	65-7,100	4 of 21
Bis(2-Ethylhexyl)phthalate	50,000	44-280	0 of 21
Carbazole		100-550	Detected in 4 of 21
Chrysene	400	120-13,000	10 of 21
Dibenz(a,h)anthracene	14	95-420	3 of 21
Dibenzofuran	6,200	59-160	of 21
Fluoranthene	50,000	250-18,000	of 21
Fluorene	50,000	49-1,800	of 21

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected	Frequency of Samples Exceeding SCGs
Indeno(1,2,3-cd)pyrene	3,200	56-2,200	0 of 21
2-Methylnapthalene	36,400	54-7,500	of 21
Naphthalene	13,000	91-490	0 of 21
Phenanthrene	50,000	180-10	0 of 21
Pyrene	50,000	61-18,000	0 of 21
PCBs (units in micrograms per kilogram (µg/kg))			
Aroclor-1254	10,000	97-11,000	1 of 21
Aroclor-1260	10,000	60-340	0 of 21
METALS (units in milligrams per liter (mg/L))			
Arsenic	7.5	0.306-35.5	12 of 21
Barium	300	10.1-1,900	4 of 21
Cadmium	1 or SB (1.93)	0.307-21.7	11 of 21
Chromium	10 or SB (15.8)	4.17-1,730	13 of 21
Lead	500	16.4-17,200	12 of 21
Selenium	2	0.564-9.18	7 of 21
Silver	SB (0.11)	0.206-1.13	7 of 21
Mercury	0.1	0.01-1.4	7 of 21

A number of VOC contaminants were identified in the subsurface samples; however, no VOCs were identified in the soil samples collected from test pits TP-23, TP-28, TP-34, TP-39 and AT-7. Acetone, benzene, xylene, and chlorobenzene were the only VOCs detected in excess of NYSDEC recommended soil cleanup objective concentrations. Acetone was the only VOC found in excess of the soil cleanup objective concentration in the samples collected from test pits TP-30, TP-37, and boring B-7. Acetone was also detected at a concentration of 17.5 times the recommended cleanup objective concentration in test pit TP-16. The concentration of xylene in test pit TP-19 was slightly above the recommended soil cleanup objective while the concentration in test pit TP-8 was approximately four times the cleanup objective. CHA also notes that no VOCs were detected in the trip blank submitted with the subsurface soil samples.

As expected based upon the historical data available for the DeLaval property, a number of SVOC contaminants were identified in the subsurface soil samples; however, as was the case with the surface soil samples, only benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, and dibenzo(a,h)anthracene were detected at concentrations

in excess of the NYSDEC recommended soil cleanup objective concentrations. The most significant SVOC contamination was identified in the soil samples collected form boring B-7 and test pits TP-5, TP-6, TP-8 and TP-16 collected in AOC-1. Elevated SVOC concentrations were also detected in the soil samples collected from test pits TP-28, TP-30 and TP-34 collected in AOC-2.

Only three soil samples had no detectable levels of SVOCs, which includes the samples collected from test pits TP-9, TP-19 and TP-24. However, the total SVOC concentrations in the samples collected from TP-35, TP-37, TP-38, TP-39, and TP-41 in AOC-3 and AOC-4 were low and none of the SVOCs detected were at concentrations in excess of the NYSDEC cleanup objectives.

Aroclor-1254 was detected in the soil samples collected from test pits TP-8, TP-9, TP-16 in AOC-1 and test pit TP-23 in AOC-2 ; however, it was only detected at a concentration in excess of NYSDEC soil cleanup objective concentrations in test pit TP-8 in AOC-1. Relatively low concentrations of Aroclor-1260 (the same congener detected in the surface soil samples) were detected in the soil samples collected from test pits TP-6, TP-8 and boring B-7 in AOC-1. A low level of Aroclor-1260 was also detected in the sample collected from TP-28, located up-gradient (east) of AOC-2.

A number of heavy metals were identified in the subsurface soil samples concentrations in excess of the background concentrations found in surface soil sample SS-29, with the exception of the samples collected in test pit TP-9 and boring B-7 in AOC-1. The most significant metal contamination was found in the sample collected from test pit TP-8, where the concentration of arsenic, barium, cadmium, chromium, lead, selenium, and silver was approximately 6, 15, 11, 109, 196, 7, and 347 times the background concentration, respectively.

Elevated concentrations of heavy metal contamination were also identified in AOC-2. The most impacted sample in this area was collected from test pit TP-30, where the concentration of mercury, arsenic, barium, cadmium, chromium, and lead were approximately 14, 3, 36, 4, 5, and 33 times the background concentration found in surface soil sample SS-29.

The most significant impact to the subsurface soils was found in AOC-1 and AOC-2. Although AOC-3 and AOC-4 are impacted as well, the impacts are less severe. The primary contaminants identified in the subsurface soils are SVOCs and heavy metals, as has historically been the case with the DeLaval property. PCBs were identified in AOC-1 and AOC-2 during the supplemental investigation; however, the only Aroclor-1254 was identified in AOC-1 in excess of the NYSDEC recommended soil cleanup objective.

3.3 GROUNDWATER

3.3.1 Groundwater Levels and Field Results

As shown on Figure 5, the groundwater flow direction beneath the DeLaval site is westward towards the Hudson River. Although it is not clear why, a small groundwater depression was identified in the vicinity of CHA-3. CHA initially thought this anomaly may be attributable to tidal influences; however, the water levels in all on-site monitoring wells were measured within a twenty-five minute period. Regardless, the difference in the groundwater level in wells CHA-3 and CHA-5 was only 0.19-feet, and therefore, the depression is considered relatively minor.

As previously discussed, sheen was observed on the purge water removed from monitoring wells CHA-2, CHA-5, and CHA-6. Therefore, all groundwater removed from these wells was placed into steel, fifty-five gallon drums for off-site disposal.

3.3.2 Analytical Results

Table 3 provides a summary of the analytical results for the groundwater samples collected from one existing on-site monitoring well and six permanent monitoring wells installed as part of the Supplemental Investigation. The groundwater results have been evaluated by comparing the data to the NYSDEC's *Technical and Operational Guidance Series (TOGS) 1.1.1 of "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" for fresh (Class GA) Groundwaters (1998).* Although a Class GA groundwater is considered a source of drinking water, it is the only set of standards and guidance values established for groundwater in TOGS 1.1.1.

Parameter concentrations exceeding the standard or guidance values presented in TOGS 1.1.1 are shaded in Table 3. The results of the ground water sample analyses are discussed below and are summarized in the following table.

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected[1]	Frequency of Samples Exceeding SCGs
VOCs (units in micrograms per kilogram (µg/kg))			
cis-1,2-Dichloroethene	5	0.77 - 49	1 of 8
Trichloroethene	5	0.67 - 5.0	1 of 8
SVOCs (units in micrograms per kilogram (µg/kg))			
Acenaphthene	20[2]	2.6	0 of 8
Bis(2-Ethylhexyl)phthalate	5	1.2-1.8	0 of 8
Di-n-butylphthalate	50[2]	3.9	0 of 8
Fluorene	50[2]	2.2	0 of 8
Naphthalene	10	1.5	0 of 8
Phenanthrene	50[2]	1.1	0 of 8
PCBs (units in micrograms per kilogram (µg/kg))			
Aroclor-1260	0.09	0.31 - 4.7	2 of 9
METALS (units in milligrams per liter (mg/L))			
Barium	1,000	16.1-204	0 of 8
Chromium	50	1.8-3.1	0 of 8
Lead	25	21-39.2	1 of 8
Mercury	0.7	0.03-0.08	0 of 8

Note: 1. If a single value is noted, the referenced parameter was detected either only one time, or multiple times at the same concentration.

2. Indicates value is a guidance value rather than a standard.

Only two VOCs were detected in the groundwater samples and no VOCs were detected in the trip blank that was submitted to the laboratory along with the groundwater samples collected from the monitoring wells. Trichloroethene was detected at the groundwater standard established in TOGS 1.1.1 in well CHA-1, which is a monitoring well located up-gradient of AOC-1. cis-1,2-Dichloroethene (1,2-DCE) was found at a concentration approximately ten times that groundwater standard in well CHA-4, which has been installed up-gradient of AOC-2. No VOCs were identified in the monitoring wells installed within or down-gradient of the three primary AOCs on the DeLaval property.

Low levels of SVOC contamination were identified in wells CHA-2 and CHA-3 located down-gradient of AOC-1 and AOC-4, respectively, and in wells CHA-5 and CHA-6 located with AOC-2. While SVOC contamination is likely attributable to the petroleum contamination identified in these areas, the concentrations are all below the groundwater standards and guidance values established in TOGS 1.1.1.

PCBs were absent from all of the groundwater samples except for well CHA-2, located down-gradient of AOC-1. Aroclor-1260 was identified at a concentration over 52 times greater than the TOGS 1.1.1 groundwater standard in well CHA-2. Since Aroclor-1260 was also identified in the surface and subsurface soil samples collected from AOC-1, it does not appear unreasonable for this compound to be detected in the groundwater. However, the laboratory did indicated that there were was some internal QA/QC problems (the percent difference between the quantified concentration son the two columns in dual column analysis was greater than forty percent) with this sample, and therefore, the concentration reported may not be accurate.

Due to the concern over the elevated concentrations of Aroclor-1260 in the groundwater sample collected from CHA-2, CHA collected a second sample from the well on October 15, 2004 and analyzed it for PCBs only. The results from this sample indicate that the concentration of Aroclor-1260 was 0.31 µg/L. However, the laboratory qualified this result as an estimated concentration. As noted in Table 3, this concentration is slightly in excess of the groundwater standard.

Barium, chromium, lead, and mercury were the only heavy metals identified in the groundwater samples collected from the DeLaval property. However, only the concentration of lead in well CHA-5 in AOC-2 was found in excess of the groundwater standards established in TOGS 1.1.1. The lead concentration in well CHA-5 was found to be 39.2 milligrams per liter (mg/L), which is approximately one and one-half times the groundwater standard of 25 mg/L.

The results of the field duplicate sample, CHA-10, compare well with the results for well MW-1. While most parameters were not detected in either sample, the concentration of barium was similar in both samples. Also, although mercury was not detected in the sample CHA-10, only a low concentration of mercury was detected in the sample MW-1. Overall, there appears to be little

impact to the groundwater quality beneath the DeLaval property. The only VOC contamination was identified in well up-gradient of the AOCs, and the SVOC and heavy metal contaminant concentrations were well below the groundwater standards and guidance values established in TOGS 1.1.1. The result considered most significant is the presence of PCBs (Arclor-1260) detected in well CHA-2.

3.4 SOIL GAS

Due to the putrescible wastes previously identified in AOC-1, a soil gas survey was conducted in this area to determine if any soil gas was actively being produced in this area. As indicated on the soil gas log in Appendix F, no detectable levels of soil gas were measured in the vicinity of AOC-1 on July 30, 2004.

3.5 QA/QC SUMMARY

As stated throughout the report, QA/QC measures including the analysis of field blanks, duplicates, matrix spike (MS) and matrix spike duplicate (MSD) samples were completed. The results of the analyses of these samples are presented in the data tables and are discussed, in most instances, in the previous sections. In addition, all analyses were performed via standard EPA methods and the laboratory data packages included all documentation required by NYSDEC ASP Protocols.

CHA contracted with Alpha Environmental Consultants, Inc., of Clifton Park, New York, to provide third party data validation services. A copy their data validation report is included as Appendix H. Alpha found the deliverables to be legible and complete with only minor issues, and the data packs were found not to contain data that is unusable.

4.0 SUPPLEMENTAL INVESTIGAITON CONCLUSIONS

As a result of the supplemental investigation, CHA was able to compile sufficient field and analytical data to significantly address the data gaps referenced in Section 1.3. Conclusions derived relative to the data gaps are presented below:

- The surficial soil sampling program identified site-wide SVOC and heavy metal contamination in the surface soil samples collected from across the DeLaval Property. In addition, PCBs were identified in the surface soils collected from the northwest corner of AOC-1.

- Based upon the additional test pits excavated on the DeLaval property, CHA was able to refine the limits of the AOCs, as shown ion Figure 3. One significant change to the AOCs, is that CHA believes that there is sufficient information to indicate that AOC-2 and AOC-3 are part of one larger impacted area as opposed to separate AOCs. In addition to the six-inch diameter fuel oil pipeline previously identified in AOC-2, CHA also discovered the presence of an approximately 4,000-gallon underground storage tank adjacent to the south side of the pipeline.

- Another discovery made from the test pit investigation was the presence of PCBs in the subsurface soils near the northern portion of AOC-1. However, the concentration of PCBs only exceeded the NYSDEC recommended soil cleanup objective concentrations in one sample, which was collected from test pit TP-8. The investigation also indicated that there are some oil-saturated soils with strong petroleum odors, heavy black staining, and elevated PID readings in the western portion of AOC-1.

- Based upon the groundwater samples collected from the newly installed monitoring wells and the existing on-site monitoring well (MW-1), it appears that although there is visual and olfactory evidence of petroleum contamination on the DeLaval site, there has been little impact to the groundwater quality beneath the site. However, PCBs were detected at a concentration in excess of the NYSDEC groundwater standard in monitoring well CHA-2. Based upon the location well CHA-2, there appears to be some correlation between the groundwater results and the PCBs identified in the surface and subsurface soils in this area.

- There appears is no evidence of active methane gas generation in the vicinity of AOC-1.

As stated previously, the data derived and conclusions drawn from the supplemental investigation were utilized to develop the January 2005 Final Remedial Alternatives Report for the DeLaval site.

Tables

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Dete Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-1 S3753-01 07/22/04 1.0 ug/Kg	SS-1DL S3753-01DL 07/22/04 5.0 ug/Kg	SS-2 S3753-02 07/22/04 1.0 ug/Kg	SS-3 S3753-03 07/22/04 1.0 ug/Kg	SS-3DL S3753-03DL 07/22/04 5.0 ug/Kg	SS-4 S3753-04 07/22/04 1.0 ug/Kg	SS-5 S3753-05 07/22/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		38 U	190 UD	36 U	35 U	180 UD	37 U	230 U
1,2-Dichlorobenzene	7,900	42 U	210 UD	40 U	39 U	200 UD	40 U	250 U
1,3-Dichlorobenzene	1,600	29 U	140 UD	27 U	27 U	130 UD	27 U	170 U
1,4-Dichlorobenzene	8,500	32 U	160 UD	31 U	30 U	150 UD	31 U	200 U
2,2-oxybis(1-Chloropropane)		42 U	210 UD	40 U	39 U	190 UD	40 U	250 U
N-Nitroso-di-n-propylamine		34 U	170 UD	32 U	32 U	160 UD	33 U	210 U
Hexachloroethane		37 U	190 UD	35 U	34 U	170 UD	36 U	220 U
Nitrobenzene	200	39 U	200 UD	37 U	37 U	180 UD	38 U	240 U
Isophorone	4,400	29 U	140 UD	27 U	27 U	130 UD	28 U	170 U
bis(2-Chloroethoxy)methane		35 U	180 UD	34 U	33 U	160 UD	34 U	210 U
1,2,4-Trichlorobenzene	3,400	22 U	110 UD	21 U	21 U	100 UD	21 U	130 U
Naphthalene	13,000	280 J	420 JD	16 U	16 U	78 UD	16 U	100 U
4-Chloroaniline	220 or MDL	290 U	1400 UD	270 U	270 U	1300 UD	280 U	1700 U
Hexachlorobutadiene		27 U	140 UD	26 U	25 U	130 UD	26 U	160 U
2-Methylnaphthalene	36,400	160 J	67 UD	13 U	12 U	62 UD	13 U	81 U
Hexachlorocyclopentadiene		19 U	97 UD	18 U	18 U	90 UD	19 U	120 U
2-Chloronaphthalene		16 U	81 UD	15 U	15 U	75 UD	16 U	98 U
2-Nitroaniline	430 or MDL	28 U	140 UD	27 U	26 U	130 UD	27 U	170 U
Dimethylphthalate	2,000	19 U	93 UD	18 U	17 U	86 UD	18 U	110 U
Acenaphthylene	41,000	140 J	120 UD	22 U	22 U	110 UD	22 U	140 U
2,6-Dinitrotoluene	1,000	33 U	170 UD	31 U	31 U	150 UD	32 U	200 U
3-Nitroaniline	500 or MDL	130 U	630 UD	120 U	120 U	580 UD	120 U	760 U
Acenaphthene	50,000**	430 J	530 JD	120 J	16 U	79 UD	16 U	100 U
Dibenzofuran	6,200	230 J	130 UD	24 U	24 U	120 UD	24 U	150 U
2,4-Dinitrotoluene		15 U	77 UD	15 U	14 U	72 UD	15 U	93 U
Diethylphthalate	71,000	24 U	120 UD	23 U	23 U	110 UD	23 U	150 U
4-Chlorophenyl-phenylether		19 U	96 UD	18 U	18 U	89 UD	18 U	120 U
Fluorene	50,000**	280 J	110 UD	80 J	20 U	100 UD	21 U	130 U
4-Nitroaniline		61 U	300 UD	58 U	56 U	280 UD	58 U	370 U
N-Nitrosodiphenylamine		20 U	98 UD	19 U	18 U	91 UD	19 U	120 U
4-Bromophenyl-phenylether		20 U	100 UD	19 U	19 U	95 UD	20 U	120 U
Hexachlorobenzene	410	15 U	73 UD	14 U	13 U	67 UD	14 U	88 U
Phenanthrene	50,000**	6300 EJ	4500 D	970	330 J	80 UD	290 J	1100 J
Anthracene	50,000**	830	1100 JD	230 J	74 J	86 UD	18 U	110 U
Carbazole		380 J	490 JD	79 J	16 U	79 UD	16 U	100 U
Di-n-butylphthalate	8,100	10 U	52 UD	9.8 U	9.6 U	48 UD	9.9 U	62 U
Fluoranthene	50,000**	8500 EJ	6800 D	1600	630 J	540 JD	540 J	3000 J
Pyrene	50,000**	7700 EJ	6600 D	1500	530 J	490 JD	560 J	2500 J
Butylbenzylphthalate	50,000**	26 U	130 UD	25 U	24 U	120 UD	25 U	160 U
3,3-Dichlorobenzidine		120 U	620 UD	120 U	120 U	580 UD	120 U	750 U
Benzo(a)anthracene	224 or MDL	3300	3200 JD	900	320 J	54 UD	320 J	1600 J
Chrysene	400	2800	2400 JD	790	300 J	110 UD	350 J	1600 J
bis(2-Ethylhexyl)phthalate	50,000**	18 U	89 UD	17 U	6100 EJ	4900 D	220 J	110 U
Di-n-octyl phthalate	50,000**	19 U	93 UD	18 U	17 U	86 UD	18 U	110 U
Benzo(b)fluoranthene	1,100	4600 J	3600 JD	1600 J	450 J	190 UD	510 J	2000 J
Benzo(k)fluoranthene	1,100	2300	1900 JD	720 J	290 J	120 UD	360 J	840 J
Benzo(a)pyrene	61 or MDL	3000	2600 JD	940	260 J	62 UD	310 J	1300 J
Indeno(1,2,3-cd)pyrene	3,200	420 J	500 JD	180 J	96 J	87 UD	88 J	600 J
Dibenz(a,h)anthracene	14 or MDL	100 J	110 UD	22 U	21 U	110 UD	22 U	140 U
Benzo(g,h,i)perylene	50,000**	940	920 JD	370 J	110 J	160 UD	160 J	770 J
Total Confident Conc. SVOC		42,690	35,560	10,079	9,490	5,930	3,708	15,510
Total TICs		23,830	0	25,350	17,870	0	7,690	53,900

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-6 S3753-06 07/22/04 1.0 ug/Kg	SS-7 S3753-07 07/22/04 5.0 ug/Kg	SS-8 S3753-08 07/22/04 1.0 ug/Kg	SS-9 S3753-09 07/22/04 1.0 ug/Kg	SS-10 S3753-10 07/22/04 5.0 ug/Kg	SS-11 S3753-11 07/22/04 1.0 ug/Kg	SS-12 S3753-12 07/22/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		200 U	220 U	38 U	190 U	200 U	39 U	180 U
1,2-Dichlorobenzene	7,900	220 U	240 U	42 U	210 U	220 U	43 U	200 U
1,3-Dichlorobenzene	1,600	150 U	160 U	28 U	140 U	150 U	29 U	140 U
1,4-Dichlorobenzene	8,500	170 U	190 U	32 U	160 U	170 U	33 U	150 U
2,2-oxybis(1-Chloropropane)		220 U	240 U	42 U	200 U	220 U	43 U	200 U
N-Nitroso-di-n-propylamine		180 U	200 U	34 U	170 U	180 U	35 U	160 U
Hexachloroethane		200 U	210 U	37 U	180 U	190 U	38 U	170 U
Nitrobenzene	200	210 U	230 U	39 U	190 U	200 U	40 U	190 U
Isophorone	4,400	150 U	170 U	29 U	140 U	150 U	29 U	140 U
bis(2-Chloroethoxy)methane		190 U	200 U	35 U	170 U	180 U	36 U	170 U
1,2,4-Trichlorobenzene	3,400	120 U	130 U	22 U	110 U	110 U	23 U	110 U
Naphthalene	13,000	89 U	97 U	17 U	82 U	87 U	17 U	80 U
4-Chloroaniline	220 or MDL	1500 U	1600 U	290 U	1400 U	1500 U	290 U	1400 U
Hexachlorobutadiene		140 U	160 U	27 U	130 U	140 U	28 U	130 U
2-Methylnaphthalene	36,400	71 U	77 U	13 U	65 U	69 U	14 U	63 U
Hexachlorocyclopentadiene		100 U	110 U	19 U	95 U	100 U	20 U	92 U
2-Chloronaphthalene		86 U	93 U	16 U	79 U	83 U	16 U	76 U
2-Nitroaniline	430 or MDL	150 U	160 U	28 U	140 U	140 U	29 U	130 U
Dimethylphthalate	2,000	98 U	110 U	18 U	90 U	95 U	19 U	87 U
Acenaphthylene	41,000	120 U	130 U	23 U	110 U	1700 J	24 U	110 U
2,6-Dinitrotoluene	1,000	170 U	190 U	33 U	160 U	170 U	34 U	160 U
3-Nitroaniline	500 or MDL	660 U	720 U	120 U	610 U	650 U	130 U	590 U
Acenaphthene	50,000**	91 U	98 U	17 U	83 U	88 U	17 U	81 U
Dibenzofuran	6,200	140 U	150 U	25 U	120 U	130 U	26 U	120 U
2,4-Dinitrotoluene		82 U	89 U	15 U	75 U	80 U	16 U	73 U
Diethylphthalate	71,000	130 U	140 U	24 U	120 U	130 U	25 U	120 U
4-Chlorophenyl-phenylether		100 U	110 U	19 U	94 U	99 U	20 U	91 U
Fluorene	50,000**	120 U	130 U	22 U	110 U	110 U	22 U	100 U
4-Nitroaniline		320 U	350 U	60 U	300 U	310 U	62 U	290 U
N-Nitrosodiphenylamine		100 U	110 U	20 U	96 U	100 U	20 U	93 U
4-Bromophenyl-phenylether		110 U	120 U	20 U	99 U	110 U	21 U	96 U
Hexachlorobenzene	410	77 U	83 U	14 U	71 U	75 U	15 U	69 U
Phenanthrene	50,000**	1500 J	3100 J	130 J	980 J	6500	18 U	2200 J
Anthracene	50,000**	470 J	810 J	18 U	90 U	1600 J	19 U	580 J
Carbazole		91 U	98 U	17 U	83 U	460 J	17 U	81 U
Di-n-butylphthalate	8,100	55 U	59 U	10 U	50 U	53 U	10 U	49 U
Fluoranthene	50,000**	3300 J	5700	300 J	2200 J	24000	140 J	2800 J
Pyrene	50,000**	2600 J	5100	270 J	1800 J	15000	130 J	2500 J
Butylbenzylphthalate	50,000**	140 U	150 U	26 U	130 U	130 U	26 U	120 U
3,3-Dichlorobenzidine		660 U	710 U	120 U	610 U	640 U	130 U	590 U
Benzo(a)anthracene	224 or MDL	1800 J	3400 J	200 J	1200 J	10000	85 J	1400 J
Chrysene	400	1500 J	2400 J	200 J	1200 J	7200	81 J	1200 J
bis(2-Ethylhexyl)phthalate	50,000**	94 U	100 U	18 U	87 U	92 U	18 U	84 U
Di-n-octyl phthalate	50,000**	98 U	110 U	18 U	90 U	95 U	19 U	87 U
Benzo(b)fluoranthene	1,100	1700 J	3800 J	200 J	1500 J	11000 J	85 J	1300 J
Benzo(k)fluoranthene	1,100	1000 J	1400 J	150 J	640 J	7500	27 U	500 J
Benzo(a)pyrene	61 or MDL	1300 J	2300 J	160 J	720 J	6900	14 U	900 J
Indeno(1,2,3-cd)pyrene	3,200	460 J	490 J	19 U	410 J	1100 J	19 U	380 J
Dibenz(a,h)anthracene	14 or MDL	120 U	130 U	23 U	110 U	120 U	23 U	110 U
Benzo(g,h,i)perylene	50,000**	490 J	680 J	34 U	420 J	1800 J	34 U	370 J
Total Confident Conc. SVOC		16,120	29,180	1,610	11,070	94,760	521	14,130
Total TICs		3,100	6,510	7,290	4,080	19,100	6,680	6,680

Qualifiers & Notes:

J - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor.

- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-13 S3753-13 07/22/04 5.0 ug/Kg	SS-14 S3753-14 07/22/04 1.0 ug/Kg	SS-14B S3753-15 07/22/04 1.0 ug/Kg	SS-14BDL S3753-15DL 07/22/04 5.0 ug/Kg	SS-15 S3753-16 07/22/04 1.0 ug/Kg	SS-16 S3753-17 07/22/04 1.0 ug/Kg	SS-17 S3753-18 07/22/04 5.0 ug/Kg
bis(2-Chloroethyl)ether		920 U	34 U	35 U	170 UD	39 U	170 U	200 U
1,2-Dichlorobenzene	7,900	1000 U	38 U	39 U	190 UD	43 U	190 U	220 U
1,3-Dichlorobenzene	1,600	690 U	26 U	26 U	130 UD	29 U	130 U	150 U
1,4-Dichlorobenzene	8,500	780 U	29 U	30 U	150 UD	33 U	150 U	170 U
2,2-oxybis(1-Chloropropane)		1000 U	38 U	38 U	190 UD	43 U	190 U	220 U
N-Nitroso-di-n-propylamine		830 U	31 U	31 U	160 UD	35 U	160 U	180 U
Hexachloroethane		890 U	33 U	34 U	170 UD	38 U	170 U	190 U
Nitrobenzene	200	950 U	35 U	36 U	180 UD	41 U	180 U	200 U
Isophorone	4,400	700 U	26 U	26 U	130 UD	30 U	130 U	150 U
bis(2-Chloroethoxy)methane		850 U	32 U	32 U	160 UD	36 U	160 U	180 U
1,2,4-Trichlorobenzene	3,400	540 U	20 U	20 U	100 UD	23 U	100 U	110 U
Naphthalene	13,000	410 U	15 U	15 U	77 UD	17 U	77 U	87 U
4-Chloroaniline	220 or MDL	6900 U	260 U	260 U	1300 UD	300 U	1300 U	1500 U
Hexachlorobutadiene		660 U	24 U	25 U	120 UD	28 U	120 U	140 U
2-Methylnaphthalene	36,400	320 U	12 U	12 U	61 UD	14 U	61 U	69 U
Hexachlorocyclopentadiene		470 U	17 U	18 U	89 UD	20 U	89 U	100 U
2-Chloronaphthalene		390 U	14 U	15 U	74 UD	17 U	74 U	83 U
2-Nitroaniline	430 or MDL	680 U	25 U	26 U	130 UD	29 U	130 U	150 U
Dimethylphthalate	2,000	450 U	17 U	17 U	85 UD	19 U	84 U	96 U
Acenaphthylene	41,000	6600 J	370 J	540 J	420 JD	24 U	110 U	1100 J
2,6-Dinitrotoluene	1,000	800 U	30 U	30 U	150 UD	34 U	150 U	170 U
3-Nitroaniline	500 or MDL	3000 U	110 U	110 U	570 UD	130 U	570 U	650 U
Acenaphthene	50,000**	410 U	15 U	16 U	78 UD	18 U	78 U	88 U
Dibenzofuran	6,200	620 U	23 U	23 U	120 UD	26 U	120 U	130 U
2,4-Dinitrotoluene		370 U	14 U	14 U	71 UD	16 U	71 U	80 U
Diethylphthalate	71,000	590 U	22 U	22 U	110 UD	25 U	110 U	130 U
4-Chlorophenyl-phenylether		460 U	17 U	18 U	88 UD	20 U	88 U	99 U
Fluorene	50,000**	530 U	20 U	20 U	100 UD	23 U	100 U	110 U
4-Nitroaniline		1500 U	54 U	56 U	280 UD	63 U	280 U	310 U
N-Nitrosodiphenylamine		480 U	18 U	18 U	90 UD	20 U	90 U	100 U
4-Bromophenyl-phenylether		490 U	18 U	19 U	93 UD	21 U	93 U	110 U
Hexachlorobenzene	410	350 U	13 U	13 U	66 UD	15 U	66 U	75 U
Phenanthrene	50,000**	22000	1200	1800	1300 JD	290 J	3100 J	6900 J
Anthracene	50,000**	5500 J	270 J	370 J	360 JD	120 J	790 J	1300 J
Carbazole		410 U	86 J	110 J	78 UD	18 U	78 U	450 J
Di-n-butylphthalate	8,100	250 U	9.2 U	9.4 U	47 UD	11 U	47 U	53 U
Fluoranthene	50,000**	88000	4600	6500 EJ	4600 D	910	8000	19000
Pyrene	50,000**	54000	2900	4000	3200 JD	910	5800	11000
Butylbenzylphthalate	50,000**	630 U	23 U	24 U	120 UD	27 U	120 U	130 U
3,3-Dichlorobenzidine		3000 U	110 U	110 U	570 UD	130 U	570 U	640 U
Benzo(a)anthracene	224 or MDL	42000	2200	3100	2500 JD	680 J	3800	8100
Chrysene	400	31000	1500	2200	2000 JD	570 J	3200 J	6000
bis(2-Ethylhexyl)phthalate	50,000**	430 U	16 U	16 U	81 UD	18 U	81 U	92 U
Di-n-octyl phthalate	50,000**	450 U	17 U	17 U	85 UD	19 U	84 U	96 U
Benzo(b)fluoranthene	1,100	49000 J	2900 J	5300 J	2900 JD	900 J	5100 J	10000
Benzo(k)fluoranthene	1,100	25000	1300	2100	1200 JD	430 J	1900 J	3600 J
Benzo(a)pyrene	61 or MDL	26000	1400	2100	1600 JD	610 J	3100 J	5200
Indeno(1,2,3-cd)pyrene	3,200	5200 J	340 J	370 J	610 JD	120 J	810 J	1400 J
Dibenz(a,h)anthracene	14 or MDL	550 U	20 U	120 J	100 UD	23 U	100 U	120 U
Benzo(g,h,i)perylene	50,000**	7700 J	450 J	540 J	610 JD	170 J	1100 J	1600 J
Total Confident Conc. SVOC		362,000	19,516	29,150	21,300	5,710	36,700	75,650
Total TICs		29,600	4,080	10,530	0	6,100	5,870	8,300

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics								
Sample ID		SS-18	SS-19	SS-20	SS-21	SS-22	SS-23	SS-24
Laboratory Sample No.		S3753-19	S3754-10	S3754-01	S3754-02	S3754-03	S3754-04	S3754-05
Sampling Date		07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04
Dilution Factor		5.0	1.0	1.0	10.0	1.0	1.0	1.0
Units		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]							
bis(2-Chloroethyl)ether		190 U	190 U	190 U	1800 U	190 U	210 U	180 U
1,2-Dichlorobenzene	7,900	210 U	210 U	210 U	2000 U	210 U	230 U	200 U
1,3-Dichlorobenzene	1,600	140 U	140 U	140 U	1400 U	140 U	150 U	140 U
1,4-Dichlorobenzene	8,500	160 U	160 U	160 U	1500 U	160 U	170 U	160 U
2,2-oxybis(1-Chloropropane)		210 U	210 U	200 U	2000 U	210 U	230 U	200 U
N-Nitroso-di-n-propylamine		170 U	170 U	170 U	1600 U	170 U	180 U	170 U
Hexachloroethane		180 U	190 U	180 U	1800 U	180 U	200 U	180 U
Nitrobenzene	200	200 U	200 U	190 U	1900 U	200 U	210 U	190 U
Isophorone	4,400	140 U	140 U	140 U	1400 U	140 U	160 U	140 U
bis(2-Chloroethoxy)methane		180 U	180 U	170 U	1700 U	180 U	190 U	170 U
1,2,4-Trichlorobenzene	3,400	110 U	110 U	110 U	1100 U	110 U	120 U	110 U
Naphthalene	13,000	84 U	85 U	82 U	810 U	84 U	91 U	82 U
4-Chloroaniline	220 or MDL	1400 U	1400 U	1400 U	14000 U	1400 U	1500 U	1400 U
Hexachlorobutadiene		130 U	140 U	130 U	1300 U	140 U	150 U	130 U
2-Methylnaphthalene	36,400	66 U	67 U	65 U	640 U	67 U	72 U	65 U
Hexachlorocyclopentadiene		96 U	98 U	95 U	930 U	97 U	100 U	94 U
2-Chloronaphthalene		80 U	81 U	79 U	770 U	81 U	87 U	78 U
2-Nitroaniline	430 or MDL	140 U	140 U	140 U	1300 U	140 U	150 U	140 U
Dimethylphthalate	2,000	92 U	93 U	90 U	880 U	92 U	100 U	90 U
Acenaphthylene	41,000	120 U	120 U	110 U	1100 U	120 U	130 U	110 U
2,6-Dinitrotoluene	1,000	160 U	170 U	160 U	1600 U	160 U	180 U	160 U
3-Nitroaniline	500 or MDL	620 U	630 U	610 U	6000 U	620 U	680 U	610 U
Acenaphthene	50,000**	85 U	86 U	83 U	820 U	85 U	92 U	83 U
Dibenzofuran	6,200	130 U	130 U	120 U	1200 U	130 U	140 U	120 U
2,4-Dinitrotoluene		77 U	78 U	75 U	740 U	77 U	83 U	75 U
Diethylphthalate	71,000	120 U	120 U	120 U	1200 U	120 U	130 U	120 U
4-Chlorophenyl-phenylether		95 U	97 U	94 U	920 U	96 U	100 U	93 U
Fluorene	50,000**	110 U	110 U	110 U	1100 U	110 U	120 U	110 U
4-Nitroaniline		300 U	310 U	300 U	2900 U	300 U	330 U	290 U
N-Nitrosodiphenylamine		98 U	99 U	96 U	940 U	98 U	110 U	95 U
4-Bromophenyl-phenylether		100 U	100 U	99 U	970 U	100 U	110 U	99 U
Hexachlorobenzene	410	72 U	73 U	71 U	690 U	72 U	78 U	70 U
Phenanthrene	50,000**	630 J	610 J	500 J	830 U	820 J	94 U	420 J
Anthracene	50,000**	92 U	93 U	90 U	880 U	92 U	100 U	90 U
Carbazole		85 U	86 U	83 U	820 U	85 U	92 U	83 U
Di-n-butylphthalate	8,100	51 U	52 U	50 U	490 U	51 U	56 U	50 U
Fluoranthene	50,000**	1500 J	1500 J	1100 J	3900 J	1300 J	660 J	630 J
Pyrene	50,000**	1300 J	1400 J	1100 J	3800 J	1300 J	700 J	670 J
Butylbenzylphthalate	50,000**	130 U	130 U	130 U	1200 U	130 U	140 U	130 U
3,3-Dichlorobenzidine		620 U	630 U	610 U	5900 U	620 U	670 U	600 U
Benzo(a)anthracene	224 or MDL	950 J	740 J	640 J	560 U	630 J	63 U	57 U
Chrysene	400	840 J	900 J	630 J	1200 U	670 J	130 U	120 U
bis(2-Ethylhexyl)phthalate	50,000**	88 U	90 U	87 U	850 U	89 U	96 U	86 U
Di-n-octyl phthalate	50,000**	92 U	93 U	90 U	880 U	92 U	100 U	90 U
Benzo(b)fluoranthene	1,100	1200 J	770 J	700 J	3800 J	670 J	220 U	200 U
Benzo(k)fluoranthene	1,100	540 J	540 J	500 J	1300 U	130 U	140 U	130 U
Benzo(a)pyrene	61 or MDL	800 J	720 J	600 J	640 U	510 J	72 U	65 U
Indeno(1,2,3-cd)pyrene	3,200	93 U	540 J	91 U	900 U	93 U	100 U	91 U
Dibenz(a,h)anthracene	14 or MDL	110 U	110 U	110 U	1100 U	110 U	120 U	110 U
Benzo(g,h,i)perylene	50,000**	170 U	510 J	160 U	1600 U	170 U	180 U	160 U
Total Confident Conc. SVOC		7,760	8,230	5,770	11,500	5,900	1,360	1,720
Total TICs		3,890	5,720	12,830	0	2,570	7,000	20,900

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor

- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1 Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-25 S3754-06 07/22/04 1.0 ug/Kg	SS-26 S3753-20 07/22/04 1.0 ug/Kg	SS-27 S3754-07 07/22/04 10.0 ug/Kg	SS-28 S3754-08 07/22/04 10.0 ug/Kg	SS-29 S3754-09 07/22/04 2.0 ug/Kg
bis(2-Chloroethyl)ether		170 U	40 U	2100 U	1800 U	360 U
1,2-Dichlorobenzene	7,900	180 U	44 U	2300 U	2000 U	400 U
1,3-Dichlorobenzene	1,600	120 U	30 U	1500 U	1300 U	270 U
1,4-Dichlorobenzene	8,500	140 U	34 U	1700 U	1500 U	310 U
2,2-oxybis(1-Chloropropane)		180 U	44 U	2300 U	1900 U	400 U
N-Nitroso-di-n-propylamine		150 U	36 U	1800 U	1600 U	320 U
Hexachloroethane		160 U	39 U	2000 U	1700 U	350 U
Nitrobenzene	200	170 U	41 U	2100 U	1800 U	370 U
Isophorone	4,400	130 U	30 U	1500 U	1300 U	270 U
bis(2-Chloroethoxy)methane		150 U	37 U	1900 U	1600 U	340 U
1,2,4-Trichlorobenzene	3,400	97 U	23 U	1200 U	1000 U	210 U
Naphthalene	13,000	74 U	250 J	910 U	780 U	160 U
4-Chloroaniline	220 or MDL	1300 U	300 U	15000 U	13000 U	2700 U
Hexachlorobutadiene		120 U	29 U	1500 U	1300 U	260 U
2-Methylnaphthalene	36,400	58 U	310 J	720 U	620 U	130 U
Hexachlorocyclopentadiene		85 U	20 U	1000 U	900 U	180 U
2-Chloronaphthalene		71 U	17 U	870 U	750 U	150 U
2-Nitroaniline	430 or MDL	120 U	30 U	1500 U	1300 U	270 U
Dimethylphthalate	2,000	81 U	19 U	990 U	860 U	180 U
Acenaphthylene	41,000	100 U	130 J	8000 J	1100 U	220 U
2,6-Dinitrotoluene	1,000	140 U	35 U	1800 U	1500 U	310 U
3-Nitroaniline	500 or MDL	550 U	130 U	6700 U	5800 U	1200 U
Acenaphthene	50,000**	75 U	18 U	920 U	790 U	160 U
Dibenzofuran	6,200	110 U	110 J	1400 U	1200 U	240 U
2,4-Dinitrotoluene		67 U	16 U	830 U	720 U	150 U
Diethylphthalate	71,000	110 U	26 U	1300 U	1100 U	230 U
4-Chlorophenyl-phenylether		84 U	20 U	1000 U	890 U	180 U
Fluorene	50,000**	96 U	23 U	1200 U	1000 U	210 U
4-Nitroaniline		260 U	64 U	3300 U	2800 U	580 U
N-Nitrosodiphenylamine		86 U	21 U	1100 U	910 U	190 U
4-Bromophenyl-phenylether		89 U	21 U	1100 U	940 U	190 U
Hexachlorobenzene	410	63 U	15 U	780 U	670 U	140 U
Phenanthrene	50,000**	76 U	1200	92000	4200 J	160 U
Anthracene	50,000**	81 U	170 J	18000 J	860 U	180 U
Carbazole		75 U	120 J	920 U	790 U	160 U
Di-n-butylphthalate	8,100	45 U	11 U	550 U	480 U	98 U
Fluoranthene	50,000**	47 U	1900	320000	12000 J	100 U
Pyrene	50,000**	60 U	1400	260000	11000 J	130 U
Butylbenzylphthalate	50,000**	110 U	27 U	1400 U	1200 U	250 U
3,3-Dichlorobenzidine		540 U	130 U	6700 U	5800 U	1200 U
Benzo(a)anthracene	224 or MDL	51 U	660 J	150000	7300 J	110 U
Chrysene	400	110 U	790 J	130000	7400 J	230 U
bis(2-Ethylhexyl)phthalate	50,000**	78 U	19 U	960 U	820 U	170 U
Di-n-octyl phthalate	50,000**	81 U	19 U	990 U	860 U	180 U
Benzo(b)fluoranthene	1,100	180 U	1200 J	180000 J	8100 J	390 U
Benzo(k)fluoranthene	1,100	120 U	470 J	64000	6800 J	250 U
Benzo(a)pyrene	61 or MDL	58 U	460 J	100000	6800 J	130 U
Indeno(1,2,3-cd)pyrene	3,200	82 U	160 J	16000 J	870 U	180 U
Dibenz(a,h)anthracene	14 or MDL	99 U	24 U	1200 U	1100 U	220 U
Benzo(g,h,i)perylene	50,000**	150 U	200 J	25000 J	3900 J	320 U
Total Confident Conc. SVOC		0	9,530	1,363,000	67,500	0
Total TICs		0	13,530	265,000	70,000	0

Quallfiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and individual Semi-VOCs<50ppm

1 Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals								
Sample ID		SS-1	SS-2	SS-3	SS-4	SS-5	SS-5DL	SS-6
Laboratory Sample No.		S3753-01	S3753-02	S3753-03	S3753-04	S3753-05	S3753-05DL	S3753-06
Sampling Date		07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04
Dilution Factor		1.0	1.0	1.0	1.0	1.0	10.0	1.0
Units	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND								
Aroclor-1016	1,000	6.1 U	5.7 U	5.7 U	5.9 U	7.4 U	74 UD	6.4 U
Aroclor-1221	1,000	4.1 U	3.9 U	3.9 U	4.0 U	5.0 U	50 UD	4.4 U
Aroclor-1232	1,000	2.8 U	2.6 U	2.6 U	2.7 U	3.4 U	34 UD	3.0 U
Aroclor-1242	1,000	3.6 U	3.4 U	3.4 U	3.5 U	4.4 U	44 UD	3.8 U
Aroclor-1248	1,000	4.3 U	4.0 U	4.0 U	4.1 U	5.2 U	52 UD	4.5 U
Aroclor-1254	1,000	1.6 U	1.5 U	1.5 U	1.5 U	1.9 U	19 UD	1.7 U
Aroclor-1260	1,000	3.4 U	3.2 U	3.2 U	3.3 U	1200 EJ	1000 D	1700 EJ
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg
COMPOUND								
Arsenic	7.5 or SB/(5.89)	15.6	7.430	11.5	24.8	4.890		9.240
Barium	300 or SB/(52.5)	170	68.0	175	85.7	127		159
Cadmium	1 or SB/(1.93)	2.440	8.700	2.760	3.310	2.190		2.710
Chromium	10 or SB/(15.8)	88.7	58.2	18.2	74.3	14.6		27.0
Lead	SB/(87.9)	908 J	78.4 J	185 J	414 J	210 J		265 J
Selenium	2 or SB/(1.25)	2.500	1.400	1.030 J	3.210	2.150		1.100 J
Silver	SB/(0.117)	1.120 J	240	0.534 J	2.070	0.149 U		0.262 J
Mercury	0.1	0.40	0.13	0.11	0.18	0.34		0.39

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-6DL S3753-06DL 07/22/04 10.0 ug/Kg	SS-7 S3753-07 07/22/04 1.0 ug/Kg	SS-7DL S3753-07DL 07/22/04 10.0 ug/Kg	SS-8 S3753-08 07/22/04 1.0 ug/Kg	SS-9 S3753-09 07/22/04 1.0 ug/Kg	SS-10 S3753-10 07/22/04 1.0 ug/Kg	SS-11 S3753-11 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	64 UD	6.9 U	69 UD	6.1 U	5.9 U	6.2 U	6.2 U
Aroclor-1221	1,000	44 UD	4.7 U	47 UD	4.2 U	4.0 U	4.2 U	4.2 U
Aroclor-1232	1,000	30 UD	3.2 U	32 UD	2.8 U	2.7 U	2.9 U	2.9 U
Aroclor-1242	1,000	38 UD	4.1 U	41 UD	3.6 U	3.5 U	3.7 U	3.7 U
Aroclor-1248	1,000	45 UD	4.9 U	49 UD	4.3 U	4.1 U	4.4 U	4.3 U
Aroclor-1254	1,000	17 UD	1.8 U	18 UD	1.6 U	1.5 U	1.6 U	1.6 U
Aroclor-1260	1,000	1500 D	3600 EJ	3400 D	3.4 U	3.3 U	3.5 U	3.5 U
Units COMPOUND			mg/Kg		mg/Kg	mg/Kg	mg/Kg	mg/Kg
Arsenic	7.5 or SB/(5.89)		19.2		8.800	9.990	10.2	6.780
Barium	300 or SB/(52.5)		318		70.6	134	179	38.4
Cadmium	1 or SB/(1.93)		3.730		2.290	2.800	2.900	2.080
Chromium	10 or SB/(15.8)		146		15.4	21.3	18.9	12.6
Lead	SB/(87.9)		456 J		58.8 J	289 J	657 J	25.4 J
Selenium	2 or SB/(1.25)		2.820		1.860	1.140	1.760	1.130 J
Silver	SB/(0.117)		2.020		0.123 U	0.119 U	0.524 J	0.126 U
Mercury	0.1		1.3		0.07	0.11	0.22	0.02

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-12 S3753-12 07/22/04 1.0 ug/Kg	SS-13 S3753-13 07/22/04 1.0 ug/Kg	SS-14 S3753-14 07/22/04 1.0 ug/Kg	SS-14B S3753-15 07/22/04 1.0 ug/Kg	SS-15 S3753-16 07/22/04 1.0 ug/Kg	SS-16 S3753-17 07/22/04 1.0 ug/Kg	SS-17 S3753-18 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	5.7 U	5.9 U	5.5 U	5.6 U	6.2 U	5.5 U	6.3 U
Aroclor-1221	1,000	3.9 U	4.0 U	3.7 U	3.8 U	4.3 U	3.8 U	4.3 U
Aroclor-1232	1,000	2.7 U	2.7 U	2.5 U	2.6 U	2.9 U	2.6 U	2.9 U
Aroclor-1242	1,000	3.4 U	3.5 U	3.2 U	3.3 U	3.7 U	3.3 U	3.7 U
Aroclor-1248	1,000	4.0 U	4.2 U	3.8 U	3.9 U	4.4 U	3.9 U	4.4 U
Aroclor-1254	1,000	1.5 U	1.5 U	1.4 U	1.4 U	1.6 U	1.4 U	1.6 U
Aroclor-1260	1,000	3.2 U	3.4 U	3.1 U	3.2 U	3.5 U	3.1 U	3.6 U
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
Arsenic	7.5 or SB/(5.89)	6.770	7.340	7.550	6.570	6.580	5.070	8.840
Barium	300 or SB/(52.5)	66.1	121	83.5	72.2	78.9	374	164
Cadmium	1 or SB/(1.93)	2.090	1.720	2.060	1.570	2.240	1.610	2.620
Chromium	10 or SB/(15.8)	13.2	10.9	12.8	8.790	15.3	11.3	15.2
Lead	SB/(87.9)	80.6 J	447 J	166 J	141 J	71.6 J	262 J	793 J
Selenium	2 or SB/(1.25)	1.060 J	1.470	1.350	1.170	1.740	0.777 J	1.390
Silver	SB/(0.117)	0.115 U	0.121 U	0.112 U	0.113 U	0.621 J	0.113 U	0.127 U
Mercury	0.1	0.03	0.13	0.07	0.13	0.07	0.12	0.10

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-18 S3753-19 07/22/04 1.0 ug/Kg	SS-19 S3754-10 07/22/04 1.0 ug/Kg	SS-20 S3754-01 07/22/04 1.0 ug/Kg	SS-21 S3754-02 07/22/04 1.0 ug/Kg	SS-22 S3754-03 07/22/04 1.0 ug/Kg	SS-23 S3754-04 07/22/04 1.0 ug/Kg	SS-24 S3754-05 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	6.0 U	6.2 U	6.0 U	5.8 U	6.1 U	6.5 U	5.9 U
Aroclor-1221	1,000	4.1 U	4.2 U	4.1 U	3.9 U	4.2 U	4.5 U	4.0 U
Aroclor-1232	1,000	2.8 U	2.9 U	2.8 U	2.7 U	2.8 U	3.0 U	2.7 U
Aroclor-1242	1,000	3.6 U	3.7 U	3.5 U	3.4 U	3.6 U	3.9 U	3.5 U
Aroclor-1248	1,000	4.2 U	4.3 U	4.2 U	4.1 U	4.3 U	4.6 U	4.2 U
Aroclor-1254	1,000	1.6 U	1.6 U	1.5 U	1.5 U	1.6 U	1.7 U	1.5 U
Aroclor-1260	1,000	3.4 U	140	83	67	290	3.7 U	140
Units COMPOUND			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Arsenic	7.5 or SB/(5.89)	8.980	21.5	9.450	8.460	15.1	8.790	8.870
Barium	300 or SB/(52.5)	130	92.7	123	57.6	80.4	51.7	62.1
Cadmium	1 or SB/(1.93)	2.500	2.340	2.920	2.100	2.500	3.400	2.460
Chromium	10 or SB/(15.8)	17.0	123 J	90.0 J	14.4 J	24.4 J	44.9 J	18.1 J
Lead	SB/(87.9)	273 J	245 J	261 J	73.7 J	130 J	139 J	192 J
Selenium	2 or SB/(1.25)	0.930 J	1.140 J	1.300	1.510	1.720	1.940	1.580
Silver	SB/(0.117)	0.124 U	0.683 J	0.120 U	0.119 U	0.124 U	1.130 J	0.120 U
Mercury	0.1	0.08	0.57 J	0.27 J	0.11 J	0.11 J	0.10 J	0.08 J

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-25 S3754-06 07/22/04 1.0 ug/Kg	SS-26 S3753-20 07/22/04 1.0 ug/Kg	SS-27 S3754-07 07/22/04 1.0 ug/Kg	SS-28 S3754-08 07/22/04 1.0 ug/Kg	SS-29 S3754-09 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	5.3 U	6.4 U	6.6 U	5.6 U	5.7 U
Aroclor-1221	1,000	3.6 U	4.4 U	4.5 U	3.8 U	3.9 U
Aroclor-1232	1,000	2.5 U	3.0 U	3.0 U	2.6 U	2.6 U
Aroclor-1242	1,000	3.2 U	3.8 U	3.9 U	3.3 U	3.4 U
Aroclor-1248	1,000	3.7 U	4.5 U	4.6 U	3.9 U	4.0 U
Aroclor-1254	1,000	1.4 U	1.7 U	1.7 U	1.4 U	1.5 U
Aroclor-1260	1,000	50 PJ	3.6 U	99 PJ	86	3.2 U
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Arsenic	7.5 or SB/(5.89)	5.540	22.1	20.1	9.680	5.890
Barium	300 or SB/(52.5)	15.1 J	123	101	41.6	52.5
Cadmium	1 or SB/(1.93)	0.973	2.220	3.220	2.480	1.930
Chromium	10 or SB/(15.8)	5.940 J	627	32.7 J	15.6 J	15.8 J
Lead	SB/(87.9)	22.8 J	189 J	406 J	138 J	87.9 J
Selenium	2 or SB/(1.25)	0.320 U	3.050	2.120	0.602 J	1.250
Silver	SB/(0.117)	0.107 U	1.960	0.809 J	0.114 U	0.117 U
Mercury	0.1	0.03 J	0.18	0.27 J	0.24 J	0.04 J

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Volatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-1S-1 S3970-01 08/02/04 1.0 ug/Kg	TP-5S-1 S3970-02 08/02/04 1.0 ug/Kg	TP-6S-1 S3970-03 08/02/04 1.0 ug/Kg	TP-8S-1 S3970-04 08/03/04 1.0 ug/Kg	TP-9S-1 S3970-05 08/03/04 1.0 ug/Kg	TP-9S-1RE S3970-05RE 08/03/04 1.0 ug/Kg	TP-16S-1 S3970-06 08/03/04 1.0 ug/Kg	TP-19S-1 S3970-07 08/04/04 1.0 ug/Kg	TP-20S-1 S3970-08 08/04/04 1.0 ug/Kg	TP-20S-1RE S3970-08RE 08/04/04 1.0 ug/Kg
Chloromethane		110 U	0.42 U	0.37 U	130 U	0.36 U	0.36 U	120 U	100 U	0.44 U	110 U
Vinyl Chloride	200	44 U	0.30 U	0.26 U	49 U	0.26 U	0.26 U	45 U	40 U	0.31 U	44 U
Bromomethane		130 U	0.90 U	0.80 U	140 U	0.77 U	0.77 U	130 U	120 U	0.94 U	130 U
Chloroethane	1,900	150 U	0.66 U	0.59 U	160 U	0.57 U	0.57 U	150 U	130 U	0.70 U	150 U
1,1-Dichloroethene	200	53 U	0.27 U	0.24 U	59 U	0.23 U	0.23 U	54 U	48 U	0.29 U	54 U
Acetone	200	540 U	34 J	8.4 U	610 U	8.1 U	8.1 U	3500 J	500 U	63	550 U
Carbon Disulfide	2,700	64 U	0.13 U	1.6 J	72 U	0.11 U	0.11 U	66 U	59 U	0.13 U	65 U
Methylene Chloride	100	100 U	4.4 J	4.5 J	110 U	2.6 J	1.6 J	110 U	94 U	0.91 U	100 U
trans-1,2-Dichloroethene	300	85 U	0.47 U	0.42 U	94 U	0.40 U	0.40 U	87 U	77 U	0.49 U	86 U
1,1-Dichloroethane	200	35 U	0.45 U	0.40 U	40 U	0.38 U	0.38 U	36 U	32 U	0.47 U	36 U
2-Butanone	300	470 U	2.9 U	2.6 U	520 U	2.5 U	2.5 U	480 U	430 U	3.0 U	470 U
Carbon Tetrachloride	600	77 U	0.38 U	0.33 U	86 U	0.32 U	0.32 U	79 U	71 U	0.40 U	76 U
cis-1,2-Dichloroethene		130 U	0.45 U	0.40 U	140 U	0.38 U	0.38 U	130 U	120 U	0.47 U	130 U
Chloroform	300	95 U	0.30 U	0.27 U	110 U	0.26 U	0.26 U	97 U	87 U	0.32 U	96 U
1,1,1-Trichloroethane	800	67 U	0.34 U	0.30 U	75 U	0.29 U	0.29 U	69 U	61 U	0.36 U	68 U
Benzene	60	40 U	0.26 U	0.23 U	44 U	0.22 U	0.22 U	2300	36 U	0.27 U	40 U
1,2-Dichloroethane	100	53 U	3.9 U	3.5 U	59 U	3.3 U	3.3 U	54 U	48 U	4.1 U	53 U
Trichloroethene	700	110 U	0.41 U	0.36 U	120 U	0.35 U	0.35 U	110 U	100 U	0.43 U	110 U
1,2-Dichloropropane		52 U	0.42 U	0.38 U	58 U	0.36 U	0.36 U	54 U	48 U	0.45 U	53 U
Bromodichloromethane		57 U	0.42 U	0.37 U	64 U	0.36 U	0.36 U	59 U	52 U	0.44 U	58 U
4-Methyl-2-Pentanone	1,000	220 U	3.0 U	2.7 U	240 U	2.6 U	2.6 U	220 U	200 U	3.2 U	220 U
Toluene	1,500	64 U	0.33 U	0.29 U	290 J	3.2 J	2.8 J	150 J	200 J	0.35 U	64 U
t-1,3-Dichloropropene		70 U	0.32 U	0.29 U	78 U	0.28 U	0.28 U	72 U	64 U	0.34 U	71 U
cis-1,3-Dichloropropene		25 U	0.25 U	0.22 U	28 U	0.21 U	0.21 U	26 U	23 U	0.26 U	25 U
1,1,2-Trichloroethane		85 U	0.64 U	0.57 U	95 U	0.55 U	0.55 U	87 U	78 U	0.67 U	86 U
2-Hexanone		110 U	4.0 U	3.6 U	120 U	3.5 U	3.5 U	110 U	98 U	4.3 U	110 U
Dibromochloromethane		82 U	0.37 U	0.33 U	89 U	0.32 U	0.32 U	64 U	57 U	0.39 U	83 U
Tetrachloroethene	1,400	54 U	0.80 U	0.71 U	81 U	0.69 U	0.69 U	56 U	50 U	9.6	55 U
Chlorobenzene	1,700	61 U	0.45 U	0.40 U	68 U	0.38 U	0.38 U	13000	55 U	0.47 U	61 U
Ethyl Benzene	5,500	67 U	0.32 U	0.28 U	530 J	0.27 U	0.27 U	69 U	420 J	0.33 U	68 U
m/p-Xylenes	1,200	560 J	0.65 U	1.1 J	4900	3.3 J	2.8 J	160 U	1200 J	0.69 U	160 U
o-Xylene	1,200	60 U	0.55 U	0.49 U	610 J	0.47 U	0.47 J	62 U	1300	0.58 U	61 U
Styrene		56 U	0.40 U	0.35 U	63 U	0.34 U	0.34 U	58 U	52 U	0.42 U	57 U
Bromoform		41 U	0.38 U	0.34 U	48 U	0.32 U	0.32 U	43 U	38 U	0.40 U	42 U
1,1,2,2-Tetrachloroethane	600	81 U	0.67 U	0.59 U	91 U	0.57 U	0.57 U	84 U	75 U	0.71 U	83 U
Total Confident Conc. VOC		560	38.4	7.2	6330	9.1	7.4	16950	3120	72.6	0
Total TICs		22400	0	385	235000	299	0	101300	99700	4140	0

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

For dual column analysis the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Volatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-23S-1 S3970-09 08/04/04 1.0 ug/Kg	TP-24S-1 S3970-10 08/04/04 1.0 ug/Kg	TP-26S-1 S4063-01 08/05/04 1.0 ug/Kg	TP-30S-1 S4063-02 08/05/04 10.0 ug/Kg	TP-34S-1 S4063-03 08/05/04 1.0 ug/Kg	TP-35S-1 S4063-04 08/05/04 1.0 ug/Kg	TP-37S-1 S4063-05 08/06/04 5.0 ug/Kg	TP-38S-1 S4063-06 08/06/04 1.0 ug/Kg	TP-39S-1 S4063-07 08/06/04 1.0 ug/Kg	TP-41S-1 S4063-08 08/05/04 1.0 ug/Kg	TP-42S-1 S4063-09 08/06/04 1.0 ug/Kg
Chloromethane		120 U	0.48 U	0.40 U	3.9 U	0.39 U	0.41 U	2.0 U	0.43 U	0.39 U	0.42 U	0.41 U
Vinyl Chloride	200	46 U	0.34 U	0.28 U	2.8 U	0.28 U	0.29 U	1.4 U	0.31 U	0.26 U	0.30 U	0.29 U
Bromomethane		130 U	1.0 U	0.85 U	8.4 U	0.83 U	0.87 U	4.3 U	0.92 U	0.83 U	0.91 U	0.87 U
Chloroethane	1,900	150 U	0.76 U	0.63 U	6.2 U	0.62 U	0.65 U	3.2 U	0.68 U	0.62 U	0.67 U	0.65 U
1,1-Dichloroethene	200	55 U	0.31 U	0.26 U	2.6 U	0.25 U	0.27 U	1.3 U	0.28 U	0.25 U	0.28 U	0.27 U
Acetone	200	570 U	100	9.0 U	270 J	8.6 U	9.2 U	250 J	61 J	8.6 U	9.6 U	9.2 U
Carbon Disulfide	2,700	67 U	5.2 J	0.12 U	1.2 U	0.12 U	0.12 U	56	0.13 U	0.12 U	0.13 U	0.12 U
Methylene Chloride	100	110 U	4.3 J	0.82 U	8.1 U	0.80 U	0.84 U	4.1 U	0.88 U	0.80 U	0.87 U	0.84 U
trans-1,2-Dichloroethene	300	88 U	0.54 U	0.45 U	4.4 U	0.44 U	0.46 U	2.3 U	0.48 U	0.44 U	0.48 U	0.46 U
1,1-Dichloroethane	200	37 U	0.51 U	0.43 U	4.2 U	0.42 U	0.44 U	2.2 U	0.46 U	0.42 U	0.45 U	0.44 U
2-Butanone	300	480 U	16 J	2.7 U	27 U	2.7 U	2.8 U	14 U	3.0 U	2.7 U	2.9 U	2.8 U
Carbon Tetrachloride	600	80 U	0.43 U	0.36 U	3.5 U	0.35 U	0.37 U	1.8 U	0.39 U	0.35 U	0.38 U	0.37 U
cis-1,2-Dichloroethene		130 U	0.51 U	0.42 U	4.2 U	0.41 U	0.43 U	2.1 U	0.46 U	0.41 U	0.45 U	0.43 U
Chloroform	300	98 U	0.34 U	0.29 U	2.8 U	0.28 U	0.29 U	1.4 U	0.31 U	0.28 U	0.30 U	0.29 U
1,1,1-Trichloroethane	800	70 U	0.39 U	0.33 U	3.2 U	0.32 U	0.33 U	1.7 U	0.35 U	0.32 U	0.35 U	0.33 U
Benzene	60	41 U	0.29 U	0.24 U	43 J	0.24 U	0.25 U	1.2 U	0.26 U	0.24 U	0.26 U	0.25 U
1,2-Dichloroethane	100	55 U	4.5 U	3.7 U	37 U	3.6 U	3.8 U	19 U	4.0 U	3.6 U	3.9 U	3.8 U
Trichloroethene	700	110 U	0.46 U	0.39 U	3.8 U	0.38 U	0.40 U	2.0 U	0.42 U	0.38 U	0.41 U	0.40 U
1,2-Dichloropropane		54 U	0.49 U	0.40 U	4.0 U	0.39 U	0.41 U	2.0 U	0.44 U	0.39 U	0.43 U	0.41 U
Bromodichloromethane		60 U	0.46 U	0.40 U	4.0 U	0.39 U	0.41 U	2.0 U	0.43 U	0.39 U	0.43 U	0.41 U
4-Methyl-2-Pentanone	1,000	230 U	3.5 U	2.9 U	29 U	2.8 U	3.0 U	15 U	3.1 U	2.8 U	3.1 U	3.0 U
Toluene	1,500	66 U	0.38 U	0.31 U	320	0.30 U	0.32 U	1.6 U	0.34 U	0.30 U	0.33 U	0.32 U
t-1,3-Dichloropropene		73 U	0.37 U	0.31 U	3.0 U	0.30 U	0.32 U	1.6 U	0.33 U	0.30 U	0.33 U	0.32 U
cis-1,3-Dichloropropene		26 U	0.26 U	0.23 U	2.3 U	0.23 U	0.24 U	1.2 U	0.25 U	0.23 U	0.25 U	0.24 U
1,1,2-Trichloroethane		69 U	0.73 U	0.61 U	6.0 U	0.60 U	0.62 U	3.1 U	0.66 U	0.60 U	0.65 U	0.62 U
2-Hexanone		110 U	4.6 U	3.9 U	38 U	3.8 U	3.9 U	19 U	4.2 U	3.8 U	4.1 U	3.9 U
Dibromochloromethane		65 U	0.42 U	0.35 U	3.5 U	0.34 U	0.36 U	1.8 U	0.36 U	0.34 U	0.37 U	0.36 U
Tetrachloroethene	1,400	57 U	0.92 U	0.77 U	110	0.75 U	9.3	3.9 U	11	0.75 U	5.0 J	4.1 J
Chlorobenzene	1,700	63 U	0.51 U	0.42 U	4.2 U	0.41 U	0.43 U	2.1 U	0.46 U	0.41 U	0.45 U	0.43 U
Ethyl Benzene	5,500	70 U	0.36 U	0.30 U	350	0.29 U	0.31 U	1.5 U	0.32 U	0.29 U	0.32 U	3.5 J
m/p-Xylenes	1,200	170 U	0.74 U	0.62 U	970	0.60 U	0.63 U	3.1 U	0.67 U	0.60 U	0.66 U	3.1 J
o-Xylene	1,200	63 U	0.63 U	0.52 U	1100	0.51 U	0.53 U	2.6 U	0.56 U	0.51 U	0.55 U	2.6 J
Styrene		59 U	0.45 U	0.38 U	3.7 U	0.37 U	0.39 U	1.9 U	0.41 U	0.37 U	0.40 U	0.39 U
Bromoform		43 U	0.43 U	0.36 U	3.6 U	0.35 U	0.37 U	1.8 U	0.39 U	0.35 U	0.38 U	0.37 U
1,1,2,2-Tetrachloroethane	600	85 U	0.77 U	0.64 U	6.3 U	0.62 U	0.65 U	3.2 U	0.69 U	0.62 U	0.68 U	0.65 U
Total Confident Conc. VOC		0	125.5	0	3163	0	9.3	306	72	0	5	13.3
Total TICs		103700	0	0	22400	3551	2460	13520	2000	1980	7320	225

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor.

- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Volatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	AT-7S-1 S3897-01 07/29/04 1.0 ug/Kg	B-7(14-16) S4313-01 08/18/04 10.0 ug/Kg	B-7(14-16)RE S4313-01RE 08/18/04 10.0 ug/Kg	TRIPBLANK S4063-10 08/08/04 1.0 ug/L
Chloromethane		0.38 U	3.9 U	3.9 U	0.68 U
Vinyl Chloride	200	0.27 U	2.8 U	2.8 U	0.27 U
Bromomethane		0.82 U	8.4 U	8.4 U	0.78 U
Chloroethane	1,900	0.61 U	6.2 U	6.2 U	0.88 U
1,1-Dichloroethene	200	0.25 U	2.6 U	2.6 U	0.32 U
Acetone	200	8.7 U	420	360	3.3 U
Carbon Disulfide	2,700	0.12 U	1.2 U	1.2 U	0.39 U
Methylene Chloride	100	0.79 U	67	48 J	0.82 U
trans-1,2-Dichloroethene	300	0.43 U	4.4 U	4.4 U	0.51 U
1,1-Dichloroethane	200	0.41 U	4.2 U	4.2 U	0.22 U
2-Butanone	300	2.8 U	27 U	27 U	2.8 U
Carbon Tetrachloride	600	0.35 U	3.5 U	3.5 U	0.47 U
cis-1,2-Dichloroethene		0.41 U	4.2 U	4.2 U	0.77 U
Chloroform	300	0.28 U	2.8 U	2.8 U	0.58 U
1,1,1-Trichloroethane	800	0.32 U	3.2 U	3.2 U	0.41 U
Benzene	60	0.23 U	2.4 U	2.4 U	0.24 U
1,2-Dichloroethene	100	3.6 U	37 U	37 U	0.32 U
Trichloroethene	700	0.37 U	3.8 U	3.8 U	0.67 U
1,2-Dichloropropane		0.39 U	4.0 U	4.0 U	0.63 U
Bromodichloromethane		0.39 U	4.0 U	4.0 U	0.35 U
4-Methyl-2-Pentanone	1,000	2.8 U	29 U	29 U	1.3 U
Toluene	1,500	0.30 U	3.1 U	3.1 U	0.39 U
t-1,3-Dichloropropene		0.30 U	3.0 U	3.0 U	0.42 U
cis-1,3-Dichloropropene		0.23 U	2.3 U	2.3 U	0.15 U
1,1,2-Trichloroethane		0.59 U	6.0 U	6.0 U	0.52 U
2-Hexanone		3.7 U	38 U	38 U	0.66 U
Dibromochloromethane		0.34 U	3.5 U	3.5 U	0.38 U
Tetrachloroethene	1,400	0.74 U	7.6 U	7.6 U	0.33 U
Chlorobenzene	1,700	0.41 U	4.2 U	4.2 U	0.37 U
Ethyl Benzene	5,500	0.29 U	3.0 U	3.0 U	0.41 U
m/p-Xylenes	1,200	0.60 U	55 J	26 J	0.96 U
o-Xylene	1,200	0.50 U	5.1 U	5.1 U	0.37 U
Styrene		0.36 U	3.7 U	3.7 U	0.34 U
Bromoform		0.35 U	3.6 U	3.6 U	0.25 U
1,1,2,2-Tetrachloroethane	600	0.62 U	6.3 U	6.3 U	0.50 U
Total Confident Conc. VOC		0	542	434	0
Total TICs		18	16860	0	

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and individual Semi-VOCs<50ppm.

1. Sheded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-1S-1 S3970-01 08/02/04 1.0 ug/Kg	TP-1S-1RE S3970-01RE 08/02/04 1.0 ug/Kg	TP-5S-1 S3970-02 08/02/04 1.0 ug/Kg	TP-6S-1 S3970-03 08/02/04 1.0 ug/Kg	TP-6S-1DL S3970-03DL 08/02/04 5.0 ug/Kg	TP-8S-1 S3970-04 08/03/04 1.0 ug/Kg	TP-8S-1RE S3970-04RE 08/03/04 1.0 ug/Kg	TP-9S-1 S3970-05 08/03/04 1.0 ug/Kg	TP-9S-1RE S3970-05RE 08/03/04 1.0 ug/Kg	TP-16S-1 S3970-06 08/03/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		21 U	21 U	20 U	36 U	180 UD	48 U	48 U	180 U	180 U	220 U
1,2-Dichlorobenzene	7,900	23 U	23 U	22 U	40 U	200 UD	53 U	53 U	190 U	190 U	240 U
1,3-Dichlorobenzene	1,600	18 U	18 U	15 U	27 U	140 UD	36 U	36 U	130 U	130 U	160 U
1,4-Dichlorobenzene	8,500	18 U	18 U	17 U	31 U	150 UD	40 U	40 U	150 U	150 U	180 U
2,2-oxybis(1-Chloropropane)		23 U	23 U	22 U	40 U	200 UD	53 U	53 U	190 U	190 U	240 U
N-Nitroso-di-n-propylamine		19 U	19 U	18 U	32 U	160 UD	43 U	43 U	160 U	160 U	200 U
Hexachloroethane		21 U	21 U	20 U	35 U	180 UD	46 U	46 U	170 U	170 U	210 U
Nitrobenzene	200	22 U	22 U	21 U	37 U	190 UD	49 U	49 U	180 U	180 U	220 U
Isophorone	4,400	16 U	16 U	15 U	27 U	140 UD	36 U	36 U	130 U	130 U	160 U
bis(2-Chloroethoxy)methane		20 U	20 U	19 U	33 U	170 UD	44 U	44 U	160 U	160 U	200 U
1,2,4-Trichlorobenzene	3,400	12 U	12 U	12 U	21 U	110 UD	28 U	28 U	100 U	100 U	130 U
Naphthalene	13,000	9.4 U	9.4 U	91 J	16 U	80 UD	320 J	340 J	76 U	76 U	96 U
4-Chloroaniline	220 or MDL	160 U	160 U	150 U	270 U	1400 UD	360 U	360 U	1300 U	1300 U	1600 U
Hexachlorobutadiene		15 U	15 U	14 U	26 U	130 UD	34 U	34 U	130 U	130 U	160 U
2-Methylnaphthalene	36,400	57 J	54 J	7.1 U	13 U	63 UD	130 J	130 J	62 U	62 U	78 U
Hexachlorocyclopentadiene		11 U	11 U	10 U	18 U	92 UD	24 U	24 U	90 U	90 U	110 U
2-Chloronephthalene		9.0 U	9.0 U	8.6 U	15 U	76 UD	20 U	20 U	75 U	75 U	92 U
2-Nitroaniline	430 or MDL	16 U	16 U	15 U	27 U	130 UD	35 U	35 U	130 U	130 U	160 U
Dimethylphthalate	2,000	10 U	10 U	9.9 U	18 U	88 UD	23 U	23 U	85 U	85 U	110 U
Acenaphthylene	41,000	13 U	13 U	12 U	850	640 JD	300 J	350 J	110 U	110 U	130 U
2,6-Dinitrotoluene	1,000	16 U	16 U	16 U	31 U	160 UD	41 U	41 U	150 U	150 U	190 U
3-Nitroaniline	500 or MDL	70 U	70 U	67 U	120 U	590 UD	160 U	160 U	580 U	580 U	710 U
Acenaphthene	50,000**	9.5 U	9.5 U	9.1 U	18 U	81 UD	760 J	760 J	79 U	79 U	96 U
Dibenzofuran	6,200	14 U	14 U	59 J	24 U	120 UD	150 J	160 J	120 U	120 U	150 U
2,4-Dinitrotoluene		8.6 U	8.6 U	8.2 U	15 U	73 UD	19 U	19 U	71 U	71 U	88 U
Diethylphthalate	71,000	14 U	14 U	13 U	23 U	120 UD	31 U	31 U	110 U	110 U	140 U
4-Chlorophenyl-phenylether		11 U	11 U	10 U	18 U	91 UD	24 U	24 U	89 U	89 U	110 U
Fluorene	50,000**	49 J	48 J	68 J	190 J	100 UD	910 J	830 J	100 U	100 U	130 U
4-Nitroaniline		34 U	34 U	32 U	57 U	290 UD	76 U	76 U	280 U	280 U	350 U
N-Nitrosodiphenylamine		11 U	11 U	10 U	19 U	93 UD	25 U	25 U	91 U	91 U	110 U
4-Bromophenyl-phenylether		11 U	11 U	11 U	19 U	96 UD	26 U	26 U	94 U	94 U	120 U
Hexachlorobenzene	410	8.1 U	8.1 U	7.7 U	14 U	69 UD	18 U	18 U	67 U	67 U	83 U
Phenanthrene	50,000**	240 J	230 J	1400	3300	2100 JD	4200 J	4300 J	80 U	80 U	1000 J
Anthracene	50,000**	62 J	68 J	100 J	710 J	570 JD	670 J	920 J	85 U	85 U	450 J
Carbazole		9.5 U	9.5 U	100 J	18 U	81 UD	420 J	460 J	79 U	79 U	98 U
Di-n-butylphthalate	8,100	5.7 U	5.7 U	5.5 U	9.8 U	49 UD	13 U	13 U	48 U	48 U	59 U
Fluoranthene	50,000**	250 J	250 J	2100	12000 EJ	4500 D	4400 J	6100 J	50 U	50 U	2100 J
Pyrene	50,000**	290 J	320 J	2400	7700 EJ	5200 D	6300	5600	64 U	360 J	2400 J
Butylbenzylphthalate	50,000**	14 U	14 U	14 U	25 U	120 UD	33 U	33 U	120 U	120 U	150 U
3,3-Dichlorobenzidine		69 U	69 U	66 U	120 U	590 UD	160 U	160 U	570 U	570 U	710 U
Benzo(a)anthracene	224 or MDL	130 J	130 J	830	3600	3100 JD	1400	1400	54 U	54 U	1800 J
Chrysene	400	150 J	160 J	1100	4000	3300 JD	2600	2700	110 U	110 U	2400 J
bis(2-Ethylhexyl)phthalate	50,000**	9.9 U	9.9 U	9.5 U	17 U	84 UD	22 U	22 U	82 U	82 U	100 U
Di-n-octyl phthalate	50,000**	10 U	10 U	9.9 U	18 U	88 UD	23 U	23 U	85 U	85 U	110 U
Benzo(b)fluoranthene	1,100	85 J	77 J	720	3700	2800 JD	1800	1400	190 U	190 U	2200 J
Benzo(k)fluoranthene	1,100	55 J	65 J	290 J	1400	990 JD	1700	1500	120 U	120 U	1000 J
Benzo(a)pyrene	61 or MDL	86 J	98 J	530	2500	1900 JD	1400	1400	62 U	62 U	1700 J
Indeno(1,2,3-cd)pyrene	3,200	73 J	50 J	460	530 J	1100 JD	23 U	130 J	67 U	67 U	1000 J
Dibenz(a,h)anthracene	14 or MDL	13 U	13 U	12 U	95 J	110 UD	28 U	28 U	100 U	100 U	130 U
Benzo(g,h,i)perylene	50,000**	48 J	19 U	340 J	500 J	760 JD	42 U	120 J	160 U	160 U	810 J
Total Confident Conc. SVOC		1565	1551	10388	21575	26460	27480	28600	0	360	16880
Total TICs		2670	0	2770	12300	0	89100	0	39100	0	100000

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value

the environmental sample

P For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D Compound identified in analysis at a secondary dilution factor.

For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-19S-1 S3970-07 08/04/04 10.0 ug/Kg	TP-19S-1RE S3970-07RE 08/04/04 10.0 ug/Kg	TP-20S-1 S3970-08 08/04/04 1.0 ug/Kg	TP-23S-1 S3970-09 08/04/04 1.0 ug/Kg	TP-23S-1RE S3970-09RE 08/04/04 1.0 ug/Kg	TP-24S-1 S3970-10 08/04/04 1.0 ug/Kg	TP-24S-1RE S3970-10RE 08/04/04 1.0 ug/Kg	TP-28S-1 S4063-01 08/08/04 1.0 ug/Kg	TP-30S-1 S4063-02 08/08/04 5.0 ug/Kg	TP-34S-1 S4063-03 08/08/04 1.0 ug/Kg	TP-35S-1 S4063-04 08/08/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		1900 U	1900 U	43 U	44 U	44 U	23 U	23 U	39 U	960 U	38 U	20 U
1,2-Dichlorobenzene	7,900	2100 U	2100 U	48 U	49 U	49 U	26 U	26 U	43 U	1100 U	42 U	22 U
1,3-Dichlorobenzene	1,600	1500 U	1500 U	32 U	33 U	33 U	17 U	17 U	29 U	720 U	29 U	15 U
1,4-Dichlorobenzene	8,500	1600 U	1600 U	36 U	38 U	38 U	20 U	20 U	33 U	810 U	32 U	17 U
2,2-oxybis(1-Chloropropane)		2100 U	2100 U	47 U	49 U	49 U	26 U	26 U	43 U	1100 U	42 U	22 U
N-Nitroso-di-n-propylamine		1700 U	1700 U	39 U	40 U	40 U	21 U	21 U	35 U	860 U	34 U	18 U
Hexachloroethane		1900 U	1900 U	42 U	43 U	43 U	23 U	23 U	38 U	930 U	37 U	19 U
Nitrobenzene	200	2000 U	2000 U	44 U	46 U	46 U	24 U	24 U	40 U	990 U	39 U	21 U
Isophorone	4,400	1500 U	1500 U	32 U	34 U	34 U	18 U	18 U	29 U	720 U	29 U	15 U
bis(2-Chloroethoxy)methane		1600 U	1600 U	40 U	41 U	41 U	22 U	22 U	36 U	890 U	35 U	18 U
1,2,4-Trichlorobenzene	3,400	1100 U	1100 U	25 U	26 U	26 U	14 U	14 U	23 U	560 U	22 U	12 U
Naphthalene	13,000	860 U	860 U	19 U	20 U	20 U	10 U	10 U	150 J	420 U	240 J	8.8 U
4-Chloroaniline	220 or MDL	15000 U	15000 U	320 U	330 U	330 U	180 U	180 U	290 U	7200 U	290 U	150 U
Hexachlorobutadiene		1400 U	1400 U	31 U	32 U	32 U	17 U	17 U	28 U	680 U	27 U	14 U
2-Methylnaphthalene	36,400	680 U	680 U	15 U	16 U	16 U	8.2 U	8.2 U	14 U	7500 J	110 J	7.0 U
Hexachlorocyclopentadiene		990 U	990 U	22 U	23 U	23 U	12 U	12 U	20 U	490 U	19 U	10 U
2-Chloronaphthalene		820 U	820 U	18 U	19 U	19 U	9.9 U	9.9 U	16 U	410 U	16 U	8.4 U
2-Nitroaniline	430 or MDL	1400 U	1400 U	32 U	33 U	33 U	17 U	17 U	29 U	710 U	28 U	15 U
Dimethylphthalate	2,000	940 U	940 U	21 U	22 U	22 U	11 U	11 U	19 U	460 U	19 U	9.7 U
Acenaphthylene	41,000	1200 U	1200 U	26 U	27 U	27 U	14 U	14 U	280 J	580 U	210 J	12 U
2,6-Dinitrotoluene	1,000	1700 U	1700 U	37 U	38 U	38 U	20 U	20 U	34 U	830 U	33 U	17 U
3-Nitroaniline	500 or MDL	6400 U	6400 U	140 U	150 U	150 U	77 U	77 U	130 U	3100 U	130 U	65 U
Acenaphthene	50,000**	870 U	870 U	19 U	20 U	20 U	10 U	10 U	170 J	430 U	140 J	8.9 U
Dibenzofuran	6,200	1300 U	1300 U	29 U	30 U	30 U	16 U	16 U	140 J	640 U	26 U	13 U
2,4-Dinitrotoluene		790 U	790 U	17 U	18 U	18 U	9.5 U	9.5 U	16 U	390 U	15 U	8.1 U
Diethylphthalate	71,000	1200 U	1200 U	27 U	28 U	28 U	15 U	15 U	25 U	610 U	24 U	13 U
4-Chlorophenyl-phenylether		980 U	980 U	22 U	22 U	22 U	12 U	12 U	20 U	480 U	19 U	10 U
Fluorene	50,000**	1100 U	1100 U	25 U	26 U	26 U	13 U	13 U	160 J	550 U	260 J	11 U
4-Nitroaniline		3100 U	3100 U	68 U	71 U	71 U	37 U	37 U	62 U	1500 U	61 U	32 U
N-Nitrosodiphenylamine		1000 U	1000 U	22 U	23 U	23 U	12 U	12 U	20 U	490 U	20 U	10 U
4-Bromophenyl-phenylether		1000 U	1000 U	23 U	24 U	24 U	12 U	12 U	21 U	510 U	20 U	11 U
Hexachlorobenzene	410	740 U	740 U	16 U	17 U	17 U	8.9 U	8.9 U	15 U	360 U	15 U	7.8 U
Phenanthrene	50,000**	880 U	880 U	450 J	340 J	320 J	11 U	11 U	2700	5100 J	740 J	9.1 U
Anthracene	50,000**	940 U	940 U	95 J	22 U	91 J	11 U	11 U	590 J	460 U	290 J	9.7 U
Carbazole		870 U	870 U	19 U	20 U	20 U	10 U	10 U	410 J	430 U	17 U	8.9 U
Di-n-butylphthalate	8,100	520 U	520 U	12 U	12 U	12 U	6.3 U	6.3 U	10 U	260 U	10 U	5.4 U
Fluoranthene	50,000**	550 U	550 U	510 J	510 J	530 J	6.6 U	6.6 U	4900	270 U	2900	5.6 U
Pyrene	50,000**	700 U	700 U	650 J	630 J	650 J	8.5 U	8.5 U	4900	350 U	3100	61 J
Butylbenzylphthalate	50,000**	1300 U	1300 U	29 U	30 U	30 U	16 U	16 U	26 U	650 U	26 U	14 U
3,3-Dichlorobenzidine		6300 U	6300 U	140 U	140 U	140 U	76 U	76 U	130 U	3100 U	120 U	65 U
Benzo(a)anthracene	224 or MDL	590 U	590 U	290 J	330 J	320 J	7.2 U	7.2 U	9100	2500 J	1100	6.1 U
Chrysene	400	1200 U	1200 U	360 J	430 J	410 J	15 U	15 U	2600	3800 J	1100	13 U
bis(2-Ethylhexyl)phthalate	50,000**	900 U	900 U	20 U	21 U	21 U	11 U	11 U	140 J	450 U	130 J	76 J
Di-n-octyl phthalate	50,000**	940 U	940 U	21 U	22 U	22 U	11 U	11 U	19 U	460 U	19 U	9.7 U
Benzo(b)fluoranthene	1,100	2100 U	2100 U	260 J	450 J	480 J	25 U	25 U	2600	1000 U	1000	22 U
Benzo(k)fluoranthene	1,100	1300 U	1300 U	110 J	210 J	210 J	16 U	16 U	1900	670 U	370 J	14 U
Benzo(a)pyrene	61 or MDL	680 U	680 U	220 J	330 J	350 J	8.2 U	8.2 U	2100	340 U	580 J	7.0 U
Indeno(1,2,3-cd)pyrene	3,200	950 U	950 U	21 U	120 J	22 U	11 U	11 U	1200	470 U	310 J	9.6 U
Dibenz(a,h)anthracene	14 or MDL	1200 U	1200 U	26 U	26 U	26 U	14 U	14 U	180 J	570 U	23 U	12 U
Benzo(g,h,i)perylene	50,000**	1700 U	1700 U	38 U	110 J	100 J	21 U	21 U	1100	850 U	280 J	18 U
Total Confident Conc. SVOC		0	0	2945	3460	3461	0	0	28720	18900	12680	137
Total TICs		7900	0	4900	39400	0	590	0	7580	260000	7590	9130

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration

J - Data indicates the presence of a compound that meets the identification criteria. The result is less then the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-37S-1 S4063-05 08/06/04 1.0 ug/Kg	TP-36S-1 S4063-06 08/06/04 1.0 ug/Kg	TP-39S-1 S4063-07 08/06/04 1.0 ug/Kg	TP-41S-1 S4063-08 08/06/04 1.0 ug/Kg	TP-42S-1 S4063-09 08/06/04 1.0 ug/Kg	AT-7S-1 S3697-01 07/28/04 1.0 ug/Kg	B-7(14-16) S4313-01 08/18/04 2.0 ug/Kg	B-7(14-16)DL S4313-01RE 08/18/04 10.0 ug/Kg
bis(2-Chloroethyl)ether		20 U	42 U	19 U	21 U	40 U	190 U	77 U	390 UD
1,2-Dichlorobenzene	7,900	22 U	46 U	21 U	23 U	44 U	210 U	85 U	430 UD
1,3-Dichlorobenzene	1,600	15 U	31 U	14 U	16 U	30 U	140 U	58 U	290 UD
1,4-Dichlorobenzene	8,500	17 U	35 U	16 U	18 U	34 U	160 U	65 U	330 UD
2,2-oxybis(1-Chloropropane)		22 U	46 U	21 U	23 U	44 U	210 U	85 U	420 UD
N-Nitroso-di-n-propylamine		18 U	37 U	17 U	19 U	36 U	170 U	69 U	340 UD
Hexachloroethane		19 U	40 U	18 U	20 U	39 U	180 U	75 U	370 UD
Nitrobenzene	200	20 U	43 U	19 U	22 U	41 U	190 U	79 U	400 UD
Isophorone	4,400	15 U	32 U	14 U	16 U	30 U	140 U	58 U	290 UD
bis(2-Chloroethoxy)methane		18 U	39 U	17 U	19 U	37 U	160 U	71 U	360 UD
1,2,4-Trichlorobenzene	3,400	12 U	24 U	11 U	12 U	23 U	110 U	45 U	220 UD
Naphthalene	13,000	8.7 U	110 J	6.3 U	9.2 U	18 U	84 U	490 J	170 UD
4-Chloroaniline	220 or MDL	150 U	310 U	140 U	160 U	300 U	1400 U	580 U	2900 UD
Hexachlorobutadiene		14 U	30 U	13 U	15 U	28 U	130 U	55 U	270 UD
2-Methylnaphthalene	36,400	8.9 U	190 J	6.6 U	7.3 U	14 U	66 U	300 J	130 UD
Hexachlorocyclopentadiene		10 U	21 U	9.6 U	11 U	20 U	96 U	39 U	200 UD
2-Chloronaphthalene		6.4 U	18 U	8.0 U	8.8 U	17 U	80 U	33 U	160 UD
2-Nitroaniline	430 or MDL	15 U	31 U	14 U	15 U	29 U	140 U	57 U	280 UD
Dimethylphthalate	2,000	9.6 U	20 U	9.1 U	10 U	19 U	92 U	37 U	190 UD
Acenaphthylene	41,000	12 U	25 U	11 U	13 U	24 U	110 U	47 U	230 UD
2,6-Dinitrotoluene	1,000	17 U	36 U	16 U	18 U	34 U	160 U	67 U	330 UD
3-Nitroaniline	500 or MDL	85 U	140 U	62 U	68 U	130 U	620 U	250 U	1300 UD
Acenaphthene	50,000**	8.8 U	19 U	8.4 U	9.3 U	18 U	85 U	1400 J	1500 JD
Dibenzofuran	6,200	13 U	28 U	13 U	14 U	27 U	130 U	51 U	260 UD
2,4-Dinitrotoluene		8.0 U	17 U	7.6 U	8.5 U	16 U	77 U	31 U	160 UD
Diethylphthalate	71,000	13 U	27 U	12 U	13 U	25 U	120 U	49 U	250 UD
4-Chlorophenyl-phenylether		9.9 U	21 U	9.5 U	10 U	20 U	95 U	39 U	190 UD
Fluorene	50,000**	11 U	24 U	11 U	12 U	23 U	110 U	1600	1800 JD
4-Nitroaniline		31 U	66 U	30 U	33 U	63 U	300 U	120 U	610 UD
N-Nitrosodiphenylamine		10 U	22 U	9.7 U	11 U	21 U	97 U	40 U	200 UD
4-Bromophenyl-phenylether		11 U	22 U	10 U	11 U	21 U	100 U	41 U	210 UD
Hexachlorobenzene	410	7.5 U	16 U	7.2 U	7.9 U	15 U	72 U	29 U	150 UD
Phenanthrene	50,000**	9.0 U	180 J	8.6 U	9.5 U	410 J	86 U	8900	10000 D
Anthracene	50,000**	9.6 U	20 U	9.1 U	10 U	120 J	92 U	3200	3300 JD
Carbazole		6.8 U	19 U	8.4 U	9.3 U	18 U	85 U	550 J	170 UD
Di-n-butylphthalate	8,100	5.3 U	11 U	5.1 U	5.6 U	11 U	51 U	21 U	100 UD
Fluoranthene	50,000**	5.6 U	12 U	5.3 U	5.9 U	500 J	420 J	11000	18000 D
Pyrene	50,000**	7.1 U	15 U	6.8 U	7.6 U	500 J	670 J	16000 E	18000 D
Butylbenzylphthalate	50,000**	13 U	28 U	13 U	14 U	27 U	130 U	52 U	260 UD
3,3-Dichlorobenzidine		64 U	140 U	61 U	68 U	130 U	620 U	260 J	1300 UD
Benzo(a)anthracene	224 or MDL	6.1 U	13 U	5.8 U	6.4 U	240 J	58 U	11000	14000 D
Chrysene	400	13 U	120 J	12 U	13 U	270 J	120 U	11000	13000 D
bis(2-Ethylhexyl)phthalate	50,000**	44 J	19 U	52 J	74 J	19 U	88 U	280 J	180 UD
Di-n-octyl phthalate	50,000**	9.8 U	20 U	9.1 U	10 U	19 U	92 U	37 U	190 UD
Benzo(b)fluoranthene	1,100	21 U	45 U	20 U	23 U	200 J	200 U	19000 E	18000 D
Benzo(k)fluoranthene	1,100	14 U	29 U	13 U	14 U	100 J	130 U	7100	7500 JD
Benzo(a)pyrene	61 or MDL	6.9 U	15 U	6.6 U	7.3 U	170 J	66 U	12000	12000 D
Indeno(1,2,3-cd)pyrene	3,200	9.7 U	20 U	9.3 U	10 U	90 J	93 U	1800	2200 JD
Dibenz(a,h)anthracene	14 or MDL	12 U	25 U	11 U	12 U	24 U	110 U	420 J	230 UD
Benzo(g,h,i)perylene	50,000**	17 U	37 U	17 U	18 U	35 U	170 U	3200	3300 JD
Total Confident Conc. SVOC		44	600	52	74	2600	1090	109500	122800
Total TICs		6660	16200	4970	4450	2050	5410	53600	0

Qualifiers & Notes

U - The compound was not detected at the indicated concentration

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the . This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm , Total Semi-VOCs<500ppm , and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-1S-1 S3970-01 08/02/04 1.0 ug/Kg	TP-5S-1 S3970-02 08/02/04 1.0 ug/Kg	TP-6S-1 S3970-03 08/02/04 1.0 ug/Kg	TP-6S-1 S3970-04 08/03/04 1.0 ug/Kg	TP-6S-1DL S3970-04DL 08/03/04 100.0 ug/Kg	TP-8S-1 S3970-05 08/03/04 1.0 ug/Kg	TP-8S-1DL S3970-05DL 08/03/04 10.0 ug/Kg	TP-16S-1 S3970-06 08/03/04 1.0 ug/Kg	TP-16S-1DL S3970-06DL 08/03/04 100.0 ug/Kg	TP-19S-1 S3970-07 08/04/04 1.0 ug/Kg
Aroclor-1016	10,000	6.6 U	6.5 U	5.8 U	7.8 U	760 UD	5.6 U	56 UD	7.0 U	700 UD	6.2 U
Aroclor-1221	10,000	4.6 U	4.4 U	3.9 U	5.2 U	520 UD	3.8 U	38 UD	4.7 U	470 UD	4.2 U
Aroclor-1232	10,000	3.1 U	3.0 U	2.7 U	3.5 U	350 UD	2.6 U	26 UD	3.2 U	320 UD	2.8 U
Aroclor-1242	10,000	4.0 U	3.9 U	3.4 U	4.5 U	450 UD	3.3 U	33 UD	4.1 U	410 UD	3.7 U
Aroclor-1248	10,000	4.8 U	4.6 U	4.1 U	5.4 U	540 UD	3.9 U	39 UD	4.9 U	490 UD	4.3 U
Aroclor-1254	10,000	1.8 U	1.7 U	1.5 U	11000 EP	6000 DPJ	1000 EJ	390 DPJ	5700 EPJ	2400 DPJ	1.6 U
Aroclor-1260	10,000	3.8 U	3.7 U	60	4.3 U	430 UD	3.2 U	32 UD	3.9 U	390 UD	3.5 U
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Mercury	0.1	0.17 J	0.36 J	0.23 J	0.09 J	NA	0.01 J	NA	0.06 J	NA	0.22 J
Arsenic	7.5 or SB/(5.89)	8.810	7.500	10.7	35.5	NA	1.090 J	NA	15.5	NA	8.630
Barium	300 or SB/(52.5)	77.5	103	81.2	778	NA	10.1 J	NA	46.1	NA	325
Cadmium	1 or SB/(1.93)	3.090	2.330	4.350	21.7	NA	0.358 J	NA	3.880	NA	3.260
Chromium	10 or SB/(15.8)	14.4	9.830	33.7	1790	NA	4.170	NA	33.8	NA	54.3
Lead	SB/(87.9)	155	229	445	17200 D	NA	21.3	NA	104	NA	303
Selenium	2 or SB/(1.25)	1.220 J	0.857 J	1.310	9.180	NA	0.341 U	NA	2.480	NA	0.711 J
Silver	SB/(0.117)	0.385 J	0.133 U	0.640 J	40.6	NA	0.115 U	NA	1.090 J	NA	0.126 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-20S-1 S3970-08 08/04/04 1.0 ug/Kg	TP-23S-1 S3970-09 08/04/04 1.0 ug/Kg	TP-24S-1 S3970-10 08/04/04 1.0 ug/Kg	TP-26S-1 S4063-01 08/05/04 1.0 ug/Kg	TP-30S-1 S4063-02 08/05/04 1.0 ug/Kg	TP-34S-1 S4063-03 08/05/04 1.0 ug/Kg	TP-35S-1 S4063-04 08/05/04 1.0 ug/Kg	TP-37S-1 S4063-05 08/05/04 1.0 ug/Kg	TP-38S-1 S4063-06 08/05/04 1.0 ug/Kg	TP-39S-1 S4063-07 08/05/04 1.0 ug/Kg	TP-41S-1 S4063-08 08/05/04 1.0 ug/Kg
Aroclor-1016	10,000	6.6 U	7.1 U	7.4 U	6.2 U	5.1 UJ	6.0 UJ	6.4 UJ	6.3 UJ	6.7 UJ	6.0 UJ	6.5 UJ
Aroclor-1221	10,000	4.7 U	4.6 U	5.1 U	4.2 U	4.2 UJ	4.1 UJ	4.4 UJ	4.3 UJ	4.5 UJ	4.1 UJ	4.5 UJ
Aroclor-1232	10,000	3.2 U	3.3 U	3.4 U	2.9 U	2.8 UJ	2.8 UJ	3.0 UJ	2.9 UJ	3.1 UJ	2.8 UJ	3.0 UJ
Aroclor-1242	10,000	4.1 U	4.2 U	4.4 U	3.7 U	3.6 UJ	3.6 UJ	3.8 UJ	3.7 UJ	4.0 UJ	3.6 UJ	3.9 UJ
Aroclor-1248	10,000	4.8 U	5.0 U	5.2 U	4.4 U	4.3 UJ	4.2 UJ	4.5 UJ	4.4 UJ	4.7 UJ	4.2 UJ	4.6 UJ
Aroclor-1254	10,000	1.8 U	97 PJ	1.9 U	1.6 U	1.6 UJ	1.6 UJ	1.7 UJ	1.6 UJ	1.7 UJ	1.6 UJ	1.7 UJ
Aroclor-1260	10,000	3.9 U	4.0 U	4.2 U	160 PJ	3.5 UJ	3.4 UJ	3.6 UJ	3.5 UJ	3.8 UJ	3.4 UJ	3.7 UJ
Units COMPOUND				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Mercury	0.1	0.45 J	0.01 U	0.03 J	0.01	1.4	0.17	0.03	0.06	0.05	0.03	0.04
Arsenic	7.5 or SB/(5.89)	14.9	12.2	5.800	6.020	16.6	5.550	7.670	6.430	6.790	6.350	6.700
Barium	300 or SB/(52.5)	66.3	328	70.9	177	1900	147	33.8	52.7	59.2	50.5	45.7
Cadmium	1 or SB/(1.93)	13.5	3.020	2.330	0.884	7.220	1.760	1.260	0.852	1.030	0.733	1.370
Chromium	10 or SB/(15.8)	55.5	19.8	16.8	13.6	85.0	89.5	36.2	14.0	17.1	13.0	18.3
Lead	SB/(87.9)	199	137	16.4	244	2930	518	31.1	17.5	55.4	43.1	23.7
Selenium	2 or SB/(1.25)	3.450	2.040	0.916 J	1.920	2.250	1.240	1.690	1.010 J	0.564 J	0.831 J	2.070
Silver	SB/(0.117)	1.130 J	0.144 U	0.208 J	0.124 U	0.124 U	0.123 U	0.130 U	0.128 U	0.137 U	0.122 U	0.134 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-42S-1 S4063-09 08/08/04 1.0 ug/Kg	AT-7S-1 S3697-01 07/29/04 1.0 ug/Kg	B-7(14-16) S4313-01 8/18/04 1.0 ug/Kg
Aroclor-1016	10,000	6.4 UJ	6.0 U	6.2 U
Aroclor-1221	10,000	4.4 UJ	4.1 U	4.2 U
Aroclor-1232	10,000	3.0 UJ	2.8 U	2.8 U
Aroclor-1242	10,000	3.8 UJ	3.6 U	3.7 U
Aroclor-1248	10,000	4.5 UJ	4.2 U	4.3 U
Aroclor-1254	10,000	1.7 UJ	1.8 U	1.8 U
Aroclor-1260	10,000	3.6 UJ	3.4 U	340
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg
Mercury	0.1	0.01 U	0.01 UJ	0.01 U
Arsenic	7.5 or SB/(5.89)	8.140	18.8	0.306 J
Barium	300 or SB/(52.5)	126	75.7	11.4 J
Cadmium	1 or SB/(1.93)	0.712	2.260	0.307 J
Chromium	10 or SB/(15.8)	8.660	29.2	5.840 J
Lead	SB/(87.9)	71.1	119	26.8
Selenium	2 or SB/(1.25)	1.020 J	2.690	1.200 J
Silver	SB/(0.117)	0.127 U	0.777 J	0.125 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Se

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 3. Ground Water Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Volatile Organics Sample ID Sampling Date Dilution Factor Units COMPOUND	TOGS 1.1.1 Standard or Guidance Value[1]	MW-1 S4507-01 09/01/04 1.0 ug/L	CHA-1 S4507-02 09/01/04 1.0 ug/L	CHA-2 S4507-03 09/01/04 1.0 ug/L	CHA-2 S5229-01 10/15/2004 1.0 ug/L	CHA-3 S4507-04 09/01/04 1.0 ug/L	CHA-4 S4507-07 09/01/04 1.0 ug/L	CHA-5 S4507-08 09/01/04 1.0 ug/L	CHA-6 S4507-09 09/01/04 1.0 ug/L	CHA-10 S4507-10 09/01/04 1.0 ug/L	TRIPBLANK S4507-11 09/01/04 1.0 ug/L
Chloromethane		0.68 U	0.68 U	0.68 U	NA	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Vinyl Chloride	2	0.27 U	0.27 U	0.27 U	NA	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Bromomethane	5	0.78 U	0.78 U	0.78 U	NA	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Chloroethane	5	0.88 U	0.88 U	0.88 U	NA	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
1,1-Dichloroethene	5	0.32 U	0.32 U	0.32 U	NA	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Acetone	50[2]	3.3 U	3.3 U	3.3 U	NA	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Carbon Disulfide		0.39 U	0.39 U	0.39 U	NA	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Methylene Chloride	5	0.62 U	0.62 U	0.62 U	NA	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
trans-1,2-Dichloroethene	5	0.51 U	0.51 U	0.51 U	NA	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,1-Dichloroethane	5	0.22 U	0.22 U	0.22 U	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
2-Butanone		2.8 U	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Carbon Tetrachloride	5	0.47 U	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
cis-1,2-Dichloroethene	5	0.77 U	0.77 U	0.77 U	NA	0.77 U	49	0.77 U	0.77 U	0.77 U	0.77 U
Chloroform	7	0.58 U	0.58 U	0.58 U	NA	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
1,1,1-Trichloroethane	5	0.41 U	0.41 U	0.41 U	NA	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Benzene	0.7	0.24 U	0.24 U	0.24 U	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloroethane	0.6	0.32 U	0.32 U	0.32 U	NA	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Trichloroethene	5	0.67 U	5.0	0.67 U	NA	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-Dichloropropane	1	0.63 U	0.63 U	0.63 U	NA	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Bromodichloromethane	50[2]	0.35 U	0.35 U	0.35 U	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
4-Methyl-2-Pentanone		1.3 U	1.3 U	1.3 U	NA	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Toluene	5	0.39 U	0.39 U	0.39 U	NA	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
t-1,3-Dichloropropene	0.4	0.42 U	0.42 U	0.42 U	NA	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
cis-1,3-Dichloropropene	0.4	0.15 U	0.15 U	0.15 U	NA	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1,2-Trichloroethane	1	0.52 U	0.52 U	0.52 U	NA	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	50[2]	0.66 U	0.66 U	0.66 U	NA	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Dibromochloromethane	50[2]	0.38 U	0.38 U	0.38 U	NA	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Tetrachloroethene	5	0.33 U	0.33 U	0.33 U	NA	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chlorobenzene	5	0.37 U	0.37 U	0.37 U	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Ethyl Benzene	5	0.41 U	0.41 U	0.41 U	NA	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
m/p-Xylenes	5	0.96 U	0.96 U	0.96 U	NA	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
o-Xylene	5	0.37 U	0.37 U	0.37 U	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Styrene	5	0.34 U	0.34 U	0.34 U	NA	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Bromoform	50[2]	0.25 U	0.25 U	0.25 U	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	0.50 U	0.50 U	0.50 U	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Total Confident Conc. VOC		0	5	0		0	49	0	0	0	0
Total TICs		0	0	19		0	0	0	0	0	0

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

1. Shaded values exceed TOGS 1.1.1 Standard or Guidance Value for Class GA Groundwater.

2. Indicates value is a guidance value rather than a standard

Table 3. Ground Water Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	TOGS 1.1.1 Standard or Guidance Value[1]	MW-1 S4507-01 09/01/04 1.0 ug/L	CHA-1 S4507-02 09/01/04 1.0 ug/L	CHA-2 S4507-03 09/01/04 1.0 ug/L	CHA-2 S5229-01 10/15/2004 1.0 ug/L	CHA-3 S4507-04 09/01/04 1.0 ug/L	CHA-4 S4507-07 09/01/04 1.0 ug/L	CHA-5 S4507-08 09/01/04 1.0 ug/L	CHA-6 S4507-09 09/01/04 1.0 ug/L	CHA-10 S4507-10 09/01/04 1.0 ug/L
bis(2-Chloroethyl)ether	1	0.330 U	0.330 U	0.330 U	NA	0.330 U	0.330 U	0.330 U	0.330 U	0.330 U
1,2-Dichlorobenzene	3	0.590 U	0.590 U	0.590 U	NA	0.590 U	0.590 U	0.590 U	0.590 U	0.590 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	0.670 U	0.680 U	0.680 U	NA	0.670 U	0.670 U	0.680 U	0.670 U	0.670 U
2,2-oxybis(1-Chloropropane)		0.830 U	0.840 U	0.840 U	NA	0.830 U	0.830 U	0.840 U	0.830 U	0.830 U
N-Nitroso-di-n-propylamine		0.770 U	0.770 U	0.770 U	NA	0.770 U	0.770 U	0.770 U	0.770 U	0.770 U
Hexachloroethane	5	0.910 U	0.920 U	0.920 U	NA	0.910 U	0.910 U	0.920 U	0.910 U	0.910 U
Nitrobenzene	0.4	0.380 U	0.380 U	0.380 U	NA	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U
Isophorone	50[2]	0.480 U	0.480 U	0.480 U	NA	0.480 U	0.480 U	0.480 U	0.480 U	0.480 U
bis(2-Chloroethoxy)methane	5	0.440 U	0.450 U	0.450 U	NA	0.440 U	0.440 U	0.450 U	0.440 U	0.440 U
1,2,4-Trichlorobenzene	5	0.410 U	0.410 U	0.410 U	NA	0.410 U	0.410 U	0.410 U	0.410 U	0.410 U
Naphthalene	10	0.270 U	0.270 U	1.5 J	NA	0.270 U	0.270 U	0.270 U	0.270 U	0.270 U
4-Chloroaniline	5	4.1 U	4.1 U	4.1 U	NA	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Hexachlorobutadiene	0.5	0.380 U	0.380 U	0.380 U	NA	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U
2-Methylnaphthalene	50[2]	0.500 U	0.500 U	0.500 U	NA	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Hexachlorocyclopentadiene	5	0.450 U	0.460 U	0.460 U	NA	0.450 U	0.450 U	0.460 U	0.450 U	0.450 U
2-Chloronaphthalene	10[2]	0.390 U	0.390 U	0.390 U	NA	0.390 U	0.390 U	0.390 U	0.390 U	0.390 U
2-Nitroaniline	5	0.300 U	0.300 U	0.300 U	NA	0.300 U	0.300 U	0.300 U	0.300 U	0.300 U
Dimethylphthalate	50[2]	0.260 U	0.260 U	0.260 U	NA	0.260 U	0.260 U	0.260 U	0.260 U	0.260 U
Acenaphthylene	20	0.430 U	0.440 U	0.440 U	NA	0.430 U	0.430 U	0.440 U	0.430 U	0.430 U
2,6-Dinitrotoluene	5	0.410 U	0.420 U	0.420 U	NA	0.410 U	0.410 U	0.420 U	0.410 U	0.410 U
3-Nitroaniline	5	1.0 U	1.1 U	1.1 U	NA	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U
Acenaphthene	20[2]	0.240 U	0.240 U	0.240 U	NA	0.240 U	0.240 U	0.240 U	2.6 J	0.240 U
Dibenzofuran		0.310 U	0.320 U	0.320 U	NA	0.310 U	0.310 U	0.320 U	0.310 U	0.310 U
2,4-Dinitrotoluene	5	0.340 U	0.340 U	0.340 U	NA	0.340 U	0.340 U	0.340 U	0.340 U	0.340 U
Diethylphthalate	50[2]	0.340 U	0.340 U	0.340 U	NA	0.340 U	0.340 U	0.340 U	0.340 U	0.340 U
4-Chlorophenyl-phenylether		0.360 U	0.370 U	0.370 U	NA	0.360 U	0.360 U	0.370 U	0.360 U	0.360 U
Fluorene	50[2]	0.170 U	0.170 U	0.170 U	NA	0.170 U	0.170 U	0.170 U	2.2 J	0.170 U
4-Nitroaniline	5	0.830 U	0.840 U	0.840 U	NA	0.830 U	0.830 U	0.840 U	0.830 U	0.830 U
N-Nitrosodiphenylamine	50[2]	0.280 U	0.280 U	0.280 U	NA	0.280 U	0.280 U	0.280 U	0.280 U	0.280 U
4-Bromophenyl-phenylether		0.170 U	0.170 U	0.170 U	NA	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
Hexachlorobenzene	0.04	0.230 U	0.230 U	0.230 U	NA	0.230 U	0.230 U	0.230 U	0.230 U	0.230 U
Phenanthrene	50[2]	0.270 U	0.280 U	0.280 U	NA	0.270 U	0.270 U	0.280 U	1.1 J	0.270 U
Anthracene	50[2]	0.160 U	0.160 U	0.160 U	NA	0.160 U	0.160 U	0.160 U	0.160 U	0.160 U
Carbazole		0.310 U	0.310 U	0.310 U	NA	0.310 U	0.310 U	0.310 U	0.310 U	0.310 U
Di-n-butylphthalate	50[2]	0.098 U	0.099 U	0.099 U	NA	3.9 J	0.098 U	0.099 U	0.098 U	0.098 U
Fluoranthene	50[2]	0.210 U	0.210 U	0.210 U	NA	0.210 U	0.210 U	0.210 U	0.210 U	0.210 U
Pyrene	50[2]	0.250 U	0.250 U	0.250 U	NA	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Butylbenzylphthalate	50[2]	0.300 U	0.300 U	0.300 U	NA	0.300 U	0.300 U	0.300 U	0.300 U	0.300 U
3,3-Dichlorobenzidine	5	1.6 U	1.6 U	1.6 U	NA	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Benzo(a)anthracene	0.002[2]	0.220 U	0.230 U	0.230 U	NA	0.220 U	0.220 U	0.230 U	0.220 U	0.220 U
Chrysene	0.002[2]	0.380 U	0.390 U	0.390 U	NA	0.380 U	0.380 U	0.390 U	0.380 U	0.380 U
bis(2-Ethylhexyl)phthalate	5	0.340 U	0.350 U	1.7 J	NA	0.340 U	0.340 U	1.2 J	1.8 J	0.340 U
Di-n-octyl phthalate	50[2]	0.170 U	0.170 U	0.170 U	NA	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
Benzo(b)fluoranthene	0.002[2]	0.230 U	0.230 U	0.230 U	NA	0.230 U	0.230 U	0.230 U	0.230 U	0.230 U
Benzo(k)fluoranthene	0.002[2]	0.380 U	0.390 U	0.390 U	NA	0.380 U	0.380 U	0.390 U	0.380 U	0.380 U
Benzo(a)pyrene	ND	0.450 U	0.450 U	0.450 U	NA	0.450 U	0.450 U	0.450 U	0.450 U	0.450 U
Indeno(1,2,3-cd)pyrene	0.002[2]	0.290 U	0.290 U	0.290 U	NA	0.290 U	0.290 U	0.290 U	0.290 U	0.290 U
Dibenz(a,h)anthracene	50	0.290 U	0.290 U	0.290 U	NA	0.290 U	0.290 U	0.290 U	0.290 U	0.290 U
Benzo(g,h,i)perylene		0.420 U	0.430 U	0.430 U	NA	0.420 U	0.420 U	0.430 U	0.420 U	0.420 U
Total Confident Conc. SVOC		0	0	3.2		3.9	0	1.2	7.7	0
Total TICs		6.6	6.2	131		8	6.6	24.1	311	7.4

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

1. Shaded values exceed TOGS 1.1.1 Standard or Guidance Value for Class GA Groundwater.

2. Indicates value is a guidance value rather than a standard.

Table 3. Ground Water Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Sample ID		MW-1	CHA-1	CHA-2	CHA-2	CHA-3	CHA-4	CHA-5	CHA-6	CHA-10
		S4507-01	S4507-02	S4507-03	S5229-01	S4507-04	S4507-07	S4507-08	S4507-09	S4507-10
Sampling Date		9/1/04	9/1/04	9/1/04	10/15/2004	9/1/04	9/1/04	9/1/04	9/1/04	9/1/04
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	TOGS 1.1.1 Standard or Guidance Value[1]									
Aroclor-1016	0.09	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U
Aroclor-1221	0.09	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Aroclor-1232	0.09	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Aroclor-1242	0.09	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U
Aroclor-1248	0.09	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
Aroclor-1254	0.09	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Aroclor-1260	0.09	0.0630 U	0.0620 U	4.7 P	0.31 J	0.0640 U	0.0620 U	0.0640 U	0.0620 U	0.0630 U
Units		ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND										
Arsenic	25	4.8 U	4.8 U	4.8 U	NA	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Barium	1,000	67.3 J	78.8 J	204	NA	16.1 J	117 J	46.8 J	81.4 J	80.1 J
Cadmium	5	0.99 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
Chromium	50	1.2 U	2.7 J	1.2 U	NA	3.1 J	2.4 J	1.8 J	1.2 U	1.2 U
Lead	25	1.8 U	22.2	1.8 U	NA	21.0	1.8 U	39.2	1.8 U	1.8 U
Selenium	10	5.2 U	5.2 U	5.2 U	NA	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Silver	50	3.4 U	3.4 U	3.4 U	NA	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Mercury	0.7	0.06 J	0.03 J	0.03 U	NA	0.04 J	0.03 U	0.08 J	0.04 J	0.03 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

1. Shaded values exceed TOGS 1.1.1 Standard or Guidance Value for Class GA Groundwater.

2. Indicates value is a guidance value rather than a standard.

Figures

SOURCE: U.S.G.S. 7.5' Topographic
QUADRANGLE: POUGHKEEPSIE, NY

SCALE: 1"=2000'

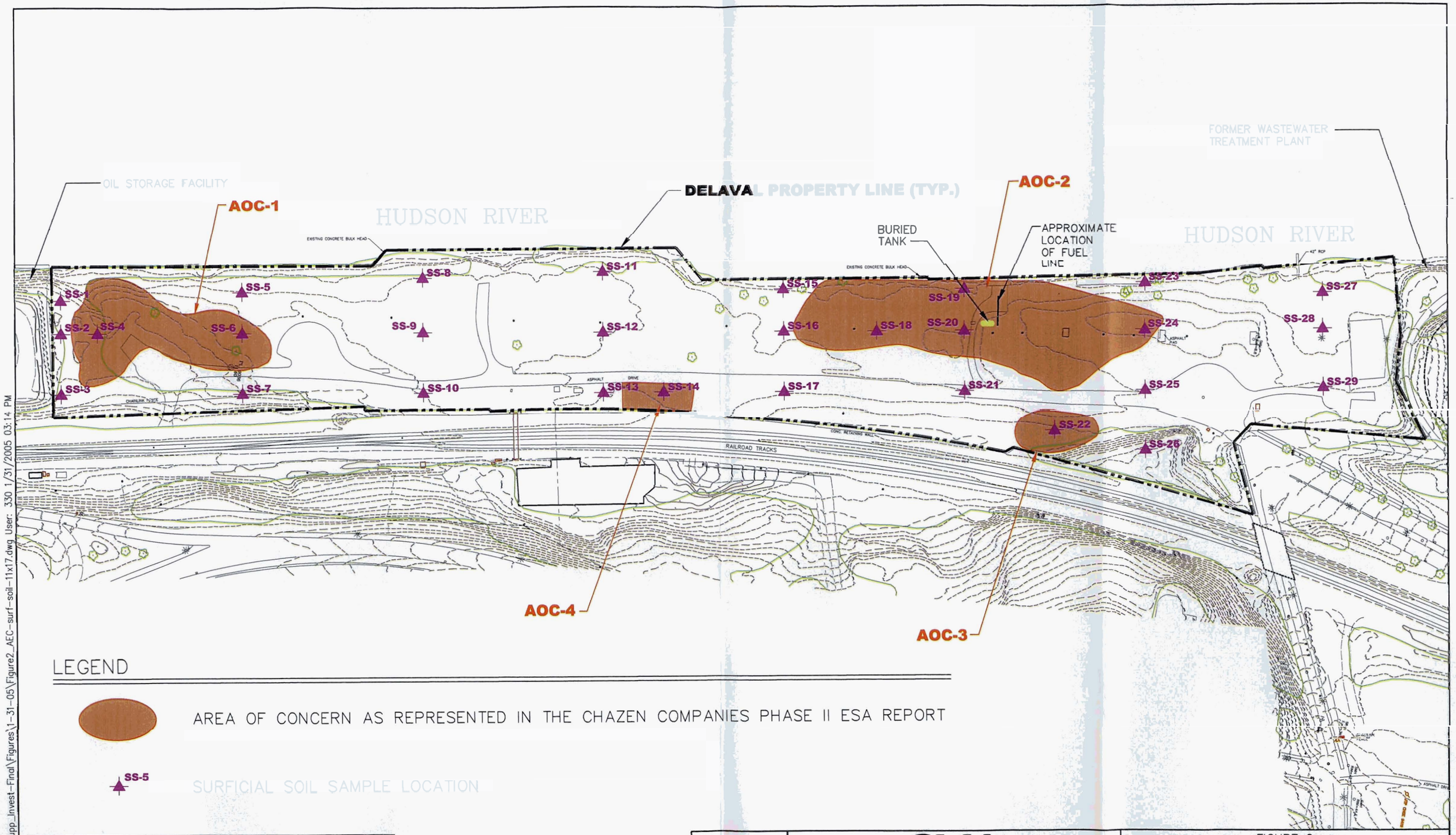
CLOUGH HARBOUR & ASSOCIATES LLP
© 2005
III Winners Circle, PO Box 5269, Albany, NY 12205
www.cloughharbour.com

11205.1001.1102

DATE: 01-31-2005

FIGURE 1
SITE LOCATION MAP
DeLAVAL PROPERTY
RINALDI BOULEVARD
POUGHKEEPSIE
STATE OF NEW YORK

File: M:\11205\ACAD\SITELOC.dwg User: 330 1/31/2005 02:56 PM



LEGEND

AREA OF CONCERN AS REPRESENTED IN THE CHAZEN COMPANIES PHASE II ESA REPORT

SS-5 SURFICIAL SOIL SAMPLE LOCATION

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269, Albany, NY 12205
www.cloughharbour.com

11205.1011.1102

DATE: JANUARY, 2005

FIGURE 2

SURFICIAL SOIL SAMPLE LOCATION PLAN AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest-Final\Figures\1-31-05\Figure2_AEC-surf-soil-11x17.dwg User: 330 1/31/2005 03:14 PM

OIL STORAGE FACILITY

AOC-1

HUDSON RIVER

DELAVAL PROPERTY LINE (TYP.)

AOC-2/3

BURIED TANK

APPROXIMATE LOCATION OF FUEL LINE

HUDSON RIVER

FORMER WASTEWATER TREATMENT PLANT

AOC-4

LEGEND

AREA OF CONCERN BASED ON SUPPLEMENTAL INVESTIGATION

TP-1 ENVIRONMENTAL EXPLORATORY TEST PIT

AT-1 ARCHEOLOGICAL TEST PIT

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269, Albany, NY 12205
www.cloughharbour.com

11205.1011.1102 | DATE: JANUARY, 2005

FIGURE 3

TEST PIT LOCATION PLAN AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest-Final\Figures\1-31-05\Figure3_AEC-testpits-11x17.dwg User: 330 1/31/2005 03:18 PM

OIL STORAGE FACILITY

AOC-1

HUDSON RIVER

DELAVAL PROPERTY LINE (TYP.)

AOC-2/3

FORMER WASTEWATER TREATMENT PLANT

BURIED TANK

APPROXIMATE LOCATION OF FUEL LINE

HUDSON RIVER

EXISTING CONCRETE BULK HEAD

CHA-2

B-7

B-8

CHA-1

CHA-3

CHA-5

CHA-6

MW-1

CHA-4

ASPHALT DRIVE

RAILROAD TRACKS

CONC. RETAINING WALL

ASPHALT PAD

42" RCP

CHAINLINK FENCE

ASPHALT DRIVE

AOC-4

LEGEND

AREA OF CONCERN BASED ON SUPPLEMENTAL INVESTIGATION

CHA-1 MONITORING WELL LOCATION

B-7 BORING LOCATION

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

N

CLOUGH HARBOUR & ASSOCIATES LLP © 2005

III Winners Circle, PO Box 5269, Albany, NY 12205

www.cloughharbour.com

11205.1011.1102

DATE: JANUARY, 2005

FIGURE 4

MONITORING WELL AND BORING LOCATION PLAN AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY

CITY OF POUGHKEEPSIE

DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest-Final\Figures\1-31-05\Figure4_AEC-well-boring-11x17.dwg User: 330 1/31/2005 03:20 PM

OIL STORAGE FACILITY

AOC-1

HUDSON RIVER

DELAVAL PROPERTY LINE (TYP.)

AOC-2/3

BURIED TANK

APPROXIMATE LOCATION OF FUEL LINE

FORMER WASTEWATER TREATMENT PLANT

HUDSON RIVER

EXISTING CONCRETE BULK HEAD

CHA-2 -0.57

CHA-3 -1.61

CHA-5 -1.62

CHA-6 -1.69

MW-1 -1.35

CHA-1 0.12

CHA-4 -0.76

-0.50 -0.75 -1.00 -1.25 -1.50 -1.75 -2.00 -0.25 0.00 0.50 1.00 1.25 1.50

RAILROAD TRACKS

ASPHALT DRIVE

CONC. RETAINING WALL

42" RCP

AOC-4

BENCH MARK
TOP OF HYDRANT
(12.49' AMSL)

LEGEND

AREA OF CONCERN BASED ON SUPPLEMENTAL INVESTIGATION

CHA-1 -0.85 — MONITORING WELL LOCATION / GROUNDWATER ELEVATION

-0.50 — GROUNDWATER CONTOUR (GROUNDWATER ELEVATIONS MEASURED ON 9-1-2004)

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

N

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5289, Albany, NY 12205
www.cloughharbour.com

11205.1011.1102

DATE: JANUARY, 2005

FIGURE 5

GROUNDWATER CONTOUR MAP AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest-Final\Figures\1-31-05\Figure5_AEC-GW-10-1-04-11x17.dwg User: 330 1/31/2005 03:22 PM

Appendix A

Test Pit Logs

Appendix B

Boring Logs

Appendix C

Well Construction Logs

Appendix D

Groundwater Level Data Logs

Appendix E

Well Sampling Logs

Appendix F

Soil Gas Survey Log

Appendix G

Chain-of-Custody Forms

Appendix H

Data Validation Report

Appendix A
Test Pit Logs

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: ATP-7
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: DeLaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 7/29/04 Start: 1:30 PM Finish: 3:30 PM
Excavation Contractor: Precision Industrial Maintenance, Inc.	Equipment: JD 310E 4X4

General Information:

Length: 45' Width: 4' Max. Depth: 9.5'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 6'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No (NYSDEC took photos)

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 2:00 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5' – 2'	Black FMC sand w/ silt, ash, slag and trace coal (sample S-1 taken)
2' – 4'	Gray silty clay w/ stones/cobbles
4' - 8'	Peat, some cow horns
8' – 9.5'	Gray fine silt, trace sand, trace clay

PID Readings/Test Pit Notes:

- No PID reading
- Sample ATP-7/S-1 taken at 2' per request of NYSDEC
- Possible structure foundation at East end of trench at approximately 8'

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP- 1
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: DeLaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 9:30 AM Finish: 10:10 AM
Excavation Contractor: Precision Industrial Maintenance, Inc.	Equipment: Kobelco SK 220 LC

General Information:

Length: 25' Width: 6' Max. Depth: 14'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 13'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 9:50 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 12'	Brown, black sand & silt (dark soil) w/ some "lathe millings" (metal), trace brick, some stones, trace wood, trace metal, some "fire brick" type material, pressed yellow-brown sand throughout layer
12' – 14'	West end: Gray/black silt & gravel heavy petroleum odor (sample S-1 taken) East end: Pieces of slag w/ some brick

PID Readings/Test Pit Notes:

- Heavy petroleum odor
- PID reading of 25 PPM in gray layer at 12'-14'
- Sample TP-1/S-1 was taken at 12'-14' from the West end of the trench at 9:50 AM
- No PID reading from slag at East end of trench at 12'-14'
- Dark colored soil from 8'-12' below the ground surface throughout the length of the trench

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-2
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 10:30 AM Finish: 11:50 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 15'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 12'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 2'	Brown soil and rocks
2' – 12'	Brown sandy soil w/ slag, stones, trace brick w/ pockets of asphalt roofing material
12' – 15'	FMC gravel, trace silt w/ cobbles & stones

PID Readings/Test Pit Notes:

- No PID Reading
- Trace amounts of stained/discolored soil throughout excavation
- Slight odor from asphalt roofing material but no PID reading
- Groundwater had no sheen or odor
- Fill appeared to stop in area of road

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-3
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 11:00 AM Finish: 11:30 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 25' Width: 6' Max. Depth: 12'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 10'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0- 0.7'	Topsoil and organics
0.7' – 3'	Soil and some brick (fill)
3' – 10'	Brown soil (silt and FMC gravel) w/ stones and rocks
10' – 12'	FMC gravel w/ stones

PID Readings/Test Pit Notes:

- No evidence of soil staining throughout excavation
- No PID reading
- Top 3' of excavation appeared to be fill material w/ soil below
- East end of trench: less fill material
- West end of trench: (approximately15' from tree) began running into fill material, with more brick and stones encountered
- Soil appeared to be clean

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-4
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 11:40 AM Finish: 12:15 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 10' Width: 6' Max. Depth: 13'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 10'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 1.5'	Topsoil and organics
1.5' – 3'	Concrete slab
3' – 11.5'	Slag & bricks, some soil
11.5' – 13'	Yellow-brown FM sand, trace silt/gravel
13'	Pieces of weathered shale

PID Readings/Test Pit Notes:

- Soil in excavation appeared to be relatively clean w/ no evidence of contamination
- Top 1.5' of excavation consisted of only dark soil w/ no odor and no PID reading
- South end of excavation is approximately 30' from tree

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-5
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 1:00 PM Finish: 1:45 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 13'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 8'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 1:30 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5' – 4'	Brown soil and cobbles, trace metal
4' – 5'	Concrete slab
5' – 11'	Slag w/ bricks, some soil
11' – 13'	Gray fine sand, trace silt w/slight black staining in pockets (sample S-1 taken)

PID Readings/Test Pit Notes:

- No PID reading
- Sample:TP-5/S-1was obtained from 12' at 1:30 PM
- Gray sand/silt materialat 11'-13' contained pockets of slight black staining with trace of odor

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-6
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 1:50 PM Finish: 2:30 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 14'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 9'

Depth to Top of Waste: Surface Depth to Bottom of Waste: 4'

Description of Waste: Metal and a Tire

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 2:00 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 4'	Concrete, soil, metal, tire, some soil (dark brown)
4' – 5'	Black/brown sandy gravel layer w/ slight staining (sample S-1 taken)
5' – 6'	Fill brick/soil
6' – 13'	Gray silt, trace sand w/ FMC gravel & cobbles

PID Readings/Test Pit Notes:

- No PID reading in excavation except for the sampled layer at 4' - 5' which had a PID reading of 18 PPM
- Groundwater had solvent type odor and slight sheen but no PID Reading
- Sample: TP-6/S-1 taken at 5' in the excavation at 2:00 PM

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-7
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 2:35 PM Finish: 3:15 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 14'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 9'

Depth to Top of Waste: 6' Depth to Bottom of Waste: 12'

Description of Waste: Wood, metal, glass and tile

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 5'	Soil and large pieces of concrete and brick
5' – 6'	Dark soil layer (silt and sand)
6' – 12'	Fill material consisting of slag, brick, wood, metal, glass, tile
12' – 14'	gray silty sand

PID Readings/Test Pit Notes:

- No PID reading
- Dark soil layer at 5' - 6' had no odor or PID reading

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-8
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 7:30 AM Finish: 8:15 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 15'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 10'

Depth to Top of Waste: 0.7' Depth to Bottom of Waste: 14'

Description of Waste: Tires, rims, wood, plastic, glass, metal and a drum

Drums Encountered: ☒ Yes ☐ No No. of Drums: 1 Materials in Drums?: ☐ Yes ☒ No

Description/Condition of Drums: Rusted/crushed - only bottom 1/3 of drum present, no PID reading

Location Marked: ☒ Yes ☐ No With: stake with ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 7:45 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 8'	Waste and soil (concrete, tires, rims, wood plastic, glass (1 drum), metal, pvc pool liner)
8' – 14'	Black oil/stained soil w/ silt & gravel, plastic, trace wood, many metal shavings and white grease like lubricant mixed in w/ metal (sample S-1 taken)
14' – 15'	Gray silt, trace sand, trace clay

PID Readings/Test Pit Notes:

- Sample TP-8/S-1 was taken from 10' in the excavation at 7:45 AM w/ a PID reading of 58 PPM
- Soil at 10' -14' contained heavy black staining
- Groundwater had very heavy petroleum odor

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-9
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 8:20 AM Finish: 8:45 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 12'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 10'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 8:30 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 5'	Brown soil w/ trace wood, cobbles, trace brick
5' – 6'	Black silty stained soil (fine) (sample S-1 taken)
6' – 8'	Brown soil w/ cobbles and brick
8' – 11'	Black sand/gravel and slag (20 ppm) Saturated/ black, stained, oily black top Type odor
11' – 12'	Gray silt/ trace sand

PID Readings/Test Pit Notes:

- Sample TP-9/S-1 was taken from 5' in the excavation at 8:30 AM. The sample consisted of a black fine silty soil with machine oil like odor. It had a PID reading of 10.1 PPM.
- Encountered groundwater in the excavation had a heavy black-top like odor w/ a PID reading of 25 PPM
- Excavation is approximately 30' from the river

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-11
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 9:45 AM Finish: 10:00 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 10.5'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 8.5'

Depth to Top of Waste: N/A Depth to Bottom of Waste: N/A

Description of Waste: N/A

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 2'	Topsoil and organics
2' – 5'	Brown/black soil w/ layers of yellow/brown fire brick type material
5' – 7.5'	Yellow/brown silt, sand and gravel
7.5' – 8.5'	Gray silt, trace gravel, trace clay with black soil staining present 25 ppm, petroleum odor – oil bands
8.5' – 10.5'	Large pieces of broken shale

PID Readings/Test Pit Notes:

- Soil layer at 5'-7.5' appeared to be very clean
- Groundwater encountered at 8.5' w/ very heavy petroleum odor, staining and oil beads present. PID reading of 25 PPM
- Excavation approximately 25' from river

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-12
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 10:15 AM Finish: 10:30 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 3'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 2'	Soil, brown silt, trace sand, clean with some concrete
2'	Bedrock (shale)

PID Readings/Test Pit Notes:

- No PID reading

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-13
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 10:30 AM Finish: 11:00 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 10'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: N/A

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 5'	Topsoil, organics w/ root mass and soil
5' – 10'	Brown FMC gravel and silt, 4" cobbles w/ trace of slag

PID Readings/Test Pit Notes:

- No PID readings
- Soil appeared very clean w/ no staining or odor

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-14
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 11:10 AM Finish: 11:45 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 7'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: N/A

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.5'	Dark topsoil and organics
0.5' – 2'	Yellow silt, trace sand w/ FMC gravel & stones
2' – 7'	Light brown silt w/ FMC gravel, stones & cobbles (trace fine sand) "till" like – very hard

PID Readings/Test Pit Notes:

- No PID readings
- Soil appeared very clean w/ no staining or odors, soil appears to be natural
- Discontinued excavation at 7' due to soil being very hard and compact - appeared to be native soil

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-15
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 12:30 PM Finish: 1:00 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 15'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: N/A

Depth to Top of Waste: 8" Depth to Bottom of Waste: 15"

Description of Waste: Metal shavings and automobile fuel tank

Drums Encountered: ☐ Yes ☒ No No. of Drums: N/A Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: N/A

Location Marked: ☒ Yes ☐ No With: Stake with orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 15'	Brown/black silt, trace sand, w/ metal filings/shavings, yellow brick (sand-stone like), trace slag, trace cobbles
15'	Bedrock (shale)

PID Readings/Test Pit Notes:

- No PID readings were encountered
- No water was encountered in excavation
- Automobile fuel tank was encountered at approximately 2'-3'. It was crushed, rusty and dry.
- The soil layer from 0.7'-15' was very consistant with a large amount of metal filings/shavings distributed throughout

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-16
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 1:00 PM Finish: 1:50 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 19'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 15'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☒ Yes ☐ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 1:30 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 15'	Brown/black soil w/ yellow fire brick, trace slag, trace millings (metal), trace wood
15' – 19'	FMC gravel w/ cobbles, stones & sand, trace slag. Black/gray in color (very wet), some staining (sample S-1 taken)
19'	Gray silt, trace sand

PID Readings/Test Pit Notes:

- Sample TP-16/S-1 taken from 15' in the excavation at 1:30 PM. Sample had staining and heavy petroleum odor but no PID readings

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-17
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 2:00 PM Finish: 2:30 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 19'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 15'

Depth to Top of Waste: 1' Depth to Bottom of Waste: 19'

Description of Waste: Fill w/ wood, metal, tires, pipes and plastic

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 19'	Brown silty soil, trace sand, some FMC gravel w/ stones & cobbles, some wood, some metal, tires, pipes, plastic, bricks
19'	Gray silt, trace sand

PID Readings/Test Pit Notes:

- Soil in the excavation from 1-15' appeared to be clean w/ no staining, no odor and no PID reading

- Soil in the excavation below 15' (water level) was stained gray/black in color w/ petroleum odor but had no PID readings

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-18
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-1
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/3/04 Start: 2:30 PM Finish: 3:00 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 15'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 11'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 14'	Soil (silt w/ some sand, some FMC gravel), concrete, bricks, tires, wood, slag, fire bricks, some asphalt
14' - 15'	Gray silt, trace sand, trace clay

PID Readings/Test Pit Notes:

- No odor or PID reading in soil above 11' (groundwater level)
- Soil below 11' (groundwater level) had slight petroleum odor - but no PID readings

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-19
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 7:30 AM Finish: 12:00 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 124' Width: 6' Max. Depth: 8' (4' deep for most of excavation)

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 4.5'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stakes w/ orange ribbons

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 7:45 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 3'	Brown soil w/ cobbles, brick, some wood
3' – 4'	Heavy staining w/ visible (oil) product w/ bricks, little soil (sample S-1 taken)
4'	Concrete slab

PID Readings/Test Pit Notes:

- Encountered soil from 0.7'-3' appeared to be clean w/ no PID readings
- Sample TP-19/S-1 taken from a depth of 3.5' at 7:45 AM and appeared to contain # 6 oil
- Encountered a Fuel line (6" steel pipe with concrete on both sides) running the length of the south side of the trench at the 3.5' - 4' level.
- Heavy oil soaking was encountered on both sides of trench directly on top of concrete slab
- Excavated to 8' on East end of trench
  - at 4' - 8' encountered heavy cobbles /stones in oil soaked water.
  - at 8' encountered gray silt w/ oil staining

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-20
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 12:30 PM Finish: 1:45 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 10' Width: 6' Max. Depth: 8'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 4.5'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 12:40 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 6'	Brown stained soil and slag
6' – 8'	FMC heavily stained sand and gravel w/ cobbles (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 12 PPM
- Encountered groundwater at 4.5' was very black w/ a heavy petroleum odor
- Sample TP-20/S-1 was taken at 7'
- Excavation was approximately 15' from river

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-21
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 1:00 PM Finish: 1:25 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 10' Width: 6' Max. Depth: 9'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 4'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5' – 5'	Brown soil w/ some black staining and some bricks
5' – 9'	Fill material – wood, brick, slag, concrete, metal, cobbles
9'	Gray silt & FMC gravel (did not appear to be stained)

PID Readings/Test Pit Notes:

- PID reading of 5.5 PPM
- Light staining was observed in the soil w/ oil beads (product) visible on groundwater
- Excavation was approximately 10' from river

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-22
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 1:30 PM Finish: 1:40 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 10' Width: 6' Max. Depth: 9'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 6'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7	Topsoil and organics
0.7' – 5'	Brown soil, brick
5' – 9'	Slag, trace brick, some soil

PID Readings/Test Pit Notes:

- PID reading of 9.3 PPM
- Encountered groundwater at 6' had a petroleum odor
- Excavation was approximately 15' from river

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-23
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 1:40 PM Finish: 2:10 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 16' Width: 7' Max. Depth: 8'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 5.5'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 1:55 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5'– 5'	Brown soil, bricks
5' – 6'	FMC Sand and gravel w/ silt (sample S-1 taken)
6' – 8'	Brick, stones

PID Readings/Test Pit Notes:

- PID reading of 31.6 PPM
- Sample TP-23/S-1 was taken from a depth of 5' at 1:55 PM
- Encountered groundwater at 5.5' had a petroleum odor and oily sheen
- Excavation was approximately 20' from river

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-24
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 2:15 PM Finish: 2:45 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 14'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 7'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 2:30 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7'– 13.5'	Soil, bricks, stone, wood, slag
13.5' – 14'	Gray silt, trace sand (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 2.2 PPM
- Encountered groundwater at approximately 7' appeared to contain oil (product) and had a petroleum odor
- Sample TP-24/S-1 was taken at a depth of 14' at 2:30 PM
- Excavation was approximately 50' from the river
- "Clean" water appeared to be entering excavation from the south w/ what appeared to be contaminated water entering from the north

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-25
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/4/04 Start: 2:50 PM Finish: 3:30 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 11'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 8'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5'– 5.5'	Brown soil, some brick, concrete, fine slag
5.5' – 10'	Coarse slag (appeared to be oil saturated), large stones and wood
10' – 11'	gray silt, trace sand

PID Readings/Test Pit Notes:

- PID reading of 17.3 PPM in deeper levels of the excavation
- Encountered groundwater at approximately 8' had a oily sheen on it w/ a petroleum odor
- Excavation was approximately 15' from access road

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-26
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 7:20 AM Finish: 8:05 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 42' Width: 6' Max. Depth: 11'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 6'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 5'	Soil, Brick, wood, concrete
5' – 10'	Stone, slag
10' – 11'	Gray silt, trace sand

PID Readings/Test Pit Notes:

- No PID readings encountered
- Soil as well as encountered groundwater appears clean with no odors or evidence of possible contanination
- Black organic material encountered above silt layer

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-27
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 8:05 AM Finish: 9:00 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 17' Width: 6' Max. Depth: 10'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 4'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 4'	Soil, brick, concrete
4' – 9.5'	slag, stone
9.5' – 10'	Silt, trace sand

PID Readings/Test Pit Notes:

- No PID readings were encountered
- No apparent contamination was present in either the soil or groundwater encountered in this excavation
- Encountered groundwater at 4' had no sheen or no odor

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-28
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 9:00 AM Finish: 10:35 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 70' Width: 6' Max. Depth: 11'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 5'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 9:10 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7'– 5'	Soil, brick, concrete
5' – 10'	Slag, stone (sample S-1 taken)
10' – 11'	Silt, trace sand

PID Readings/Test Pit Notes:

- No PID readings were encountered
- No appearent contamination was present in either the soil or the groundwater encountered in this excavation
- Sample TP- 28/S-1 was taken from a depth of 6' in the excavation

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-29
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 10:35 AM Finish: 11:15 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 11'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 5'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 3.5'	Bricks, soil
3.5' – 10.5'	Slag, stones
10.5' – 11'	Silt, trace sand

PID Readings/Test Pit Notes:

- No PID readings were encountered
- No visible soil staining was observed
- Encountered groundwater at 5' had oil sheen
- A slight petroleum odor was noticed

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-30
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 11:20 AM Finish: 11:30 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 4'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 11:30 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7'– 4'	Soil and brick (sample S-1) taken

PID Readings/Test Pit Notes:

- PID reading of 6.3 PPM
- Heavy oil staining observed in 0.7'-4' layer
- Discontinued excavation due to large concrete foundations in excavation area
- Sample TP-30/S-1 taken from a depth of 3'

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-31
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 11:30 AM Finish: 12:00 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 8' Width: 8' Max. Depth: 6'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 5'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 6	Brick walls
	Concrete Floor

PID Readings/Test Pit Notes:

- No PID readings were encountered
- Encountered groundwater at 5' had an oil sheen
- Encountered soils had slight oil staining

NOTE:
This excavation appeared to have discovered some sort of buried vault or room with brick walls. It is assumed to be an old boiler room due to use of fire bricks in walls.

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-32
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 12:50 PM Finish: 1:15 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 12' Width: 6' Max. Depth: 8'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 8'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7'– 2.5'	Brown soil, bricks
2.5' – 3'	Concrete slab
3' – 6'	Brown soil, stones
6' – 8'	Silt, sand

PID Readings/Test Pit Notes:

- PID reading of 14.3 PPM
- Encountered black staining in soil at a depth of 6'
- Encountered groundwater at a depth of 8' with oil sheen and petroleum odor.

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-33
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 1:15 PM Finish: 1:45 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 6' Width: 6' Max. Depth: 7'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 1.2'	Concrete slab
1.2' – 7'	Brown soil, bricks, slag, concrete

PID Readings/Test Pit Notes:

- No PID readings were encountered
- Slight oil staining was observed on encountered soils
- Groundwater was not encountered due to difficulty in excavating in this area because of numerous buried foundations

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-34
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 1:45 PM Finish: 2:20 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 10'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 6'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: Brick

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 2:10 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 9'	Brick, brown soil, wood
9' – 10'	Silt, trace sand (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 6.0 PPM
- Encountered oil staining in soil w/ strong petroleum odor
- Encountered groundwater at 6' with oil sheen
- Sample TP-34/S-1 was taken from a depth of 9' at 2:10 PM
- Excavation was 30' from river

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-35
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 2:20 PM Finish: 2:50 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 10'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 9'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 2:35 PM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 9'	Brick, Brown soil
9' – 10'	Silt, trace sand (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 8.0 PPM
- Encountered groundwater at depth of 9' had no oil sheen
- Black staining was observed in encountered soil
- Sample TP-35/S-1 was taken from a depth of 9' at 2:35 PM
- Excavation was approximately 20' from the river

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-36
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/5/04 Start: 2:50 PM Finish: 3:30 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 16' Width: 6' Max. Depth: 12'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 11'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5' – 11'	Brown soil, brick, concrete, wood, steel and slag
11' – 12'	Gray silt, trace sand

PID Readings/Test Pit Notes:

- No PID readings were encountered
- Small areas of oil stained soil were encountered in excavation
- Encountered groundwater at a depth of 11' had no oil sheen

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-37
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-3
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 7:15 AM Finish: 7:50 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 17'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 7:25 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 7'	Brown soil, concrete, wood, brick
7' – 9'	Brown silt, sand (sample S-1 taken)
9' – 11'	Gray silty clay w/ FMC gravel and cobbles
11' – 17'	Brown silty clay with gravel and cobbles

PID Readings/Test Pit Notes:

- PID reading of 0.9 PPM
- Encountered some staining of soils w/ a petroleum odor
- Encountered a heavier contamination/petroleum odor in the 9' - 11' layer
- No groundwater was encountered in this excavation
- Sample TP-37/S-1was taken from a depth of 9' at 7:25 AM

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-38
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-3
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 8:00 AM Finish: 8:25 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 15' Width: 6' Max. Depth: 8'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 7'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 8:15 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 1.5'	Fill material
1.5' – 2'	Brown sand
2' – 3'	Soil, cobbles
3' – 4'	Crushed slag
4' – 5'	"Black Layer," silt, gravel, with product
5' – 8'	Gray silt, sand (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 19.3 PPM
- Heavy petroleum odor was present in excavation
- Heavy staining was encountered in soils of the excavation
- Encountered groundwater at 7' has visible free product on it's surface
- Sample TP-38/S-1was taken at a depth of 6' at 8:15 AM

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-39
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-3
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 8:25 AM Finish: 9:15 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 25' Width: 6' Max. Depth: 12.5'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 12'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 8:50 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 1'	Topsoil and organics
1' – 4'	Brown soil, trace brick, trace metal, silt and gravel
4' – 4.7'	Concrete slab
4.7'– 6'	Crushed slag
6' – 9'	Brown silt, sand, gravel
9' – 12.5'	Gray silty clay (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 15.7 PPM
- Heavy petroleum odor was present in excavation
- Free product was encountered in both the soil and groundwater of the excavation
- Sample TP-39/S-1was taken at a depth of 12' at 8:50 AM
- Excavation was approximately 15' from railroad

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-40
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-3
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 9:15 AM Finish: 10:15 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 6'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☐ Yes ☒ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 6'	Slag, brick, brown soil, concrete, rocks
	Concrete slab

PID Readings/Test Pit Notes:

- No PID readings were encountered
- Unable to excavate beyond a depth of 6' to investigate for potential contamination due to the fact that a thick concrete pad was encountered at that depth
- Excavations were attempted in 4 different locations to avoid the concrete pad - attempts were unsuccessful

NOTE:
Contaminants assumed to be below 6' as they were at the other locations.

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-41
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-4
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/2/04 Start: 10:15 AM Finish: 10:55 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 30' Width: 6' Max. Depth: 8'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 7'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 10:25 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.5'	Topsoil and organics
0.5'– 4'	Brown soil, stones, concrete, fill material, brick
4' – 8'	Silt w/ trace of clay, FMC gravel (sample S-1 taken)

PID Readings/Test Pit Notes:

- PID reading of 30.9 PPM
- Sample TP-41/S-1was taken from a depth of 6.5'
- Encountered groundwater at 7' had a sheen on its surface
- Encountered soils in the excavation contained slight staining
- A non-petroleum odor (solvent-like) was encountered in the excavation
- No evidence of contamination was observed at the north end of the excavation

Clough, Harbour & Associates LLP Test Pit Log	Test Pit No.: TP-42
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-4
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 11:00 AM Finish: 11:30 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 8' Max. Depth: 9'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 8'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 11:20 AM

Sample Analyses: VOC's, SVOC's, PCB's, RCRA 8 Metals No. of Bottles: 2

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 3'	Slag, stone, brown soil, brick
3' – 4'	Concrete slab
4' – 5'	Slag, stones, brown soil, brick
5' – 9'	FMC gravel, MC sand and silt, cobbles (sample S-1 taken)

PID Readings/Test Pit Notes:

- No PID readings were encountered
- No staining was observed in the encountered soils of the excavation
- No free product was observed in the groundwater encountered at 8' in the excavation
- A mild solvent-like odor was encountered in the excavation
- Sample TP-42/S-1was taken from a depth of 7' at 11:20 AM
- A brick wall was encountered running along the East side of the excavation

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-43
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-4
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 11:30 AM Finish: 12:00 AM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 20' Width: 6' Max. Depth: 10'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 9'

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7'– 1'	Crushed slag
1' – 9'	Soil, slag, stones, cobbles
9' – 10'	Gray silt, trace sand

PID Readings/Test Pit Notes:

- PID reading of 23.4 PPM
- No staining was observed in the encountered soils of the excavation
- A slight odor was encountered in the groundwater at the 9'-10' depths of the excavation
- No free product was observed on the surface of the encountered groundwater of the excavation

Clough, Harbour & Associates LLP Test Pit Log	**Test Pit No.:** TP-44
Project Name: DeLaval Property - Supplemental Investigation	Test Pit Location: Delaval Property AOC-2
Project Location: City of Poughkeepsie, New York	Logged By: J. Herrick
Project Number: 11205.1005.1102	Date: 8/6/04 Start: 12:30 PM Finish: 1:15 PM
Excavation Contractor: Precision	Equipment: Kobelco SK 220 LC

General Information:

Length: 25' Width: 6' Max. Depth: 4'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Depth to Top of Waste: NA Depth to Bottom of Waste: NA

Description of Waste: NA

Drums Encountered: ☐ Yes ☒ No No. of Drums: NA Materials in Drums?: ☐ Yes ☐ No

Description/Condition of Drums: NA

Location Marked: ☒ Yes ☐ No With: Stake w/ orange ribbon

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☐ Yes ☒ No

Sampling Method: _____ Sampling Time: _____

Sample Analyses: _____ No. of Bottles: _____

Test Pit Profile

0 – 0.7'	Topsoil and organics
0.7' – 4'	Brown soil, bricks, wood
4'	Concrete pad

PID Readings/Test Pit Notes:

- No PID readings were encountered
- Black stained soil was encountered overlying the concrete pad
- A slight petroleum odor was encountered in the excavation

Appendix B

Boring Logs

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B1

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

LOCATION: Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.

DRILLER: INSPECTOR: J. Herrick

START DATE and TIME: 8/16/2004 4:00:00 PM

FINISH DATE and TIME: 8/16/2004 5:25:00 PM

SURFACE ELEV: CHECKED BY: S. Smith

DRILL FLUID: None DRILLING METHOD: Hollow Stem Augers

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	1.5	4-4-3-4	7				**SILT**, trace f. sand, yellow fire brick, metal filings, black/brown, moist **(FILL)**			
S2	2	1.5	6-4-4-6	8				**SILT**, trace f. sand, trace solid black tar, black/brown, moist **(FILL)**		Slight staing of soil observed, no odor or PID readings.	
S3	2	0.8	4-1-2-1	3		5		**SILT**, trace f. sand, trace f.c. gravel, black/brown, moist **(FILL)**		Moderate tar like odor noted.	
S4	2	1	2-2-3-3	5				**SILT**, trace f.m.c. sand, trace f.c. gravel, trace slag, black/brown, moist **(FILL)**			
S5	2	0.4	2-1-1-2	2				**f.m.c. SAND and Clayey SILT** Some Cobbles, brown/black, moist **(FILL)**			
S6	2	0.8	3-1-1-2	2		10		**SILT**, Some Ash, Some Slag, little brick, brown/black, moist **(FILL)**			
S7	2	0.9	2-1-1-2	2				**SLAG**, trace silt, black, moist **(FILL)**			
S8	2	1	2-2-1-4	3		15		**SLAG**, trace silt, black, moist **(FILL)**			
S9	2	1.4	5-9-6-5	15				**f. SAND and SILT**, Some Slag, gray, moist **(FILL)**			
S10	2	1.8	3-3-13-50	16				**f. SAND and SILT**, Some Weathered Shale (at bottom), gray, moist **(SM)**			
						20		End of Boring at 20 ft			

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B2

LOCATION: Poughkeepsie, New York
CLIENT: City of Poughkeepsie
CONTRACTOR: Aquifer Drilling & Testing, Inc.
DRILLER: INSPECTOR: J. Herrick
START DATE and TIME: 8/17/2004 9:00:00 AM
FINISH DATE and TIME: 8/17/2004 9:45:00 AM
SURFACE ELEV: CHECKED BY: S. Smith

DRILL FLUID: None
DRILLING METHOD: Hollow Stem Augers

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	1.5	2-3-4-3	7				**SILT**, trace f.m. sand, trace f.c. gravel, trace glass, trace brick, brown, mottled, moist **(FILL)**			
										No odor, no PID reading, no staining	
S2	2	1.1	4-5-5-4	10							
								f. SAND and SILT Some f. Gravel, little cobbles, trace wood, brown, moist **(FILL)**		No odor, no staining	
S3	2	1.6	4-6-7-9	13		5		**SILT**, black, moist **(FILL)**		No odor, no staining	
								f. SAND and SILT Some f. Gravel, trace organics, gray, wet **(FILL)**		Heavy petroleum odor, PID = 10 ppm, heavy staining	
S4	2	1.6	3-3-2-3	5				**SILT**, black, wet **(FILL)**			
								SILT, and SLAG, black, wet **(FILL)**		PID = 44.4 ppm, heavy odor and staining	
S5	2	0.8	4-4-4-3	8		10					
										PID = 46 ppm, heavy odor and staining, sheen on water	
S6	2	0.2	2-2-2-2	4							
								CLAY and SILT, trace organics, gray, moist **(CL/ML)**		PID = 27.8 ppm, heavy odor and staining	
S7	2	0.9	1-1-1-1	2							
										PID = 6.0 ppm, heavy petroleum odor and staining	
S8	2	1.2	1-1-1-1	2		15					
								End of Boring at 16 ft		PID = 0.0 ppm, no odor, no staining	
						20					

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B3

LOCATION: Poughkeepsie, New York
DRILL FLUID: None
DRILLING METHOD: Hollow Stem Augers
CLIENT: City of Poughkeepsie
CONTRACTOR: Aquifer Drilling & Testing, Inc.
DRILLER:
INSPECTOR: J. Herrick
START DATE and TIME: 8/17/2004 1:30:00 PM
FINISH DATE and TIME: 8/17/2004 2:30:00 PM
SURFACE ELEV:
CHECKED BY: S. Smith

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	1.3	4-14-10-6	24	**f.m. SAND**, Some Cobbles, little brick, trace silt, brown, moist **(FILL)**		No visual, olfactory, of photoionic evidence of contamination in boring.	
S2	2	1	6-3-3-2	6	**f. SAND**, AND SILT, Some Cinders, little ash, little coal, brown/black, moist **(FILL)**			
S3	2	0.2	1-1-1-1	2	**SILT**, AND SLAG, wet **(FILL)**			
S4	2	0.4	1-WH-WH-1		**SLAG**, Some f. c. Gravel, trace silt, brown, wet **(FILL)**			
S5	2	0.2	WH-WH-WH -WH		**SLAG**, trace f. c. gravel, brown, wet **(FILL)**			
S6	2	1.3	WH-WH-WH -WH		**SILT**, Some Slag, brown, moist **(FILL)**			
S7	2	1.7	3-1-1-1	2	**SILT**, trace clay and organics, gray, moist **(ML)**			
					End of Boring at 14 ft			

5
10
15
20

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B4

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

LOCATION: Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.

DRILLER: INSPECTOR: J. Herrick

START DATE and TIME: 8/16/2004 11:15:00 AM

FINISH DATE and TIME: 8/16/2004 2:30:00 PM

SURFACE ELEV: CHECKED BY: S. Smith

DRILL FLUID: None

DRILLING METHOD: Hollow Stem Augers

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	0.8	12-13-15-10	28				**Clayey SILT**, Some f.c. Gravel, trace f.m.c. sand, trace concrete, trace topsoil, and organics, brown, moist **(FILL)**		No visual, olfactory, of photoionic evidence of contamination in boring.	
S2	2	0.8	28-37-14-6	51				**Clayey SILT**, Some f.c. Gravel, little concrete, brown, moist **(FILL)**			
S3	2	1.1	5-6-11-8	17		5		**Clayey SILT**, trace f.m.c. sand, trace f.c. gravel, trace brick, trace concrete, brown, moist **(FILL)**			
S4	2	0.4	12-50-NA-NA					**Clayey SILT**, trace sand, f.c. gravel, trace brick, trace concrete, trace aluminum, brown, moist **(FILL)**			
S5	2	0.2	4-5-5-4	10				**f. SAND and SILT**, Some Cobbles, trace clay, gray, moist **(FILL)**			
S6	2	1.2	2-1-1-12	2		10		**Silty CLAY**, gray, moist **(CL-ML)**			
S7	2	1.2	1-1-1-12	2				**Silty CLAY**, trace shale fragments, gray, moist **(CL-ML)**			
								End of Boring at 14 ft			
						15					
						20					

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B5

LOCATION: Poughkeepsie, New York
DRILL FLUID: None
DRILLING METHOD: Hollow Stem Augers
CLIENT: City of Poughkeepsie
CONTRACTOR: Aquifer Drilling & Testing, Inc.
DRILLER:
INSPECTOR: J. Herrick
START DATE and TIME: 8/17/2004 3:45:00 PM
FINISH DATE and TIME: 8/17/2004 5:20:00 PM
SURFACE ELEV:
CHECKED BY: S. Smith

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	0.9	2-4-5-3	9				**f. SAND and SILT** Some f. c. Gravel, little brick, brown, moist **(FILL)**			
								f. SAND and SILT Some f.c. Gravel, gray, mottled, moist **(FILL)**			
S2	2	1.4	1-7-12-27	19				**f.c. GRAVEL** and SILT, black, moist **(FILL)**		No visual, olfactory, of photoionic evidence of contamination in boring.	
								f.c. GRAVEL Some Slag, little cobbles, trace silt, black, wet **(FILL)**			
S3	2	1.4	19-13-9-9	22		5					
								SLAG, little cobbles, trace silt, black, wet **(FILL)**		No PID reading, black stain, heavy petroleum odor	
S4	2	0.3	4-5-6-5	11							
S5	2	1.1	3-4-10-8	14		10					
S6	2	0.8	6-7-8-9	15							
								f. SAND and SILT Some Cobbles, black, wet **(FILL)**			
S7	2	0.3	4-3-2-1	5							
S8	2	0.5	1-2-2-2	4		15					
S9	2	0.5	2-1-2-3	3							
S10	2	0.4	3-5-3-3	8							
						20		End of Boring at 20 ft		Slight petroleum odor, staining, no PID reading	

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B6

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

LOCATION: Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.

DRILLER: INSPECTOR: J. Herrick

START DATE and TIME: 8/18/2004 8:00:00 AM

FINISH DATE and TIME: 8/18/2004 10:30:00 AM

SURFACE ELEV: CHECKED BY: S. Smith

DRILL FLUID: None DRILLING METHOD: Hollow Stem Augers

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	1	4-9-11-24	20				**f. SAND and SILT**, Some f.c. Gravel, trace coal, trace cobbles, brown, moist **(FILL)**			
S2	2	1.4	3-5-13-23	18				**f. SAND and SILT**, Some f.c. Gravel, trace brick, trace cobbles, brown, moist **(FILL)**			
S3	2	0.7	6-40-53-21	93		5		**SILT**, little concrete, little brick, trace f. sand, brown, moist **(FILL)**			
S4	2	0.8	11-10-8-9	18				**f. SAND and SILT**, Some f.c. Gravel, little cobbles, brown, moist **(FILL)**		No visual, olfactory, of photoionic evidence of contamination	
S5	2	0.7	3-2-3-6	5				**f. SAND and SILT**, trace brick, brown, moist **(FILL)**		Slight solvent odor	
S6	2	0.7	2-2-3-4	5		10		**f.c. GRAVEL**, Some f.m. Sand, black, wet **(FILL)** **f.c. GRAVEL**, trace f. sand, trace cobbles, wet **(FILL)**			
S7	2	1	3-3-9-11	12				**SILT**, gray, saturated **(ML)** **SILT**, little shale fragments, gray, saturated **(ML)**			
S8	2	1.4	3-13-9-2	22		15		**SILT**, trace shale fragments, trace roots, gray, saturated **(ML)**			
								End of Boring at 16 ft		Petroleum odor, trace product, sheen on water	
						20					

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B7

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

LOCATION: Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.

DRILLER: INSPECTOR: J. Herrick

START DATE and TIME: 8/18/2004 3:00:00 PM

FINISH DATE and TIME: 8/18/2004 4:50:00 PM

SURFACE ELEV: CHECKED BY: S. Smith

DRILL FLUID: None

DRILLING METHOD: Hollow Stem Augers

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
								SILT, trace f.c. gravel, trace m.c. sand, trace coal, trace ash, black, moist **(FILL)**			
S1	2	2	9-8-8-8	16				**f. SAND**, Some Fire Brick, brown, dry **(FILL)**			
								SILT, little f.c. gravel, trace m.c. sand, trace coal, trace ash, black, moist **(FILL)**			
								SILT, black, moist **(FILL)**			
S2	2	1.3	6-4-9-7	13				**f. SAND**, yellow/brown, dry **(FILL)**			
								SILT, black, moist **(FILL)**			
								SILT, trace cobbles, trace concrete, trace metal filings, black moist **(FILL)**		*No visual, olfactory, of photoionic evidence of contamination*	
S3	2	0.9	3-3-4-4	7		5					
								SILT, trace slag, black, moist **(FILL)**		Slight petroleum odor	
S4	2	1.1	4-2-1-2	3				**f. SAND**, brown, dry **(FILL)**			
								SILT, trace slag, black, moist **(FILL)**			
								f. SAND and SILT, trace stone, black, moist **(FILL)**			
S5	2	1	2-2-1-2	3				**f. SAND**, yellow, dry **(FILL)**			
								f. SAND and SILT, trace stone, black, moist **(FILL)**			
						10		**f. SAND and SILT**, trace stone, black, moist **(FILL)**			
S6	2	1.1	4-3-4-4	7				**f. SAND**, yellow, dry **(FILL)**			
								f. SAND and SILT, trace stone, black, moist **(SM)**		No visual, olfactory, of photoionic evidence of contamination	
								f. SAND and SILT, black, moist **(SM)**			
S7	2	1.5	4-6-5-3	11							
								f. SAND and SILT, trace stone, black, saturated **(SM)**		Slight petroleum odor	
S8	2	1	2-3-3-4	6		15					
S9	1	0.5	48-1-50/0.5	R				**SHALE (BEDROCK)**			
								End of Boring at 17 ft		Heavy petroleum odor, black stained and soaked on top of bedrock	
						20					

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

DeLaval Property
SUBSURFACE LOG
HOLE NUMBER B8

PROJECT NUMBER: 11205.1011.1102 August 16, 2004

LOCATION: Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.

DRILLER: INSPECTOR: J. Herrick

START DATE and TIME: 8/18/2004 1:45:00 PM

FINISH DATE and TIME: 8/18/2004 2:30:00 PM

SURFACE ELEV: CHECKED BY: S. Smith

DRILL FLUID: None

DRILLING METHOD: Hollow Stem Augers

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per on Split Spoon Sampler	"N" Value or RQD%	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	2	1.5	3-4-2-3	6				**SILT**, Some f.m. Sand, trace f.c. gravel, trace brick, brown, moist **(FILL)**		No visual, olfactory, of photoionic evidence of contamination in boring.	
								COAL, Some Ash, black, dry **(FILL)**			
S2	2	1.5	3-5-11-11	16				**f. SAND and SILT**, Some Brick, little slag, trace coal, trace ash, black/brown, moist **(FILL)**			
S3	2	1	6-7-6-5	13		5		**SILT**, trace f. sand, trace f. gravel, trace slag, trace coal, trace ash, brown, moist **(FILL)**			
S4	2	0	6-2-2-11	4				**SILT**, brown, moist **(FILL)**			
S5	2	0.2	11-8-7-12	15		10		**SILT**, and SLAG, brown, saturated **(FILL)**			
S6	2	1.4	8-14-49-44	63				**m.c. SAND**, and f.c. GRAVEL, Some Brick, brown, saturated **(FILL)**			
								SHALE, gray, moist **(SHALE)**			
								End of Boring at 12 ft			
						15				Borehole grouted to surface after completing boring.	
						20					

SUBSURFACE LOG 11205 LOGS.GPJ UPDATEDCHA.GDT 11/22/04

Appendix C

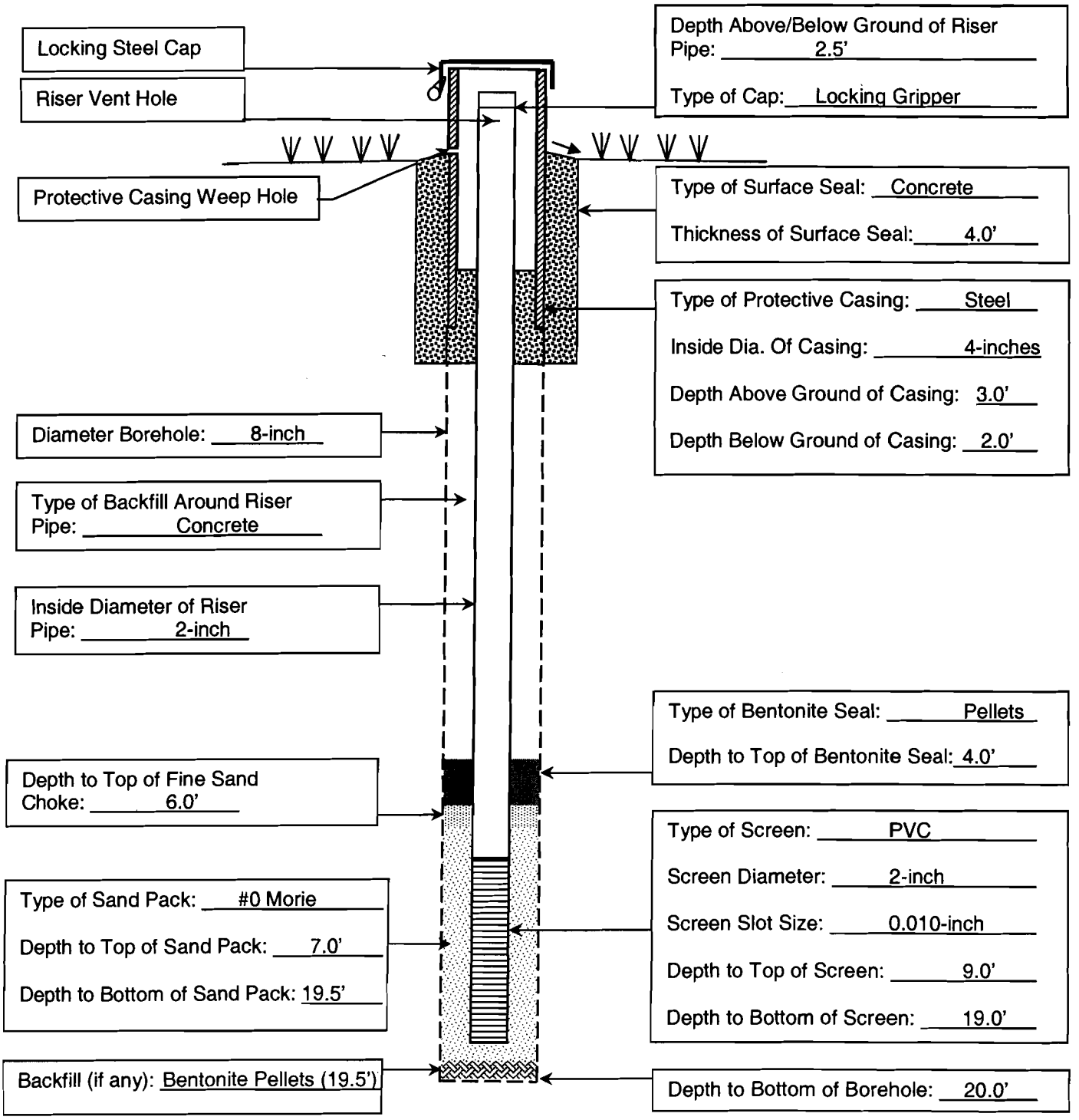
Well Construction Logs

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

WELL CONSTRUCTION LOG

BORING NO. B1
WELL NO. CHA1
PROJECT NO.: 11205.1011.1102
SHEET NO.: 1 OF 1
ELEVATION:
START DATE: 8/16/04 TIME: 5:30 PM
FINISH DATE: 8/17/04 TIME: 8:45 AM
DRILLER: Derrick Walter
INSPECTOR: J. Herrick

PROJECT & LOCATION: DeLaval Property, City of Poughkeepsie, New York
CLIENT: City of Poughkeepsie
CONTRACTOR: Aquifer Drilling & Testing, Inc.



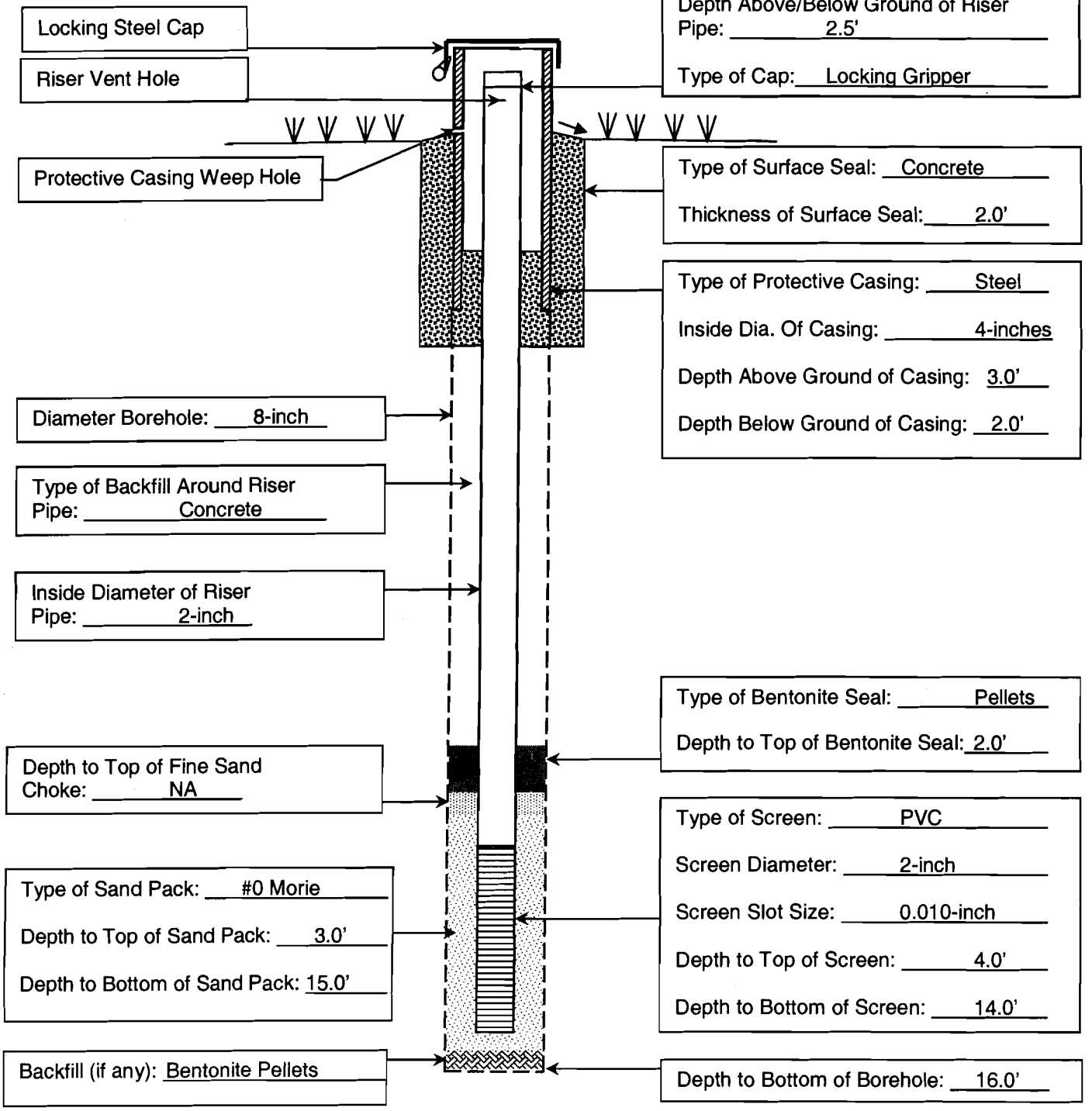
CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

WELL CONSTRUCTION LOG

BORING NO. B2
WELL NO. CHA2

PROJECT & LOCATION: DeLaval Property, City of Poughkeepsie, New York
CLIENT: City of Poughkeepsie
CONTRACTOR: Aquifer Drilling & Testing, Inc.

PROJECT NO.: 11205.1011.1102
SHEET NO.: 1 OF 1
ELEVATION:
START DATE: 8/17/04 TIME: 9:45 AM
FINISH DATE: 8/17/04 TIME: 10:45 AM
DRILLER: Derrick Walter
INSPECTOR: J. Herrick



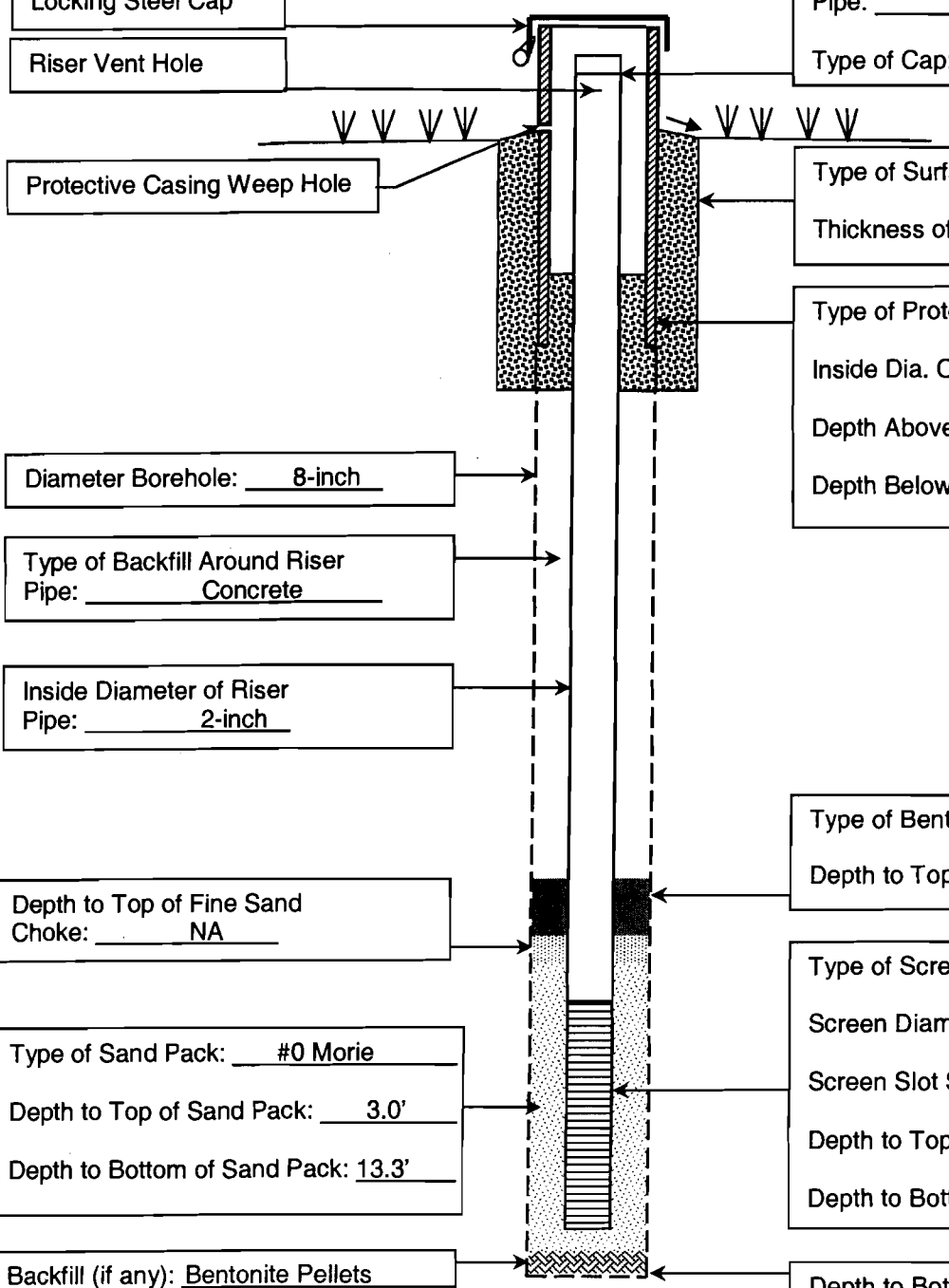
CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

WELL CONSTRUCTION LOG

BORING NO. B3
WELL NO. CHA3

PROJECT & LOCATION: DeLaval Property, City of Poughkeepsie, New York
CLIENT: City of Poughkeepsie
CONTRACTOR: Aquifer Drilling & Testing, Inc.

PROJECT NO.: 11205.1011.1102
SHEET NO.: 1 OF 1
ELEVATION:
START DATE: 8/16/04 TIME: 2:30 PM
FINISH DATE: 8/16/04 TIME: 4:00 PM
DRILLER: Derrick Walter
INSPECTOR: J. Herrick



CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS | SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

WELL CONSTRUCTION LOG

BORING NO. B4

WELL NO. CHA4

PROJECT & LOCATION: DeLaval Property, City of Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.

PROJECT NO.: 11205.1011.1102

SHEET NO.: 1 OF 1

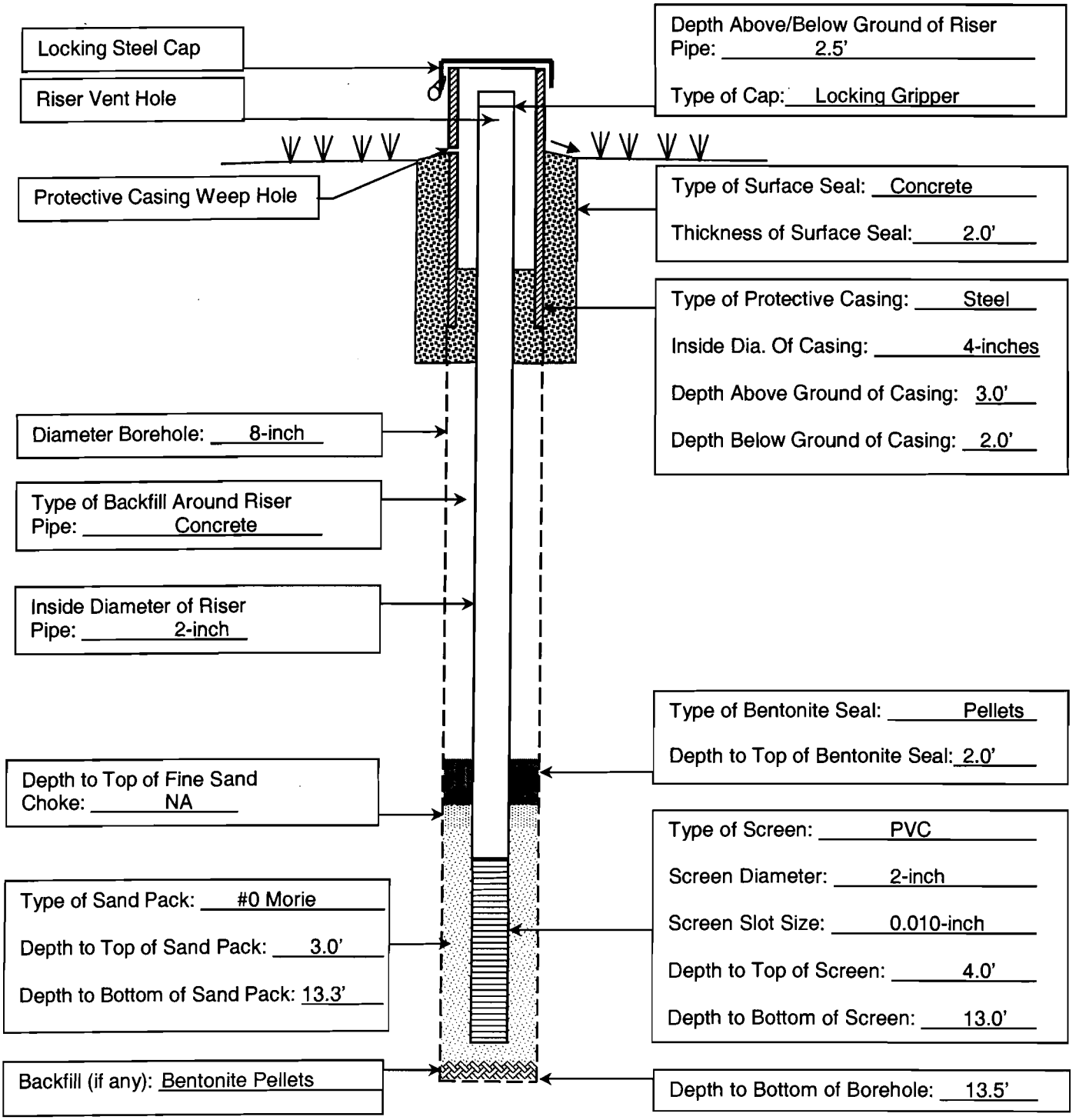
ELEVATION:

START DATE: 8/16/04 TIME: 2:30 PM

FINISH DATE: 8/16/04 TIME: 4:00 PM

DRILLER: Derrick Walter

INSPECTOR: J. Herrick



CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

WELL CONSTRUCTION LOG

BORING NO. B5

WELL NO. CHA5

PROJECT NO.: 11205.1011.1102

SHEET NO.: 1 OF 1

ELEVATION:

START DATE: 8/17/04 TIME: 5:30 PM

FINISH DATE: 8/17/04 TIME: 6:30 PM

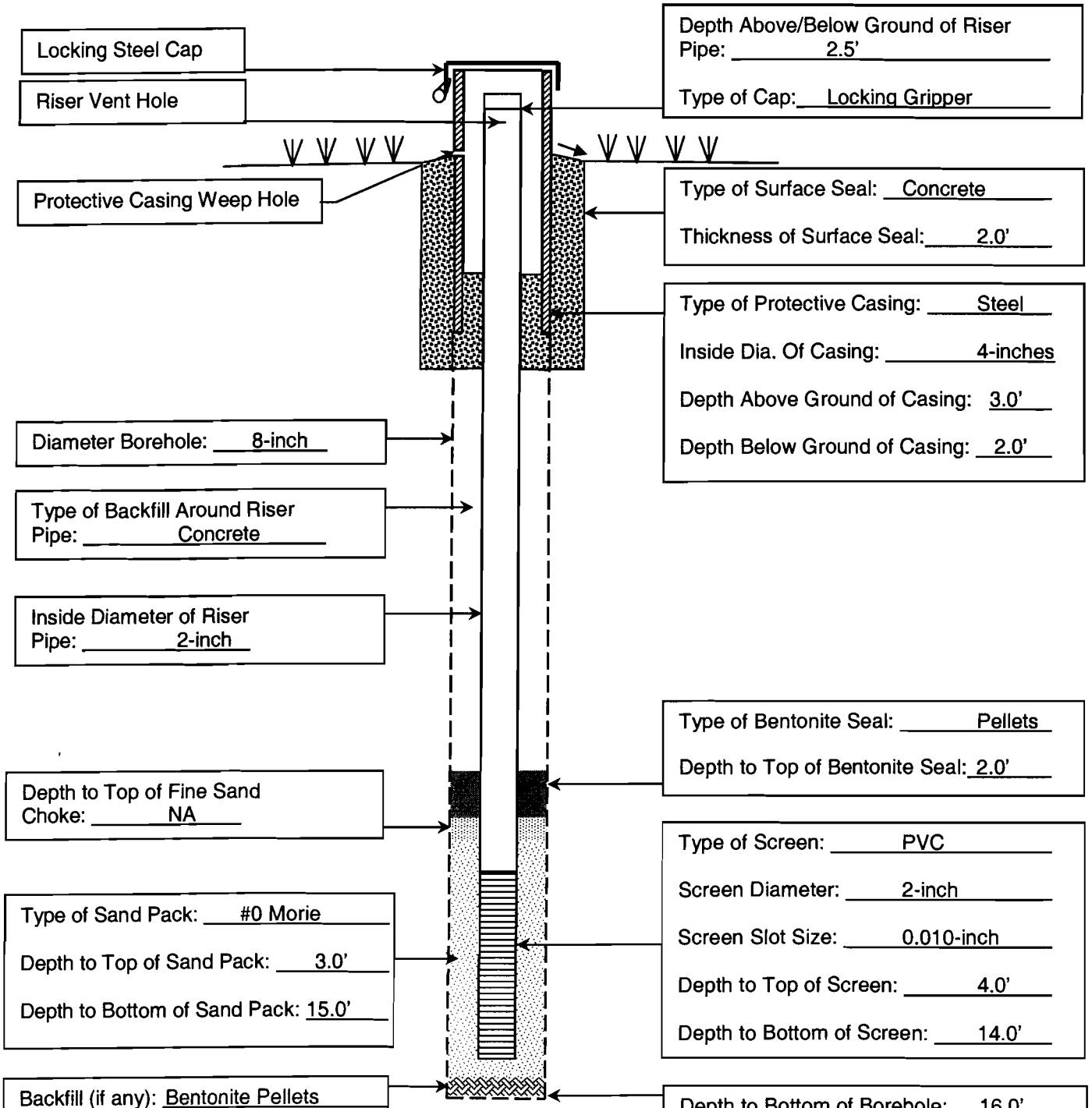
DRILLER: Derrick Walter

INSPECTOR: J. Herrick

PROJECT & LOCATION: DeLaval Property, City of Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.



CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

WELL CONSTRUCTION LOG

BORING NO. B6

WELL NO. CHA6

PROJECT NO.: 11205.1011.1102

SHEET NO.: 1 OF 1

ELEVATION:

START DATE: 8/17/04 TIME: 10:50 PM

FINISH DATE: 8/17/04 TIME: 12:00 PM

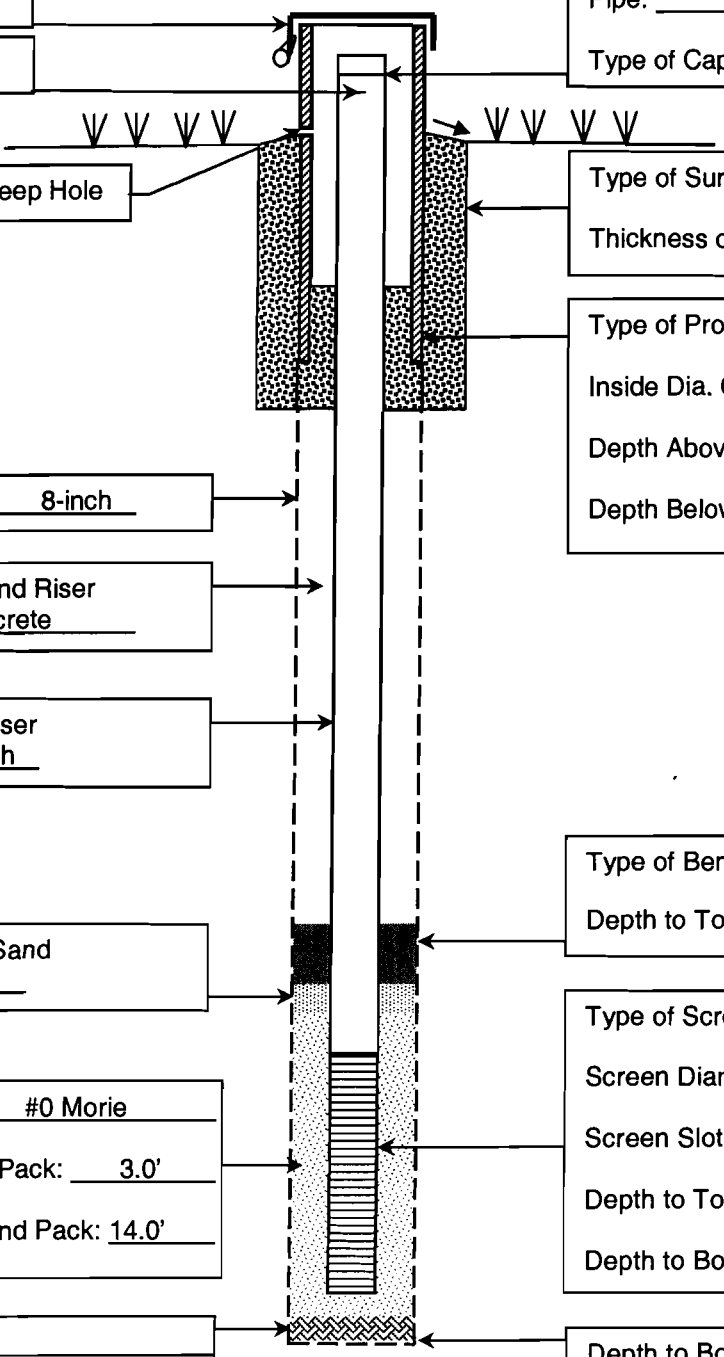
DRILLER: Derrick Walter

INSPECTOR: J. Herrick

PROJECT & LOCATION: DeLaval Property, City of Poughkeepsie, New York

CLIENT: City of Poughkeepsie

CONTRACTOR: Aquifer Drilling & Testing, Inc.



Locking Steel Cap

Riser Vent Hole

Protective Casing Weep Hole

Depth Above/Below Ground of Riser Pipe: 2.5'

Type of Cap: Locking Gripper

Type of Surface Seal: Concrete

Thickness of Surface Seal: 2.0'

Type of Protective Casing: Steel

Inside Dia. Of Casing: 4-inches

Depth Above Ground of Casing: 3.0'

Depth Below Ground of Casing: 2.0'

Diameter Borehole: 8-inch

Type of Backfill Around Riser Pipe: Concrete

Inside Diameter of Riser Pipe: 2-inch

Type of Bentonite Seal: Pellets

Depth to Top of Bentonite Seal: 2.0'

Depth to Top of Fine Sand Choke: NA

Type of Screen: PVC

Screen Diameter: 2-inch

Screen Slot Size: 0.010-inch

Depth to Top of Screen: 4.0'

Depth to Bottom of Screen: 14.0'

Type of Sand Pack: #0 Morie

Depth to Top of Sand Pack: 3.0'

Depth to Bottom of Sand Pack: 14.0'

Backfill (if any): NA

Depth to Bottom of Borehole: 14.0'

Appendix D

Groundwater Level Data Logs

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

GROUNDWATER LEVEL ELEVATION DATA

PROJECT: DeLaval Property Supplemental Investigation
CLIENT: City of Poughkeepsie
INSPECTOR: James Herrick and Robert Hall

FILE NO.: 11205.1011.1102
DATE: 8/26/04

WELL	TOP OF RISER ELEVATION (ft.)	WATER DEPTH (ft.)	WATER ELEVATION (ft.)	TIME (hrs.)	COMMENTS
MW-1	5.39	6.59	-1.20	1400	No odor
CHA #1	16.34	16.07	0.27	1425	No odor
CHA #2	9.53	10.06	-0.53	1430	No odor
CHA #3	7.74	9.52	-1.78	1420	No odor
CHA #4	12.74	13.22	-0.48	1410	No odor
CHA #5	4.78	6.50	-1.72	1405	No odor
CHA #6	9.42	11.36	-1.94	1400	Strong petroleum/solvent like odor

Note #1: The top of a fire hydrant located immediately north of the entrance to the site on Rinaldi Blvd. was utilized as a Bench Mark for elevation survey purposes. This was assumed to have an elevation of **12.5 ft.**

Note #2: Tide in Hudson River is coming in. Two empty 55 gallon drums were left near CHA #6 for future purge water.

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

GROUNDWATER LEVEL ELEVATION DATA

PROJECT: DeLaval Property Supplemental Investigation
CLIENT: City of Poughkeepsie
INSPECTOR: James Herrick and Robert Hall

FILE NO.: 11205.1011.1102
DATE: 9/1/04

WELL	TOP OF RISER ELEVATION (ft.)	WATER DEPTH (ft.)	WATER ELEVATION (ft.)	TIME (hrs.)	COMMENTS
MW-1	5.39	6.74	-1.35	1120	No odor
CHA #1	16.34	16.22	0.12	1135	No odor
CHA #2	9.53	10.10	-0.57	1138	Slight petroleum odor
CHA #3	7.74	9.55	-1.81	1130	No odor
CHA #4	12.74	13.50	-0.76	1125	No odor
CHA #5	4.78	6.40	-1.62	1140	No odor
CHA #6	9.42	11.00	-1.58	1145	Paint/solvent like odor

Note #1: The top of a fire hydrant located immediately north of the entrance to the site on Rinaldi Blvd. was utilized as a Bench Mark for elevation survey purposes. This was assumed to have an elevation of **12.5 ft.**

Note #2: Purged water from CHA #'s 2, 5 and 6 was drummed, labeled and left on-site. One empty drum remains on-site.

Note #3: Metals were sampled as tide was rising.

GROUNDWATER LEVEL ELEVATION DATA

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

PROJECT: DeLaval Property Supplemental Investigation
CLIENT: City of Poughkeepsie
INSPECTOR: James Herrick

FILE NO.: 11205.1011.1102
DATE: 10/15/04

WELL	TOP OF RISER ELEVATION (ft.)	WATER DEPTH (ft.)	WATER ELEVATION (ft.)	TIME (hrs.)	COMMENTS
MW-1	5.39	5.60	-0.21	1135	No odor
CHA #1	16.34	16.28	0.06	1120	No odor
CHA #2	9.53	9.90	-0.37	1030	Slight petroleum odor
CHA #3	7.74	8.36	-0.62	1125	No odor
CHA #4	12.74	13.44	-0.70	1130	No odor
CHA #5	4.78	5.02	-0.24	1200	No odor
CHA #6	9.42	9.26	0.16	1140	Paint/solvent like odor

Note #1: The top of a fire hydrant located immediately north of the entrance to the site on Rinaldi Blvd. was utilized as a Bench Mark for elevation survey purposes. This was assumed to have an elevation of **12.5 ft.**

Note #2: Purged water from CHA #'s 2 was drummed, labeled and left on-site.

Note #3: Well CHA-2 sample for PCBs only. No 0other wells were sampled.

Appendix E

Well Sampling Logs

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** CHA-1
Project Name: DeLaval Property - Supplemental Investigation	Logged By: J. Herrick
Project Location: 11205-1011-1102	Date: 9/1/04
Project Number: 11205-1011-1102	Screen Length: 10'

Purge Information:

(1) Depth to Bottom of Well: 21.5 ft. (from TOC)
(2) Depth to Water: 16.22 ft. (from TOC)
(3) Column of Water: 5.28 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: 0.86 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☒ Bailer ☐ Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	1	2	3							
Time	2:50	2:53	2:56	5:58						
ORP/EH (mV)	-21.1	-36.4	-37.0							
pH	7.08	7.34	7.32							
Cond. (MS/CM)	1921/ 1511	1902/ 1478	1857/ 1443							
Turbidity (NTU)	680	>1000	800	27.0						
D.O. (mg/L)										
Temperature (°C)	13.82	13.29	13.31							

Total Volume Purged: 3 gal. Total Purge Time: 9 minutes

Sampling Information:

Sampling Method: grab/bailer

No. of Bottles: 5

Sampling Time: 4@3:00:VOCs,SVOCs,PCBs,1@5:58:Metals

Sample Analyses: VOCs, SVOCs (8270 B/N only), PCBs, RCRA Metals

Comments: 1st bailer mostly clear. Brown sediment observed in 3rd bailer of groundwater purged. No odor/sheen.

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** CHA-2
Project Name: DeLaval Property	Logged By: JH
Project Location: City of Poughkeepsie	Date: 10/15/04
Project Number: 11205-1011-1102	Screen Length:

Purge Information:

(1) Depth to Bottom of Well: 16.5 ft. (from TOC)
(2) Depth to Water: 9.9 ft. (from TOC)
(3) Column of Water: 6.6 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: 1.08 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☐ Bailer ☒ Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	1.1	2.2	3.3							
Time	10:50	10:58	11:03							
ORP/EH (mV)	-197.8	-195.5	-181.9							
pH	7.25	7.36	7.25							
Cond. (MS/CM)	1568/ 1332	1731/ 1441	1774/ 1465							
Turbidity (NTU)	28.7	12.4	8.27							
D.O. (mg/L)										
Temperature (°C)	17.08	16.23	15.89							

Total Volume Purged: 3.5 gal. Total Purge Time: 18 minutes

Sampling Information:

Sampling Method: Grab/bailer

No. of Bottles: 2

Sampling Time: 11:10 AM

Sample Analyses: PCB's

Comments: H2O relatively clear, slight petroleum odor. Slight sheen was present on H2O surface. Needed to replace batteries in groundwater quality meter during well purging process.
Note: Purged H2O from CHA-2 was placed in existing purged H2O drum located at CHA-6 - appropriately labeled.

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** CHA-3 (MS/MSD)
Project Name: DeLaval Property-Supplemental Investigation	Logged By: J. Herrick
Project Location: City of Poughkeepsie, NY	Date: 9/1/04
Project Number: 11205-1011-1102	Screen Length: 7'

Purge Information:

(1) Depth to Bottom of Well: 13.5 ft. (from TOC)
(2) Depth to Water: 9.55 ft. (from TOC)
(3) Column of Water: 3.95 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: .64 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☒ Bailer ☐ Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	1	2	3							
Time	3:12	3:15	3:17	5:55						
ORP/EH (mV)	-33.8	-39.4	-39.7							
pH	7.92	7.77	7.70							
Cond. (MS/CM)	299/ 287	297/ 286	302/ 290							
Turbidity (NTU)	176	328	320	4.81						
D.O. (mg/L)										
Temperature (°C)	22.74	23.08	22.90							

Total Volume Purged: 3.0 gal. Total Purge Time: 7 minutes

Sampling Information:

Sampling Method: grab/bailer

No. of Bottles: 10

Sampling Time: 3:25-VOCs,SVOCs,PCBs, 5:53-Metals

Sample Analyses: VOCs (8260), SVOCs(8270 B/N only), PCBs, RCRA Metals

Comments: 1st bailer clear, then slightly brown/turbid with fine brown silt. No odor/sheen noted. MSMSD collected from this well location.

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** CHA-4
Project Name: DeLaval Property-Supplemental Investigation	Logged By: J.Herrick
Project Location: City of Poughkeepsie, NY	Date: 9/1/04
Project Number: 11205-1011-1102	Screen Length: 9'

Purge Information:

(1) Depth to Bottom of Well: 15.5 ft. (from TOC)
(2) Depth to Water: 13.5 ft. (from TOC)
(3) Column of Water: 2 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: 0.34 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☒ Bailer ☐ Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	0.5	1.0								
Time	2:17	2:25	4:05	6:00						
ORP/EH (mV)	1.60	6.1								
pH	6.69	6.8								
Cond. (MS/CM)	960/ 800	960/ 793								
Turbidity (NTU)	>1000	>1000	>50	55.0						
D.O. (mg/L)										
Temperature (°C)	10.11	15.79								

Total Volume Purged: 1.0 gal. Total Purge Time: 10 minutes

Sampling Information:

Sampling Method: grab/bailer

No. of Bottles: 5

Sampling Time: 2:30-VOCs, SVOCs, PCBs, 6:00-Metals

Sample Analyses: VOCs(8260), SVOCs(8270 B/N only), PCbs, RCRA Metals

Comments: Top 1/2 of first bailer clear, then progressively got very turbid/gray at bottom. Significant amount of fine gray silt observed in bailer. No odor/sheen. Well dry after 1.0 gal. Allowed well to recharge short-time before collected sample for organic analyses. Allowed well to recharge for over three hours prior to collecting sample for metal analysis.

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** CHA-5
Project Name: DeLaval Property-Supplemental Investigation	Logged By: J.Herrick
Project Location: City of Poughkeepsie, NY	Date: 9/1/04
Project Number: 11205-1011-1102	Screen Length: 10'

Purge Information:

(1) Depth to Bottom of Well: 16.5 ft. (from TOC)
(2) Depth to Water: 6.4 ft. (from TOC)
(3) Column of Water: 10.1 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: 1.65 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☒ Bailer ☐ Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	2	4	6							
Time	1:26	1:28	1:32	3:50						
ORP/EH (mV)	-158.6	-163.5	-163.4							
pH	7395	7398	7.94							
Cond. (MS/CM)	844/ 774	777/ 712	703/ 643							
Turbidity (NTU)	>1000	>1000	883	48.2						
D.O. (mg/L)										
Temperature (°C)	20.59	20.58	20.51							

Total Volume Purged: 6 gal. Total Purge Time: 11 minutes

Sampling Information:

Sampling Method: grab/bailer

No. of Bottles: 5

Sampling Time: 1:35-VOCs,SVOCs, PCBs, 3:50-Metals

Sample Analyses: VOCs(8260),SVOCs(8270 B/N only), PCbs, RCRA Metals

Comments: 1st bailer clear, then progressively turbid w/ heavy grea/black silt as continued purging. Heavy petroleum odor w/ sheen noted during purging process. Purge H2O placed into drums.

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** CHA-6
Project Name: DeLaval Property-Supplemental Investigation	Logged By: J. Herrick
Project Location: City of Poughkeepsie	Date: 9/1/04
Project Number: 11205-1011-1102	Screen Length: 10'

Purge Information:

(1) Depth to Bottom of Well: 16.5 ft. (from TOC)
(2) Depth to Water: 6.74 ft. (from TOC)
(3) Column of Water: 9.76 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: 1.6 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☒ Bailer ☐ Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	2	4	6							
Time	12:58	1:01	1:05	3:45						
ORP/EH (mV)	-137.6	-148.6	-143.5							
pH	7.54	7.57	7.55							
Cond. (MS/CM)	1116/ 978	1124/ 982	1120/ 982							
Turbidity (NTU)	>1000	>1000	>1000	7.16						
D.O. (mg/L)										
Temperature (°C)	18.5	18.44	18.44							

Total Volume Purged: 6 gal. Total Purge Time: 13 minutes

Sampling Information:

Sampling Method: grab/bailer

No. of Bottles: 5

Sampling Time: 1:10pm-VOCs, SVOCs, PCBs, 3:45-Metals

Sample Analyses: VOCs(8260) SVOCs(8270 B/N only) PCBs, RCRA Metals

Comments: 1st bailer clear. Grayish sediment start upon removeing second bailer abd turbidity progressively worsening with a relatively significant amount of blackish silt as purging continued. Strong odor of petroleum/solvent noted and sheen on purged water observed. All purged water was placed into drums for off-site disposal.

Clough, Harbour & Associates LLP Well Sampling/Development Log	**Sample/Well Designation:** MW-1 (CHA-10 dup)
Project Name: DeLaval Property - Supplemental Investigation	Logged By: J. Herrrick
Project Location: City of Poughkeepsie, NY	Date: 9/1/04
Project Number: 11205-1011-1102	Screen Length:

Purge Information:

(1) Depth to Bottom of Well: 17 ft. (from TOC)
(2) Depth to Water: 6.74 ft. (from TOC)
(3) Column of Water: 10.26 ft. [(1) – (2)]
(4) Well Riser Diameter: 2 in.
(5) Volume Conversion: 0.163 gal./ft. (see below)
(6) 1 Well Volume: 1.67 gal. [(3) x (5)]

Method of Purging: ☐ WaTerra ☒ Bailer ☐Submersible ☐ Other: (

Volume Conversion: (gal./ft.)
2" = 0.163 4" = 0.653 6" = 1.469 8" 2.611 10" = 4.08

Field Analysis:

Volume Purged (gal.)	2	4	6							
Time	12:25 PM	12:29	12:34	3:35						
ORP/EH (mV)	-41.5	-52.7	-48.8							
pH	6.97	7.10	7.20							
Cond. (MS/CM)	773/ 623	1031/ 823	1112/ 891							
Turbidity (NTU)	55.1	77.9	82.4	30.1						
D.O. (mg/L)										
Temperature (°C)	14.81	14.44	14.57							

Total Volume Purged: 6 gal. Total Purge Time: 14 minutes

Sampling Information:

Sampling Method: grab/bailer

No. of Bottles: 10

Sampling Time: 12:30pm-CHA-10(VOCs,SVOCs,PCBs) 12:45pm - MW-1(VOCs,SVOCs, PCBs), 3:35-Metals,3:40-Metals

Sample Analyses: VOC's(8260), SVOC's(8270 B/N), PCB's, RCRA Metals

Comments: Collected CHA-10 (duplicate sample) at this location. 1st bailer of groundwater purged was fairly clear and remained relatively clear during purging process. A pale yellow-orange color was observed in the purge water. H2O remained relatively clear - some turbidity (pale yellow-orange color). No odor/no sheen noted.

Appendix F

Soil Gas Survey Log

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

Soil Gas Survey Log

Project Name: DeLaval Property

Logged By: J. Herrick/C. Moore

Project Location: City of Poughkeepsie, New York

Date: 7/30/04

Project Number: 11205.1011.1102

Start Time: 10:45 AM Finish Time: 12:15 PM

Gas Instrument Model: V-Rae

Calibration Gas: methane Date: 7/30/04

PID Instrument Model: _____

Calibration Gas: _____ Date: _____

Barometric Pressure: 29.35 in. Hg

Wind Velocity: calm

Temperature: 78 °F

Weather Station Location: on-site

Point ID	Initial Reading % LEL	25' Offset % LEL	50' Offset % LEL	Point ID	Initial Reading % LEL	25' Offset % LEL	50' Offset % LEL
1	0.0			31	0.0		
2	0.0			32	0.0		
3	0.0			33	0.0		
4	0.0			34	0.0		
5	0.0			35	0.0		
6	0.0			36	0.0		
7	0.0			37	0.0		
8	0.0			38	0.0		
9	0.0			39	0.0		
10	0.0			40	0.0		
11	0.0			41	0.0		
12	0.0			42	0.0		
13	0.0			43	0.0		
14	0.0			44	0.0		
15	0.0			45	0.0		
16	0.0						
17	0.0						
18	0.0						
19	0.0						
20	0.0						
21	0.0						
22	0.0						
23	0.0						
24	0.0						
25	0.0						
26	0.0						
27	0.0						
28	0.0						
29	0.0						
30	0.0						

Appendix G

Chain-of-Custody Forms

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 51587

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: CHA

ADDRESS: 11 Winners Circle

CITY: Albany STATE: NY ZIP: 12205

ATTENTION:

PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME: Delcual

PROJECT NO.: 11205 LOCATION: Poughkeepsie

PROJECT MANAGER: K. Zobran

e-mail: KZobran@CHA-llb.com

PHONE: 518 449-4947 FAX:

BILLING INFORMATION

BILL TO: PO#:

ADDRESS:

CITY: STATE: ZIP:

ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD FORMAT _____
- ☐ USEPA CLP
- ☒ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other _____

ANALYSIS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1. SS-1		So.l		X	7/22	p.m.	1				None						
2. SS-2							1			PCBs, 8270 (Base Neutrals)							
3. SS-3							1			& RCRA Metals							
4. SS-4							1										
5. SS-5							1										
6. SS-6							1										
7. SS-7							1										
8. SS-8							1										
9. SS-9							1										
10. SS10							1										

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	7/22/04 5:00	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____

MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

Page 1 of 3

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

5/5/2004

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 51585

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY:
ADDRESS: Refer To Page 1
CITY: STATE: ZIP:
ATTENTION:
PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME: Refer To Page 1
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☒ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

1 PCB's, SVOC, RCRA 8 (metals) 2 3 4 5 6 7 8 9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	SS-20	Soil		✓	7/22/04	p.m	1	✓									
2.	SS-21	↓		↓	↓	↓	1	✓									
3.	SS-22						1	✓									
4.	SS-23						1	✓									
5.	SS-24						1	✓									
6.	SS-25						1	✓									
7.	SS-26 MS/MSD						3	✓									
8.	SS-27						1	✓									
9.	SS-28						1	✓									
10.	SS-29	↓		↓	↓	↓	1	✓									

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	7/22/04	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Page 3 of 3

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

5/5/2004

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

Page 2 of 3

CHEMTECH PROJECT NO.

COC Number 51586

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY:
ADDRESS: See Page 1
CITY: STATE: ZIP:
ATTENTION:
PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME:
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD FORMAT _____
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other _____

ANALYSIS

PRESERVATIVES (1 2 3 4 5 6 7 8 9)

COMMENTS

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

	CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES
1.		SS - 11						
2.		SS - 12						
3.		SS - 13						
4.		SS - 14						
5.		SS - 14B						
6.		SS - 15						
7.		SS-16						
8.		SS-17						
9.		SS - 18						
10.		SS - 19						

Refer to Page 1

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME	
RELINQUISHED BY SAMPLER: 1.	7/7/04	RECEIVED BY: 1.
RELINQUISHED BY: 2.	DATE/TIME:	RECEIVED BY: 2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY: 3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

WHITE - CHEMTECH COPY PINK - SAMPLER COPY

51586

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 51584

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Clough Harbours + Associates LLP
ADDRESS: III Winners Circle
CITY: Albany STATE: NY ZIP: 12205
ATTENTION: Keith Cowan
PHONE: (518) 453-2894 FAX: (518) 453-4773

PROJECT INFORMATION

PROJECT NAME: DeLaval Property
PROJECT NO.: 11205 LOCATION: Poughkeepsie, NY
PROJECT MANAGER: Keith Ziobro
e-mail:
PHONE: (518) 453-2835 FAX: (518) 453-4773

BILLING INFORMATION

BILL TO: CHA PO#:
ADDRESS: III Winners Circle
CITY: Albany STATE: NY ZIP: 12205
ATTENTION: Keith Ziobro PHONE: (518) 453-2835

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☒ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

1 VOCs 2 SVOCs, PCBs, RCRA 8 metals 3 4 5 6 7 8 9

PRESERVATIVES

	1	2	3	4	5	6	7	8	9
	None								

COMMENTS

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1.	DT-7/5-1	Soil		✓	7/29/04	2:00pm	2	✓	✓								
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [illegible]	7/30 [illegible]	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 51582

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Clough Harbour + Assoc LLP

ADDRESS: III Winners Circle

CITY: Albany STATE: NY ZIP: 12205

ATTENTION: Keith ZicGren

PHONE: (518) 453-2835 FAX: (518) 453-4773

PROJECT INFORMATION

PROJECT NAME: DeLaval Property

PROJECT NO.: 11205 LOCATION: Poughkeepsie NY

PROJECT MANAGER: Keith ZicGren

e-mail:

PHONE: Same FAX: Same

BILLING INFORMATION

BILL TO: CHA PO#:

ADDRESS: III Winners Circle

CITY: Albany STATE: NY ZIP: 12205

ATTENTION: Keith ZicGren PHONE: (518) 453-2835

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD FORMAT _____
- ☐ USEPA CLP
- ☑ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other _____

ANALYSIS

VOC's, SVOC's, PCB, RCRA 8 metals

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								None			(ICE)						← Specify Preservatives A–HCl B–HNO_3 C–H_2SO_4 D–NaOH E–ICE F–Other
1.	TP-1 /S-1	Soil		✓	8/2/04	9:50am	2	✓	✓								
2.	TP-5 /S-1	"		✓	"	1:30pm	2	✓	✓								
3.	TP-6 /S-1	"		✓	"	2:00pm	2	✓	✓								
4.	TP-8 /S-1	"		✓	8/3/04	7:45am	2	✓	✓								
5.	TP-9 /S-1	"		✓	"	8:30am	2	✓	✓								
6.	TP-16 /S-1	"		✓	"	1:30pm	2	✓	✓								
7.	TP-19 /S-1	"		✓	8/4/04	7:45am	2	✓	✓								
8.	TP-20 /S-1	"		✓	"	12:40pm	2	✓	✓								
9.	TP-23 /S-1	"		✓	"	2:00pm	2	✓	✓								
10.	TP-24 /S-1	"		✓	"	2:30pm	2	✓	✓								

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. J. S. Kennedy, III	8/4/04 4:20 pm	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____

MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.:

COC Number 51581

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Clough Harbour + Assoc. LLP
ADDRESS: III Winners Circle
CITY: Albany STATE: NY ZIP: 12205
ATTENTION: Keith Ziobron
PHONE: 518/453-2855 FAX: (518) 453-4773

PROJECT INFORMATION

PROJECT NAME: Delaware Property Supplemental Site Investigation
PROJECT NO.: 1225 LOCATION: Poughkeepsie, NY
PROJECT MANAGER: Keith Ziobron
e-mail:
PHONE: Same FAX: Same

BILLING INFORMATION

BILL TO: CHA PO#:
ADDRESS: III Winners Circle
CITY: Albany STATE: NY ZIP: 12205
ATTENTION: Keith Ziobron PHONE: 518/453-2835

DATA TURNAROUND INFORMATION

FAX: ______ DAYS *
HARD COPY: ______ DAYS *
EDD: ______ DAYS *
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☒ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other ______
☐ EDD FORMAT ______

ANALYSIS

1. VOCs 2. SVOCs 3. PCBs 4. ... 5. ... 6. 7. 8. 9.

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1 (None/Ice)	2	3	4	5	6	7	8	9	COMMENTS
1.	TP-28/S-1	Soil		✓	8/6/04	[illegible]	2	✓	✓								
2.	TP-30/S-1	↓		✓	↓	1130	↓	✓	✓								
3.	TP-34/S-1			✓		[illegible]		✓	✓								
4.	TP-35/S-1			✓		[illegible]		✓	✓								
5.	TP-37/S-1	Soil		✓	8/6/04	[illegible]	[illegible]		✓								
6.	TP-38/S-1					[illegible]	2	✓	✓								
7.	TP-39/S-1					[illegible]	2	✓									
8.	TP-41/S-1					[illegible]	2	✓	✓								
9.	TP-42/S-1			✓		[illegible]	2	✓	✓								
10.																	

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. J. S. Hewitt	8/6/04 1:00pm	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or cooler at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. ______
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Page 1 of 2

SHIPPED VIA: CLIENT: ☒ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT
Shipment Complete: ☒ YES ☐ NO

5/5/2004

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH

HAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 51856

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Clough Harbour Assoc LLP

ADDRESS: III Winners Circle

CITY: Albany STATE: NY ZIP: 12205

ATTENTION: Keith Zukerman

PHONE: 518 453-2835 FAX: (518) 453-[illegible]

PROJECT INFORMATION

PROJECT NAME:

PROJECT NO.: LOCATION:

PROJECT MANAGER:

e-mail:

PHONE: FAX:

BILLING INFORMATION

BILL TO: PO#:

ADDRESS:

CITY: STATE: NY ZIP: 12205

ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: ______ DAYS *

HARD COPY: ______ DAYS *

EDD: ______ DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY
☐ RESULTS + QC
☐ New Jersey REDUCED
☐ New Jersey CLP
☐ EDD FORMAT
☐ USEPA CLP
☐ New York State ASP "B"
☐ New York State ASP "A"
☐ Other

ANALYSIS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1.	Trip Blank	H2O					2										
2.	Temp Blank	H2O															
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

PRESERVATIVES

COMMENTS: ← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [illegible signature]	[illegible]/04 1:00pm	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

☐ Cooler Temp.

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

Page ___ of ___

5/5/2004

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

51856

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 51950

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Clough Harbour + Assoc LLP.
ADDRESS: 111 Winners Circle
CITY: Albany STATE: NY ZIP: 12205
ATTENTION: Misty Ziobron
PHONE: 518 457-2835 FAX: (518) 453-4773

PROJECT INFORMATION

PROJECT NAME: Delaval Property
PROJECT NO.: LOCATION: Poughkeepsie, NY
PROJECT MANAGER: Misty Ziobron
e-mail:
PHONE: Same FAX: Same

BILLING INFORMATION

BILL TO: CHA PO#:
ADDRESS: 111 Winners Circle
CITY: Albany STATE: NY ZIP: 12205
ATTENTION: Misty Ziobron PHONE: (518) 457-2835

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD FORMAT _____
- ☐ USEPA CLP
- ☒ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other _____

ANALYSIS

VOC's SVOC's PCB's Metals RCRA 8

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								F	F								← Specify Preservatives A–HCl B–HNO_3 C–H_2SO_4 D–NaOH E–ICE F–Other
1.	B-7 (14'-16')	Soil		✓	8/18/04	4:45 pm	2	✓	✓								
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. J C Hennessy III	8/20/04 10:00 AM	
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____

MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

51950

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 52560

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: CHA

ADDRESS: 3 W. Main Circle

CITY: Albany STATE: NY ZIP: 12205

ATTENTION: Keith Lowan

PHONE: 518 453-7864 FAX: 518 453-4773

PROJECT INFORMATION

PROJECT NAME: Delaval

PROJECT NO.: 11205-101 LOCATION: Poughkeepsie

PROJECT MANAGER: Keith Lowan

e-mail:

PHONE: 518 453-2465 FAX: 518 453-4773

BILLING INFORMATION

BILL TO: CHA PO#: 11205.101.1102

ADDRESS: 3 W. Main Circle

CITY: Alb STATE: NY ZIP: 12205

ATTENTION: K. Lowan PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD FORMAT _____
- ☐ USEPA CLP
- ☒ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other _____

ANALYSIS

1 VOC's 2 SVOC's 3 PCB's 4 RCRA metals 5 6 7 8 9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	MW-1	H_2O		X	9/1/04	12:45	5	X	X	X	X						metals @ 3:35 pm
2.	CHA-1	H_2O		X	9/1/04	3:00	5	X	X	X	X						metals @ 5:55 pm
3.	CHA-2	H_2O		X	9/1/04	2:00	5	X	X	X	X						metals @ 4:00 pm
4.	CHA-3 MS/MSD	H_2O		X	9/1/04	3:25	10	X	X	X	X						metals @ 5:55 pm
5.	CHA-4	H_2O		X	9/1/04	2:30	5	X	X	X	X						metals @ 6:00 pm
6.	CHA-5	H_2O		X	9/1/04	1:35	5	X	X	X	X						metals @ 3:50 pm
7.	CHA-6	H_2O		X	9/1/04	1:10	5	X	X	X	X						metals @ 3:45
8.	CHA-10	H_2O		X	9/1/04	12:30	5	X	X	X	X						metals @ 3:40 pm
9.	Trip Blank	H_2O			9/1/04												-
10.	Temp Blank	H_2O			9/1/04												

PRESERVATIVES: A E E B

COMMENTS: ← Specify Preservatives
A – HCl B – HNO_3 C – H_2SO_4 D – NaOH E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. K. Lowan	9/2/04 (9:20 am)	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____

MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

5/5/2004

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

52560

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

COC Number 52564

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: CHA

ADDRESS: 21 Winners Circle

CITY: Albany STATE: NY ZIP: 12205

ATTENTION: Keith Zicbicz

PHONE: (518) 453-2835 FAX: (518) 453-4773

PROJECT INFORMATION

PROJECT NAME: DeLaval Property

PROJECT NO.: 11205.1011 +Hor LOCATION: Poughkeepsie, NY

PROJECT MANAGER: Keith Zicbicz

e-mail:

PHONE: (518) 453-2835 FAX: (518) 453-4773

BILLING INFORMATION

BILL TO: CHA PO#: 11205.1011.1102

ADDRESS: 21 Winners Circle

CITY: Albany STATE: ZIP: 12205

ATTENTION: Keith Zicbicz PHONE: (518) 453-2835

DATA TURNAROUND INFORMATION

FAX: 24 hrs DAYS *

HARD COPY: DAYS *

EDD: DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD FORMAT
- ☐ USEPA CLP
- ☒ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other

ANALYSIS

PCB's (8082)

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
								E									← Specify Preservatives
1.	CHA-2	H_2O		✓	10/15/04	11:10	2	X									A-HCl B-HNO_3 C-H_2SO_4 D-NaOH E-ICE F-Other
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

PRESERVATIVES

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. J.T. Hamilton III	10/15/04 / 2:00pm	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp. _____

MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

5/5/2004

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

52564

Appendix H

Data Validation Report

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

September 8, 2004

Mr. Keith Cowan
Clough, Harbour, & Associates LLP
111 Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
DeLaval Site
July 2004 Sampling Event

Dear Mr. Cowan:

The data validation summaries are attached to this letter for the DeLaval, July 2004 sampling event. The data for Chemtech, Project Nos. S3753, S3754, and S3897, were acceptable with some minor issues that are identified and discussed in the validation summaries. The data packs did not contain data that were unusable (R).

A list of common data validation acronyms is attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Environmental Consultants, Inc.

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

RECEIVED
SEP
DIV.

E:\Alpha E\dataval projects\2004 Projects\04513-delaval\cowan-1.ltr.wpd

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.

J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

Data Usability Summary Report for
Chemtech, Project No. S3753

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of semi-volatile base/neutral, PCB, and metal analyses.

The overall performances of the analyses are acceptable. Chemtech did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- There were semi-volatile results for some compounds in samples SS-1, SS-3, and SS-14B that were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. Results for these compounds marked "E" in the undiluted samples were qualified as estimates (J).

- The semi-volatile results for sample SS-1DL were flagged as "estimated" (J) because the results were quantitated using an internal standard (IS6) with an area outside control limits.

- The semi-volatile results for phenanthrene and benzo(b)fluoranthene in samples were flagged as "estimates" (J) because the %Ds for these compounds were above the allowable maximum (25%) in the associated continuing calibrations.

- There were PCB results for some aroclors in samples SS-5, SS-6, and SS-7 that were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. Results for these compounds marked "E" in the undiluted samples were qualified as estimates (J).

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

- PCB aroclor results for the following samples were flagged as "estimated" (J) because one or more surrogate recoveries were below advisory limits:

  SS-1 SS-3 SS-4 SS-6 SS-14
  SS-14B SS-16

- Results for lead were flagged as "estimated" (J) because spike recoveries for MS/MSD sample SS-26 were outside control limits.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of Base/Neutral Data
for Chemtech, Project No. S3753

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: All DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits, per method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for hexachlorocyclopentadiene (54.6%) was above the allowable maximum (30%). Positive results for hexachlorocyclopentadiene should be considered estimates (J).

Continuing Calibration: The SPCCs and CCCs were within control limits, per method 8270C.

The RRF80s for all target compounds were above the allowable minimum (0.050), as required. The %Ds for bis(2-chloroethyl)ether (32.5%), nitrobenzene (25.2%), bis(2-chloroethoxy)methane (25.2%), hexachlorocyclopentadiene (26.7%), and benzo(b)fluoranthene (59.7%) were above the allowable maximum (25%) on 07-31-04 (BE013407.D). The %Ds for bis(2-chloroethyl)ether (27.1%), hexachlorocyclopentadiene (47.9%), carbazole (25.6%), and benzo(b)fluoranthene (30.1%) were above the allowable maximum (25%) on 07-31-04 (BE013437.D). The %Ds for bis(2-chloroethyl)ether (35.0%), hexachlorocyclopentadiene (44.5%), and phenanthrene (29.7%) were above the allowable maximum (25%) on 08-01-04 (BE013465.D). Positive results for these compounds should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard retention times were within control limits. One of 6 internal standard areas (IS1) for samples SS-7, SS-7RE, SS-13, and SS-13RE was outside control limits.

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

One of 6 internal standard areas (IS6) for sample SS-1DL was outside control limits. Positive results for these samples that were quantatied using internal standards with areas outside control limits should be considered estimates (J).

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: One of 50 relative percent differences was above the allowable maximum and 9 of 100 %Rs (percent recoveries) were outside QC limits for MS/MSD sample SS-26. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries were within QC limits for sample PB16519BS.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

There were semi-volatile results for samples SS-1, SS-3, and SS-14B that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The samples were diluted by the laboratory and re-analyzed; therefore, the results for compounds that are flagged as 'E' in the undiluted samples should be considered estimates (J) and the use of the diluted results for those compounds is recommended. It is recommended that the undiluted results be used for all other compounds.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of PCB Data for
Chemtech, Project No. S3753

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

Blanks: The method blank reported target PCBs as not detected.

Surrogate Recovery: One of two surrogate recoveries for samples SS-3, SS-6, and SS-16 was below advisory limits but was greater than 10%. Two of two surrogate recoveries for samples SS-1, SS-4, SS-14, and SS-14B were below advisory limits but were greater than 10%. Results for the above samples should be considered estimates (J).

One of two surrogate recoveries for sample SS-8 was above advisory limits. Positive results for sample SS-8 should be considered estimates (J).

Matrix Spike/Matrix Spike Duplicate : One of two relative percent differences was above the allowable maximum (20%) and 3 of 4 percent recoveries were above QC limits for MS/MSD sample SS-26. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries were within QC limits (70-130%) for sample PB16520BS.

Initial Calibration: The average %RSDs for target PCB aroclors were below the allowable maximum (20%), as required.

Continuing Calibration: The average %D for aroclor-1016 (17.6%) was above the allowable maximum (15%) for CCAL2, the RTX-5 column, on 07-27-04. The average %D for aroclor-1016 (28.3%) was above the allowable maximum (15%) for CCAL3, the RTX-5 column, on 07-2704. Positive results for aroclor-1016 should be considered estimates (J) in associated samples.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966

PCB Analytical Sequence: The retention time for TCX in samples SS-13, SS-15, SS-16, and SS-17 was outside control limits on RTX-1701 column. The retention times for TCX and DCB in sample SS-26 were outside control limits on RTX-1701 column. No action is taken because the identification of aroclors is by pattern recognition, not retention time.

PCB Identification Summary for Multicomponent Analytes : Checked results were within GC quantitation limits. Detected aroclors were confirmed on a second, dissimilar column. The %Ds for detected aroclors were below the allowable maximum (25%) in environmental samples.

There were aroclor results for samples SS-5, SS-6, and SS-7 that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The samples were diluted by the laboratory and re-analyzed; therefore, the results for compounds that are flagged as 'E' in the undiluted samples should be considered estimates (J) and the use of the diluted results for those compounds is recommended. It is recommended that the undiluted results be used for all other compounds.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of RCRA Metals Data
for Chemtech, Project No: S3753

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: The samples were analyzed within SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for RCRA metals were within QC limits (80-120%).

Blanks: The analyses of initial and continuing calibration, and preparation blanks reported target metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable RCRA metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for lead (65.7% and 66.4%) were outside control limits (75-125%) for MS/MSD sample SS-26. Results for lead should be considered estimates (J).

Duplicates: The relative percent differences for RCRA metals were below the allowable maximum (35%) for duplicate sample SS-26D and MS/MSD sample SS-26.

Laboratory Control Sample: The percent recoveries for RCRA metals were within control limits (80-120%) for the LCSs.

ICP Serial Dilution: The %Ds for applicable RCRA metals were below the allowable maximum (10%) for serial dilution sample SS-26L, as required.

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for samples were above the minimum (50%), as required.

E:\Alpha E\dataval projects\2004 Projects\04513-delaval\s3753.met.wpd

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

Data Usability Summary Report for
Chemtech, Project No. S3754

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of semi-volatile base/neutral, PCB, and metal analyses.

The overall performances of the analyses are acceptable. Chemtech did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The semi-volatile results for benzo(b)fluoranthene in samples were flagged as "estimates" (J) because the %Ds for benzo(b)fluoranthene were above the allowable maximum (25%) in the associated continuing calibrations.
- PCB aroclor results for sample SS-27 were flagged as "estimated" (J) because one of two surrogate recoveries was below advisory limits but was greater than 10%.
- The PCB aroclor-1260 result for sample SS-25 was flagged as an estimate (J) because the %D (28.5%) for dual column quantitation was greater than 25% but was less than 70%.
- Positive results for lead were flagged as "estimated" (J) because spike recoveries for MS/MSD sample SS-20 were above control limits.
- Results for mercury were flagged as "estimated" (J) because the recovery for mercury was below control limits in the laboratory control sample.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966

- Positive results for chromium were flagged as "estimated" (J) because the percent difference (%D) for chromium in serial dilution sample SS-20L was above the allowable maximum (10%).

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of Base/Neutral Data
for Chemtech, Project No. S3754

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: All DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits, per method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for hexachlorocyclopentadiene (54.6%) was above the allowable maximum (30%). Positive results for hexachlorocyclopentadiene should be considered estimates (J).

Continuing Calibration: The SPCCs and CCCs were within control limits, per method 8270C.

The RRF80s for all target compounds were above the allowable minimum (0.050), as required. The %Ds for bis(2-chloroethyl)ether (32.5%) and benzo(b)fluoranthene (29.9%) were above the allowable maximum (25%) on 07-29-04 (BE013324.D). The %Ds for bis(2-chloroethyl)ether (32.5%), nitrobenzene (25.2%), bis(2-chloroethoxy)methane (25.2%), hexachlorocyclopentadiene (26.7%), and benzo(b)fluoranthene (59.7%) were above the allowable maximum (25%) on 07-31-04 (BE013407.D). Positive results for these compounds should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966

Matrix Spike/Matrix Spike Duplicate: Two of 50 relative percent differences were above the allowable maximum and 8 of 100 %Rs (percent recoveries) were outside QC limits for MS/MSD sample SS-20. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries were within QC limits for sample PB16521BS.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of PCB Data for
Chemtech, Project No. S3754

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

Blanks: The method blank reported target PCBs as not detected.

Surrogate Recovery: One of two surrogate recoveries for sample SS-27 was below advisory limits but was greater than 10%. Results for sample SS-27 should be considered estimates (J).

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample SS-20.

Laboratory Control Sample: The percent recoveries were within QC limits (70-130%) for sample PB16522BS.

Initial Calibration : The average %RSDs for target PCB aroclors were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for aroclor-1016 and aroclor-1260 were below the allowable maximum (15%) for both columns, as required.

PCB Analytical Sequence: The retention times for TCX and DCB were within control limits on both columns for environmental samples.

PCB Identification Summary for Multicomponent Analytes: Checked results were within GC quantitation limits. Detected aroclors were confirmed on a second, dissimilar column. The %Ds for dual column quantitation of aroclor-1260 in samples SS-25 (28.5%) and SS-27 (68.8%) were greater than the allowable maximum (25%) and flagged 'P' by the laboratory. Results with %Ds greater than 25% but less than 70% should be considered estimates (J). Results flagged may be biased low.

E:\Alpha E\dataval projects\2004 Projects\04513-delaval\s3754.pcb.wpd

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of RCRA Metals Data
for Chemtech, Project No: S3754

Soil Samples
Collected July 22, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: The samples were analyzed within SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for RCRA metals were within QC limits (80-120%).

Blanks: The analyses of initial and continuing calibration, and preparation blanks reported target metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable RCRA metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for lead (148.2% and 152.0%) were above control limits (75-125%) for MS/MSD sample SS-20. Positive results for lead should be considered estimates (J).

Duplicates: The relative percent differences for RCRA metals were below the allowable maximum (35%) for duplicate sample SS-20D and MS/MSD sample SS-26.

Laboratory Control Sample: The recovery for mercury was below control limits (0.2-2.0 mg/kg) for the LCS. Results for mercury should be considered estimates (J).

ICP Serial Dilution: The %Ds for chromium (13.0%) and lead (12.8%) were above the allowable maximum (10%) for serial dilution sample SS-20L. Positive results for chromium and lead that are above the CRDLs should be considered estimates (J).

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for samples were above the minimum (50%), as required.

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

Data Usability Summary Report for
Chemtech, Project No. S3897

Soil Samples
Collected July 29, 2004

Prepared by: Donald Anné
September 8, 2004

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile base/neutral, PCB, and metal analyses.

The overall performances of the analyses are acceptable. Chemtech did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The result for mercury in sample AT-7S-1 was flagged as "estimated" (J) because spike recoveries for MS/MSD sample S3910-03 were outside control limits.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of Volatiles Data
for Chemtech, Project No. S3897

Soil Samples
Collected July 29, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: The sample was analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: All BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits, per method 8260B.

The average RRF for target compounds were above the allowable minimum (0.050), as required. The %RSD for methylene chloride (45.3%) was above the allowable maximum (30%). Positive results for methylene chloride should be considered estimates (J).

Continuing Calibration: All SPCCs and CCCs were within control limits, per method 8260B.

The RRF50s for target compounds were above the allowable minimum (0.050), as required. The %Ds for chloroethane (34.6%) and methyelene chloride (34.9%) were above the allowable maximum (25%) on 08-05-04 (VK080502.D). Positive results for these compounds should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: All internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil sample.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample S3939-03.

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

Laboratory Control Sample: The percent recoveries were within QC limits for sample BSPK0805S1.

Compound ID: Checked surrogates were within GC/MS quantitation and qualitation limits. There were no target compounds reported in the soil sample.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of Base/Neutral Data
for Chemtech, Project No. S3897

Soil Samples
Collected July 29, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: All DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits, per method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits, per method 8270C.

The RRF80s for all target compounds were above the allowable minimum (0.050), as required. The %Ds for n-nitroso-di-n-propylamine (84.8%) and indeno(1,2,3-cd)pyrene (29.4%) were above the allowable maximum (25%) 08-11-04 (BB017556.D). Positive results for these compounds should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard retention times were within control limits. One of 6 internal standard areas (IS6) for sample AT-7S-1 was outside control limits. Positive results for sample AT-7S-1 that were quantatied using internal standards with areas outside control limits should be considered estimates (J).

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: One of 50 relative percent differences was above the allowable maximum and 49 of 100 %Rs (percent recoveries) were outside QC limits for MS/MSD sample S3896-01. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

Laboratory Control Sample: The percent recoveries were within QC limits for sample PB00131BS.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of PCB Data for
Chemtech, Project No. S3897

Soil Samples
Collected July 29, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: The sample was extracted and analyzed within SW-846 holding times.

Blanks: The method blank reported target PCBs as not detected.

Surrogate Recovery: The surrogate recoveries for the soil sample were within advisory limits.

Matrix Spike/Matrix Spike Duplicate: One of two relative percent differences was above the allowable maximum (20%) and 2 of 4 percent recoveries were above QC limits for MS/MSD sample S3896-01. No action is taken on MS/MSD data alone to qualify or reject the sample results.

Laboratory Control Sample: The percent recoveries were within QC limits (70-130%) for sample PB00130BS.

Initial Calibration: The average %RSDs for target PCB aroclors were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for aroclor-1260 (15.5%) and aroclor-1016 (17.2%) were above the allowable maximum (15%) for CCAL2, the RTX-5 column, on 08-05-04. The average %D for aroclor-1016 (16.1%) was above the allowable maximum (15%) for CCAL2, the RTX-1701 column, on 08-05-04. Positive results for these two aroclors should be considered estimates (J) in the associated samples.

PCB Analytical Sequence: The retention times for the soil sample were within control limits on both columns.

PCB Identification Summary for Multicomponent Analytes: Checked results (surrogates) were within GC quantitation limits. The analysis of the soil sample reported target aroclors as not detected.

E:\Alpha E\dataval projects\2004 Projects\04513-delaval\s3897.pcb.wpd

ALPHA
ENVIRONMENTAL
CONSULTANTS, INC.
Data Validation
Environmental Chemistry
Lab and Field Audits
Sampling Plans

QA/QC Review of RCRA Metals Data
for Chemtech, Project No: S3897

Soil Samples
Collected July 29, 2004

Prepared by: Donald Anné
September 8, 2004

Holding Times: The sample was analyzed within SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recovery for lead (79%) was outside QC limits (80-120%). No action was taken on the soil sample because the lead result was greater than two times the CRDL for lead.

Blanks: The analyses of initial and continuing calibration, and preparation blanks reported target metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable RCRA metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for mercury (68.5% and 60.4%) were outside control limits (75-125%) for MS/MSD sample S3910-03S. Results for lead should be considered estimates (J).

Duplicates: The relative percent differences for RCRA metals were below the allowable maximum (35%) for duplicate samples AT-7S-1D and S3910-03D, and MS/MSD samples AT-7S-1 and S3910-03.

Laboratory Control Sample: The percent recoveries for RCRA metals were within control limits (80-120%) for the LCSs.

ICP Serial Dilution: The %Ds for applicable RCRA metals were below the allowable maximum (10%) for serial dilution sample AT-7S-1L, as required.

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • FAX (518) 348-6966

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for samples were above the minimum (50%), as required.

SUPPLEMENTAL INVESTIGATION PROGRAM
DATA SUMMARY

for

THE DELAVAL PROPERTY
RINALDI BOULEVARD
POUGHKEEPSIE, NEW YORK

ERP Site Number: B00190-3

Prepared for:

The City of Poughkeepsie
62 Civic Center Plaza
P.O. Box 300
Poughkeepsie, NY 12602-0300

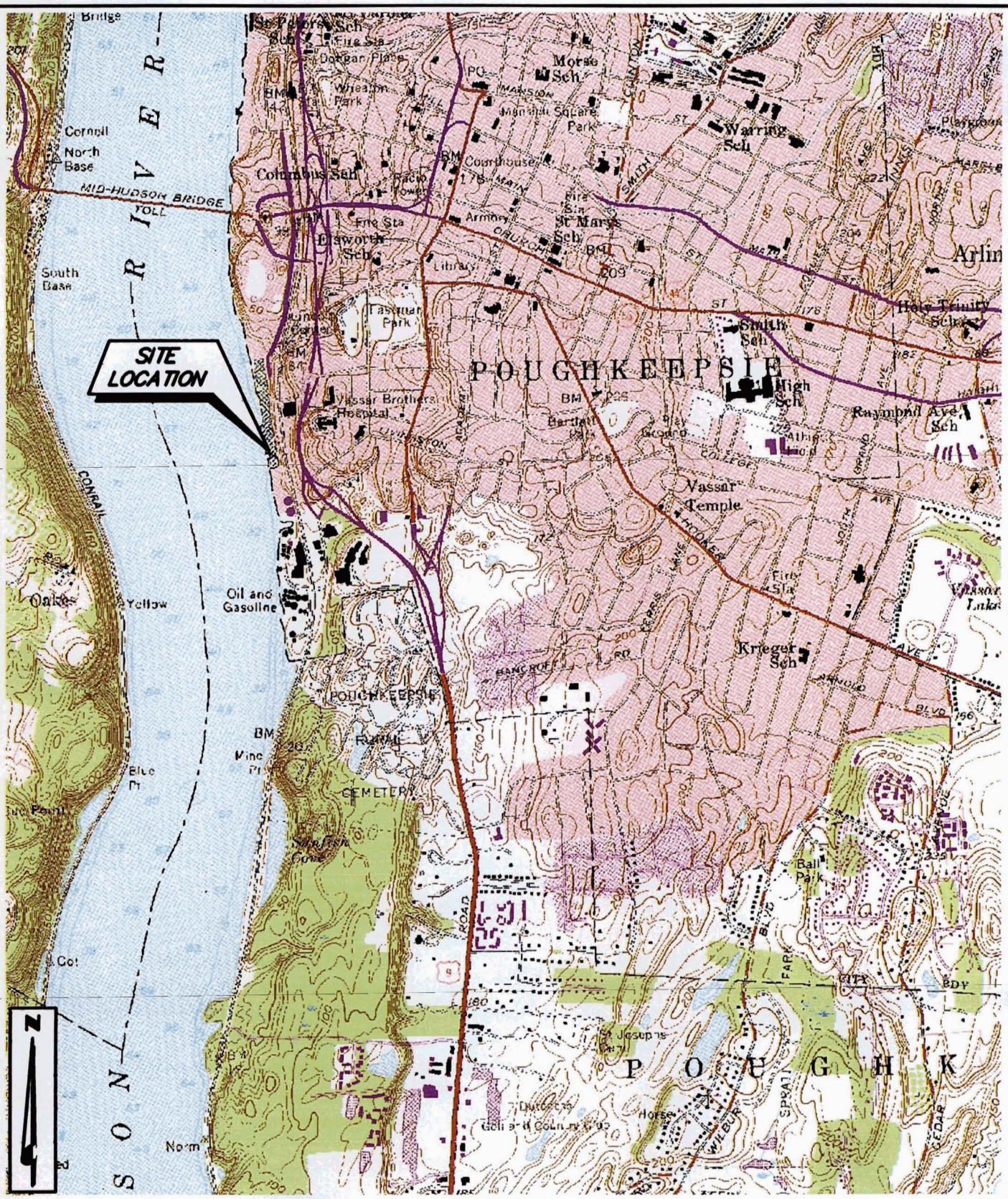
October 2004

oject No.: 11205.1001.1102

Prepared By:

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS
III Winners Circle
Albany, NY 12205-0269

(518) 453-4500



SOURCE: U.S.G.S. 7.5' Topographic
QUADRANGLE: POUGHKEEPSIE, NY

SCALE: 1"=2000'

CHA
DRAWING COPYRIGHT © 2003
CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE – ALBANY, NEW YORK – 12205
518-453-4500

11205.1001.1102 | DATE: 07-25-2003

FIGURE 1
SITE LOCATION MAP
DeLAVAL PROPERTY
RINALDI BOULEVARD
POUGHKEEPSIE
STATE OF NEW YORK

File: M:\11205\ACAD\SITELOC.dwg User: 330 10/28/2004 04:06 PM

Summary of Analytical Results for Surficial Soils

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected[1]	Frequency of Samples Exceeding SCGs
SVOCs (units in micrograms per kilogram (µg/kg))			
Acenaphthylene	41,000	140-8,000	0 of 30
Acenaphthene	50,000	120-430	0 of 30
Anthracene	50,000	74-18,000	0 of 30
Benzo(a)anthracene	224	85-150,000	23 of 30
Benzo(a)pyrene	61	160-100,000	24 of 30
Benzo(b)fluoranthene	1,100	85-180,000	18 of 30
Benzo(g,h,i)perylene	50,000	110-25,000	0 of 30
Benzo(k)fluoranthene	1,100	150-64,000	10 of 30
Bis(2-Ethylhexyl)phthalate	50,000	220-6,100	0 of 30
Carbazole		79-460	Detected in 7 of 30
Chrysene	400	81-130,000	21 of 30
Dibenz(a,h)anthracene	14	100-120	2 of 30
Dibenzofuran	6,200	110-230	0 of 30
Fluoranthene	50,000	140-320,000	2 of 30
Fluorene	50,000	80-280	0 of 30
Indeno(1,2,3-cd)pyrene	3,200	88-16,000	2 of 30
2-Methylnapthalene	36,400	160-310	0 of 30
Naphthalene	13,000	250-280	0 of 30
Phenanthrene	50,000	130-92,000	1 of 30
Pyrene	50,000	130-320,000	2 of 30
PCBs (units in micrograms per kilogram (µg/kg))			
Aroclor-1260	1,000	50-3600	3 of 30
METALS (units in milligrams per liter (mg/L))			
Arsenic	7.5	5.07-24.0	26 of 30
Barium	300	15.1-374	25 of 30
Cadmium	1	0.973-8.7	28 of 30
Chromium	10	5.94-627	17 of 30
Lead	500	22.8-908	22 of 30
Selenium	2	0.602-3.20	18 of 30
Silver		0.149-240	Detected in 10 of 30
Mercury	0.1	0.02-1.30	21 of 30

Note: 1. If a single value is noted, the referenced parameter was detected either only one time, or multiple times at the same concentration.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics								
Sample ID		SS-1	SS-1DL	SS-2	SS-3	SS-3DL	SS-4	SS-5
Laboratory Sample No.		S3753-01	S3753-01DL	S3753-02	S3753-03	S3753-03DL	S3753-04	S3753-05
Sampling Date		07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04
Dilution Factor		1.0	5.0	1.0	1.0	5.0	1.0	1.0
Units	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND								
bis(2-Chloroethyl)ether		38 U	190 UD	36 U	35 U	180 UD	37 U	230 U
1,2-Dichlorobenzene	7,900	42 U	210 UD	40 U	39 U	200 UD	40 U	250 U
1,3-Dichlorobenzene	1,600	29 U	140 UD	27 U	27 U	130 UD	27 U	170 U
1,4-Dichlorobenzene	8,500	32 U	160 UD	31 U	30 U	150 UD	31 U	200 U
2,2-oxybis(1-Chloropropane)		42 U	210 UD	40 U	39 U	190 UD	40 U	250 U
N-Nitroso-di-n-propylamine		34 U	170 UD	32 U	32 U	160 UD	33 U	210 U
Hexachloroethane		37 U	190 UD	35 U	34 U	170 UD	36 U	220 U
Nitrobenzene	200	39 U	200 UD	37 U	37 U	180 UD	38 U	240 U
Isophorone	4,400	29 U	140 UD	27 U	27 U	130 UD	28 U	170 U
bis(2-Chloroethoxy)methane		35 U	180 UD	34 U	33 U	160 UD	34 U	210 U
1,2,4-Trichlorobenzene	3,400	22 U	110 UD	21 U	21 U	100 UD	21 U	130 U
Naphthalene	13,000	280 J	420 JD	16 U	16 U	78 UD	16 U	100 U
4-Chloroaniline	220 or MDL	290 U	1400 UD	270 U	270 U	1300 UD	280 U	1700 U
Hexachlorobutadiene		27 U	140 UD	26 U	25 U	130 UD	26 U	160 U
2-Methylnaphthalene	36,400	160 J	67 UD	13 U	12 U	62 UD	13 U	81 U
Hexachlorocyclopentadiene		19 U	97 UD	18 U	18 U	90 UD	19 U	120 U
2-Chloronaphthalene		16 U	81 UD	15 U	15 U	75 UD	16 U	98 U
2-Nitroaniline	430 or MDL	28 U	140 UD	27 U	26 U	130 UD	27 U	170 U
Dimethylphthalate	2,000	19 U	93 UD	18 U	17 U	86 UD	18 U	110 U
Acenaphthylene	41,000	140 J	120 UD	22 U	22 U	110 UD	22 U	140 U
2,6-Dinitrotoluene	1,000	33 U	170 UD	31 U	31 U	150 UD	32 U	200 U
3-Nitroaniline	500 or MDL	130 U	630 UD	120 U	120 U	580 UD	120 U	760 U
Acenaphthene	50,000**	430 J	530 JD	120 J	16 U	79 UD	16 U	100 U
Dibenzofuran	6,200	230 J	130 UD	24 U	24 U	120 UD	24 U	150 U
2,4-Dinitrotoluene		15 U	77 UD	15 U	14 U	72 UD	15 U	93 U
Diethylphthalate	71,000	24 U	120 UD	23 U	23 U	110 UD	23 U	150 U
4-Chlorophenyl-phenylether		19 U	96 UD	18 U	18 U	89 UD	18 U	120 U
Fluorene	50,000**	280 J	110 UD	80 J	20 U	100 UD	21 U	130 U
4-Nitroaniline		61 U	300 UD	58 U	56 U	280 UD	58 U	370 U
N-Nitrosodiphenylamine		20 U	98 UD	19 U	18 U	91 UD	19 U	120 U
4-Bromophenyl-phenylether		20 U	100 UD	19 U	19 U	95 UD	20 U	120 U
Hexachlorobenzene	410	15 U	73 UD	14 U	13 U	67 UD	14 U	88 U
Phenanthrene	50,000**	6300 EJ	4500 D	970	330 J	80 UD	290 J	1100 J
Anthracene	50,000**	830	1100 JD	230 J	74 J	86 UD	18 U	110 U
Carbazole		380 J	490 JD	79 J	16 U	79 UD	16 U	100 U
Di-n-butylphthalate	8,100	10 U	52 UD	9.8 U	9.6 U	48 UD	9.9 U	62 U
Fluoranthene	50,000**	8500 EJ	6800 D	1600	630 J	540 JD	540 J	3000 J
Pyrene	50,000**	7700 EJ	6600 D	1500	530 J	490 JD	560 J	2500 J
Butylbenzylphthalate	50,000**	26 U	130 UD	25 U	24 U	120 UD	25 U	160 U
3,3-Dichlorobenzidine		120 U	620 UD	120 U	120 U	580 UD	120 U	750 U
Benzo(a)anthracene	224 or MDL	3300	3200 JD	900	320 J	54 UD	320 J	1600 J
Chrysene	400	2800	2400 JD	790	300 J	110 UD	350 J	1600 J
bis(2-Ethylhexyl)phthalate	50,000**	18 U	89 UD	17 U	6100 EJ	4900 D	220 J	110 U
Di-n-octyl phthalate	50,000**	19 U	93 UD	18 U	17 U	86 UD	18 U	110 U
Benzo(b)fluoranthene	1,100	4500 J	3600 JD	1600 J	450 J	190 UD	510 J	2000 J
Benzo(k)fluoranthene	1,100	2300	1900 JD	720 J	290 J	120 UD	360 J	840 J
Benzo(a)pyrene	61 or MDL	3000	2600 JD	940	260 J	62 UD	310 J	1300 J
Indeno(1,2,3-cd)pyrene	3,200	420 J	500 JD	180 J	96 J	87 UD	88 J	800 J
Dibenz(a,h)anthracene	14 or MDL	100 J	110 UD	22 U	21 U	110 UD	22 U	140 U
Benzo(g,h,i)perylene	50,000**	940	920 JD	370 J	110 J	160 UD	160 J	770 J
Total Confident Conc. SVOC		42,690	35,560	10,079	9,490	5,930	3,708	15,510
Total TICs		23,830	0	25,350	17,870	0	7,690	53,900

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-6 S3753-06 07/22/04 1.0 ug/Kg	SS-7 S3753-07 07/22/04 5.0 ug/Kg	SS-8 S3753-08 07/22/04 1.0 ug/Kg	SS-9 S3753-09 07/22/04 1.0 ug/Kg	SS-10 S3753-10 07/22/04 5.0 ug/Kg	SS-11 S3753-11 07/22/04 1.0 ug/Kg	SS-12 S3753-12 07/22/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		200 U	220 U	38 U	190 U	200 U	39 U	180 U
1,2-Dichlorobenzene	7,900	220 U	240 U	42 U	210 U	220 U	43 U	200 U
1,3-Dichlorobenzene	1,600	150 U	160 U	28 U	140 U	150 U	29 U	140 U
1,4-Dichlorobenzene	8,500	170 U	190 U	32 U	160 U	170 U	33 U	150 U
2,2-oxybis(1-Chloropropane)		220 U	240 U	42 U	200 U	220 U	43 U	200 U
N-Nitroso-di-n-propylamine		180 U	200 U	34 U	170 U	180 U	35 U	160 U
Hexachloroethane		200 U	210 U	37 U	180 U	190 U	38 U	170 U
Nitrobenzene	200	210 U	230 U	39 U	190 U	200 U	40 U	190 U
Isophorone	4,400	150 U	170 U	29 U	140 U	150 U	29 U	140 U
bis(2-Chloroethoxy)methane		190 U	200 U	35 U	170 U	180 U	36 U	170 U
1,2,4-Trichlorobenzene	3,400	120 U	130 U	22 U	110 U	110 U	23 U	110 U
Naphthalene	13,000	89 U	97 U	17 U	82 U	87 U	17 U	80 U
4-Chloroaniline	220 or MDL	1500 U	1600 U	290 U	1400 U	1500 U	290 U	1400 U
Hexachlorobutadiene		140 U	160 U	27 U	130 U	140 U	28 U	130 U
2-Methylnaphthalene	36,400	71 U	77 U	13 U	65 U	69 U	14 U	63 U
Hexachlorocyclopentadiene		100 U	110 U	19 U	95 U	100 U	20 U	92 U
2-Chloronaphthalene		86 U	93 U	16 U	79 U	83 U	16 U	76 U
2-Nitroaniline	430 or MDL	150 U	160 U	28 U	140 U	140 U	29 U	130 U
Dimethylphthalate	2,000	98 U	110 U	18 U	90 U	95 U	19 U	87 U
Acenaphthylene	41,000	120 U	130 U	23 U	110 U	1700 J	24 U	110 U
2,6-Dinitrotoluene	1,000	170 U	190 U	33 U	160 U	170 U	34 U	160 U
3-Nitroaniline	500 or MDL	660 U	720 U	120 U	610 U	650 U	130 U	590 U
Acenaphthene	50,000**	91 U	98 U	17 U	83 U	88 U	17 U	81 U
Dibenzofuran	6,200	140 U	150 U	25 U	120 U	130 U	26 U	120 U
2,4-Dinitrotoluene		82 U	89 U	15 U	75 U	80 U	16 U	73 U
Diethylphthalate	71,000	130 U	140 U	24 U	120 U	130 U	25 U	120 U
4-Chlorophenyl-phenylether		100 U	110 U	19 U	94 U	99 U	20 U	91 U
Fluorene	50,000**	120 U	130 U	22 U	110 U	110 U	22 U	100 U
4-Nitroaniline		320 U	350 U	60 U	300 U	310 U	62 U	290 U
N-Nitrosodiphenylamine		100 U	110 U	20 U	96 U	100 U	20 U	93 U
4-Bromophenyl-phenylether		110 U	120 U	20 U	99 U	110 U	21 U	96 U
Hexachlorobenzene	410	77 U	83 U	14 U	71 U	75 U	15 U	69 U
Phenanthrene	50,000**	1500 J	3100 J	130 J	980 J	6500	18 U	2200 J
Anthracene	50,000**	470 J	810 J	18 U	90 U	1600 J	19 U	580 J
Carbazole		91 U	98 U	17 U	83 U	460 J	17 U	81 U
Di-n-butylphthalate	8,100	55 U	59 U	10 U	50 U	53 U	10 U	49 U
Fluoranthene	50,000**	3300 J	5700	300 J	2200 J	24000	140 J	2800 J
Pyrene	50,000**	2600 J	5100	270 J	1800 J	15000	130 J	2500 J
Butylbenzylphthalate	50,000**	140 U	150 U	26 U	130 U	130 U	26 U	120 U
3,3-Dichlorobenzidine		660 U	710 U	120 U	610 U	640 U	130 U	590 U
Benzo(a)anthracene	224 or MDL	1800 J	3400 J	200 J	1200 J	10000	85 J	1400 J
Chrysene	400	1500 J	2400 J	200 J	1200 J	7200	81 J	1200 J
bis(2-Ethylhexyl)phthalate	50,000**	94 U	100 U	18 U	87 U	92 U	18 U	84 U
Di-n-octyl phthalate	50,000**	98 U	110 U	18 U	90 U	95 U	19 U	87 U
Benzo(b)fluoranthene	1,100	1700 J	3800 J	200 J	1500 J	11000 J	85 J	1300 J
Benzo(k)fluoranthene	1,100	1000 J	1400 J	150 J	640 J	7500	27 U	500 J
Benzo(a)pyrene	61 or MDL	1300 J	2300 J	160 J	720 J	6900	14 U	900 J
Indeno(1,2,3-cd)pyrene	3,200	460 J	490 J	19 U	410 J	1100 J	19 U	380 J
Dibenz(a,h)anthracene	14 or MDL	120 U	130 U	23 U	110 U	120 U	23 U	110 U
Benzo(g,h,i)perylene	50,000**	490 J	680 J	34 U	420 J	1800 J	34 U	370 J
Total Confident Conc. SVOC		16,120	29,180	1,610	11,070	94,760	521	14,130
Total TICs		3,100	6,510	7,290	4,080	19,100	6,680	6,680

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics								
Sample ID		SS-13	SS-14	SS-14B	SS-14BDL	SS-15	SS-16	SS-17
Laboratory Sample No.		S3753-13	S3753-14	S3753-15	S3753-15DL	S3753-16	S3753-17	S3753-18
Sampling Date		07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04
Dilution Factor		5.0	1.0	1.0	5.0	1.0	1.0	5.0
Units	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND								
bis(2-Chloroethyl)ether		920 U	34 U	35 U	170 UD	39 U	170 U	200 U
1,2-Dichlorobenzene	7,900	1000 U	38 U	39 U	190 UD	43 U	190 U	220 U
1,3-Dichlorobenzene	1,600	690 U	26 U	26 U	130 UD	29 U	130 U	150 U
1,4-Dichlorobenzene	8,500	780 U	29 U	30 U	150 UD	33 U	150 U	170 U
2,2-oxybis(1-Chloropropane)		1000 U	38 U	38 U	190 UD	43 U	190 U	220 U
N-Nitroso-di-n-propylamine		830 U	31 U	31 U	160 UD	35 U	160 U	180 U
Hexachloroethane		890 U	33 U	34 U	170 UD	38 U	170 U	190 U
Nitrobenzene	200	950 U	35 U	36 U	180 UD	41 U	180 U	200 U
Isophorone	4,400	700 U	26 U	26 U	130 UD	30 U	130 U	150 U
bis(2-Chloroethoxy)methane		850 U	32 U	32 U	160 UD	36 U	160 U	180 U
1,2,4-Trichlorobenzene	3,400	540 U	20 U	20 U	100 UD	23 U	100 U	110 U
Naphthalene	13,000	410 U	15 U	15 U	77 UD	17 U	77 U	87 U
4-Chloroaniline	220 or MDL	6900 U	260 U	260 U	1300 UD	300 U	1300 U	1500 U
Hexachlorobutadiene		660 U	24 U	25 U	120 UD	28 U	120 U	140 U
2-Methylnaphthalene	36,400	320 U	12 U	12 U	61 UD	14 U	61 U	69 U
Hexachlorocyclopentadiene		470 U	17 U	18 U	89 UD	20 U	89 U	100 U
2-Chloronaphthalene		390 U	14 U	15 U	74 UD	17 U	74 U	83 U
2-Nitroaniline	430 or MDL	680 U	25 U	26 U	130 UD	29 U	130 U	150 U
Dimethylphthalate	2,000	450 U	17 U	17 U	85 UD	19 U	84 U	96 U
Acenaphthylene	41,000	6600 J	370 J	540 J	420 JD	24 U	110 U	1100 J
2,6-Dinitrotoluene	1,000	800 U	30 U	30 U	150 UD	34 U	150 U	170 U
3-Nitroaniline	500 or MDL	3000 U	110 U	110 U	570 UD	130 U	570 U	650 U
Acenaphthene	50,000**	410 U	15 U	16 U	78 UD	18 U	78 U	88 U
Dibenzofuran	6,200	620 U	23 U	23 U	120 UD	26 U	120 U	130 U
2,4-Dinitrotoluene		370 U	14 U	14 U	71 UD	16 U	71 U	80 U
Diethylphthalate	71,000	590 U	22 U	22 U	110 UD	25 U	110 U	130 U
4-Chlorophenyl-phenylether		460 U	17 U	18 U	88 UD	20 U	88 U	99 U
Fluorene	50,000**	530 U	20 U	20 U	100 UD	23 U	100 U	110 U
4-Nitroaniline		1500 U	54 U	56 U	280 UD	63 U	280 U	310 U
N-Nitrosodiphenylamine		480 U	18 U	18 U	90 UD	20 U	90 U	100 U
4-Bromophenyl-phenylether		490 U	18 U	19 U	93 UD	21 U	93 U	110 U
Hexachlorobenzene	410	350 U	13 U	13 U	66 UD	15 U	66 U	75 U
Phenanthrene	50,000**	22000	1200	1800	1300 JD	290 J	3100 J	6900 J
Anthracene	50,000**	5500 J	270 J	370 J	360 JD	120 J	790 J	1300 J
Carbazole		410 U	86 J	110 J	78 UD	18 U	78 U	450 J
Di-n-butylphthalate	8,100	250 U	9.2 U	9.4 U	47 UD	11 U	47 U	53 U
Fluoranthene	50,000**	88000	4600	6500 EJ	4600 D	910	8000	19000
Pyrene	50,000**	54000	2900	4000	3200 JD	910	5800	11000
Butylbenzylphthalate	50,000**	630 U	23 U	24 U	120 UD	27 U	120 U	130 U
3,3-Dichlorobenzidine		3000 U	110 U	110 U	570 UD	130 U	570 U	640 U
Benzo(a)anthracene	224 or MDL	42000	2200	3100	2500 JD	680 J	3800	8100
Chrysene	400	31000	1500	2200	2000 JD	570 J	3200 J	6000
bis(2-Ethylhexyl)phthalate	50,000**	430 U	16 U	16 U	81 UD	18 U	81 U	92 U
Di-n-octyl phthalate	50,000**	450 U	17 U	17 U	85 UD	19 U	84 U	96 U
Benzo(b)fluoranthene	1,100	49000 J	2900 J	5300 J	2900 JD	900 J	5100 J	10000
Benzo(k)fluoranthene	1,100	25000	1300	2100	1200 JD	430 J	1900 J	3600 J
Benzo(a)pyrene	61 or MDL	26000	1400	2100	1600 JD	610 J	3100 J	5200
Indeno(1,2,3-cd)pyrene	3,200	5200 J	340 J	370 J	610 JD	120 J	810 J	1400 J
Dibenz(a,h)anthracene	14 or MDL	550 U	20 U	120 J	100 UD	23 U	100 U	120 U
Benzo(g,h,i)perylene	50,000**	7700 J	450 J	540 J	610 JD	170 J	1100 J	1600 J
Total Confident Conc. SVOC		362,000	19,516	29,150	21,300	5,710	36,700	75,650
Total TICs		29,600	4,080	10,530	0	6,100	5,870	8,300

Qualifiers & Notes:
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%
E - Value exceeds calibration range.
D - Compound identified in analysis at a secondary dilution factor.
* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference
NA-not analyzed
MDL - Method Detection Limit
** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.
1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics								
Sample ID		SS-18	SS-19	SS-20	SS-21	SS-22	SS-23	SS-24
Laboratory Sample No.		S3753-19	S3754-10	S3754-01	S3754-02	S3754-03	S3754-04	S3754-05
Sampling Date		07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04	07/22/04
Dilution Factor		5.0	1.0	1.0	10.0	1.0	1.0	1.0
Units	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND								
bis(2-Chloroethyl)ether		190 U	190 U	190 U	1800 U	190 U	210 U	180 U
1,2-Dichlorobenzene	7,900	210 U	210 U	210 U	2000 U	210 U	230 U	200 U
1,3-Dichlorobenzene	1,600	140 U	140 U	140 U	1400 U	140 U	150 U	140 U
1,4-Dichlorobenzene	8,500	160 U	160 U	160 U	1500 U	160 U	170 U	160 U
2,2-oxybis(1-Chloropropane)		210 U	210 U	200 U	2000 U	210 U	230 U	200 U
N-Nitroso-di-n-propylamine		170 U	170 U	170 U	1600 U	170 U	180 U	170 U
Hexachloroethane		180 U	190 U	180 U	1800 U	180 U	200 U	180 U
Nitrobenzene	200	200 U	200 U	190 U	1900 U	200 U	210 U	190 U
Isophorone	4,400	140 U	140 U	140 U	1400 U	140 U	160 U	140 U
bis(2-Chloroethoxy)methane		180 U	180 U	170 U	1700 U	180 U	190 U	170 U
1,2,4-Trichlorobenzene	3,400	110 U	110 U	110 U	1100 U	110 U	120 U	110 U
Naphthalene	13,000	84 U	85 U	82 U	810 U	84 U	91 U	82 U
4-Chloroaniline	220 or MDL	1400 U	1400 U	1400 U	14000 U	1400 U	1500 U	1400 U
Hexachlorobutadiene		130 U	140 U	130 U	1300 U	140 U	150 U	130 U
2-Methylnaphthalene	36,400	66 U	67 U	65 U	640 U	67 U	72 U	65 U
Hexachlorocyclopentadiene		96 U	98 U	95 U	930 U	97 U	100 U	94 U
2-Chloronaphthalene		80 U	81 U	79 U	770 U	81 U	87 U	78 U
2-Nitroaniline	430 or MDL	140 U	140 U	140 U	1300 U	140 U	150 U	140 U
Dimethylphthalate	2,000	92 U	93 U	90 U	880 U	92 U	100 U	90 U
Acenaphthylene	41,000	120 U	120 U	110 U	1100 U	120 U	130 U	110 U
2,6-Dinitrotoluene	1,000	160 U	170 U	160 U	1600 U	160 U	180 U	160 U
3-Nitroaniline	500 or MDL	620 U	630 U	610 U	6000 U	620 U	680 U	610 U
Acenaphthene	50,000**	85 U	86 U	83 U	820 U	85 U	92 U	83 U
Dibenzofuran	6,200	130 U	130 U	120 U	1200 U	130 U	140 U	120 U
2,4-Dinitrotoluene		77 U	78 U	75 U	740 U	77 U	83 U	75 U
Diethylphthalate	71,000	120 U	120 U	120 U	1200 U	120 U	130 U	120 U
4-Chlorophenyl-phenylether		95 U	97 U	94 U	920 U	96 U	100 U	93 U
Fluorene	50,000**	110 U	110 U	110 U	1100 U	110 U	120 U	110 U
4-Nitroaniline		300 U	310 U	300 U	2900 U	300 U	330 U	290 U
N-Nitrosodiphenylamine		98 U	99 U	96 U	940 U	98 U	110 U	95 U
4-Bromophenyl-phenylether		100 U	100 U	99 U	970 U	100 U	110 U	99 U
Hexachlorobenzene	410	72 U	73 U	71 U	690 U	72 U	78 U	70 U
Phenanthrene	50,000**	630 J	610 J	500 J	830 U	820 J	94 U	420 J
Anthracene	50,000**	92 U	93 U	90 U	880 U	92 U	100 U	90 U
Carbazole		85 U	86 U	83 U	820 U	85 U	92 U	83 U
Di-n-butylphthalate	8,100	51 U	52 U	50 U	490 U	51 U	56 U	50 U
Fluoranthene	50,000**	1500 J	1500 J	1100 J	3900 J	1300 J	660 J	630 J
Pyrene	50,000**	1300 J	1400 J	1100 J	3800 J	1300 J	700 J	670 J
Butylbenzylphthalate	50,000**	130 U	130 U	130 U	1200 U	130 U	140 U	130 U
3,3-Dichlorobenzidine		620 U	630 U	610 U	5900 U	620 U	670 U	600 U
Benzo(a)anthracene	224 or MDL	950 J	740 J	640 J	560 U	630 J	63 U	57 U
Chrysene	400	840 J	900 J	630 J	1200 U	670 J	130 U	120 U
bis(2-Ethylhexyl)phthalate	50,000**	88 U	90 U	87 U	850 U	89 U	96 U	86 U
Di-n-octyl phthalate	50,000**	92 U	93 U	90 U	880 U	92 U	100 U	90 U
Benzo(b)fluoranthene	1,100	1200 J	770 J	700 J	3800 J	670 J	220 U	200 U
Benzo(k)fluoranthene	1,100	540 J	540 J	500 J	1300 U	130 U	140 U	130 U
Benzo(a)pyrene	61 or MDL	800 J	720 J	600 J	640 U	510 J	72 U	65 U
Indeno(1,2,3-cd)pyrene	3,200	93 U	540 J	91 U	900 U	93 U	100 U	91 U
Dibenz(a,h)anthracene	14 or MDL	110 U	110 U	110 U	1100 U	110 U	120 U	110 U
Benzo(g,h,i)perylene	50,000**	170 U	510 J	160 U	1600 U	170 U	180 U	160 U
Total Confident Conc. SVOC		7,760	8,230	5,770	11,500	5,900	1,360	1,720
Total TICs		3,890	5,720	12,830	0	2,570	7,000	20,900

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor

' - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics						
Sample ID		SS-25	SS-26	SS-27	SS-28	SS-29
Laboratory Sample No.		S3754-06	S3753-20	S3754-07	S3754-08	S3754-09
Sampling Date		07/22/04	07/22/04	07/22/04	07/22/04	07/22/04
Dilution Factor		1.0	1.0	10.0	10.0	2.0
Units	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND						
bis(2-Chloroethyl)ether		170 U	40 U	2100 U	1800 U	360 U
1,2-Dichlorobenzene	7,900	180 U	44 U	2300 U	2000 U	400 U
1,3-Dichlorobenzene	1,600	120 U	30 U	1500 U	1300 U	270 U
1,4-Dichlorobenzene	8,500	140 U	34 U	1700 U	1500 U	310 U
2,2-oxybis(1-Chloropropane)		180 U	44 U	2300 U	1900 U	400 U
N-Nitroso-di-n-propylamine		150 U	36 U	1800 U	1600 U	320 U
Hexachloroethane		160 U	39 U	2000 U	1700 U	350 U
Nitrobenzene	200	170 U	41 U	2100 U	1800 U	370 U
Isophorone	4,400	130 U	30 U	1500 U	1300 U	270 U
bis(2-Chloroethoxy)methane		150 U	37 U	1900 U	1600 U	340 U
1,2,4-Trichlorobenzene	3,400	97 U	23 U	1200 U	1000 U	210 U
Naphthalene	13,000	74 U	250 J	910 U	780 U	160 U
4-Chloroaniline	220 or MDL	1300 U	300 U	15000 U	13000 U	2700 U
Hexachlorobutadiene		120 U	29 U	1500 U	1300 U	260 U
2-Methylnaphthalene	36,400	58 U	310 J	720 U	620 U	130 U
Hexachlorocyclopentadiene		85 U	20 U	1000 U	900 U	180 U
2-Chloronaphthalene		71 U	17 U	870 U	750 U	150 U
2-Nitroaniline	430 or MDL	120 U	30 U	1500 U	1300 U	270 U
Dimethylphthalate	2,000	81 U	19 U	990 U	860 U	180 U
Acenaphthylene	41,000	100 U	130 J	8000 J	1100 U	220 U
2,6-Dinitrotoluene	1,000	140 U	35 U	1800 U	1500 U	310 U
3-Nitroaniline	500 or MDL	550 U	130 U	6700 U	5800 U	1200 U
Acenaphthene	50,000**	75 U	18 U	920 U	790 U	160 U
Dibenzofuran	6,200	110 U	110 J	1400 U	1200 U	240 U
2,4-Dinitrotoluene		67 U	16 U	830 U	720 U	150 U
Diethylphthalate	71,000	110 U	26 U	1300 U	1100 U	230 U
4-Chlorophenyl-phenylether		84 U	20 U	1000 U	890 U	180 U
Fluorene	50,000**	96 U	23 U	1200 U	1000 U	210 U
4-Nitroaniline		260 U	64 U	3300 U	2800 U	580 U
N-Nitrosodiphenylamine		86 U	21 U	1100 U	910 U	190 U
4-Bromophenyl-phenylether		89 U	21 U	1100 U	940 U	190 U
Hexachlorobenzene	410	63 U	15 U	780 U	670 U	140 U
Phenanthrene	50,000**	76 U	1200	92000	4200 J	160 U
Anthracene	50,000**	81 U	170 J	18000 J	860 U	180 U
Carbazole		75 U	120 J	920 U	790 U	160 U
Di-n-butylphthalate	8,100	45 U	11 U	550 U	480 U	98 U
Fluoranthene	50,000**	47 U	1900	320000	12000 J	100 U
Pyrene	50,000**	60 U	1400	260000	11000 J	130 U
Butylbenzylphthalate	50,000**	110 U	27 U	1400 U	1200 U	250 U
3,3-Dichlorobenzidine		540 U	130 U	6700 U	5800 U	1200 U
Benzo(a)anthracene	224 or MDL	51 U	660 J	150000	7300 J	110 U
Chrysene	400	110 U	790 J	130000	7400 J	230 U
bis(2-Ethylhexyl)phthalate	50,000**	78 U	19 U	960 U	820 U	170 U
Di-n-octyl phthalate	50,000**	81 U	19 U	990 U	860 U	180 U
Benzo(b)fluoranthene	1,100	180 U	1200 J	180000 J	8100 J	390 U
Benzo(k)fluoranthene	1,100	120 U	470 J	64000	6800 J	250 U
Benzo(a)pyrene	61 or MDL	58 U	460 J	100000	6800 J	130 U
Indeno(1,2,3-cd)pyrene	3,200	82 U	160 J	16000 J	870 U	180 U
Dibenz(a,h)anthracene	14 or MDL	99 U	24 U	1200 U	1100 U	220 U
Benzo(g,h,i)perylene	50,000**	150 U	200 J	25000 J	3900 J	320 U
Total Confident Conc. SVOC		0	9,530	1,363,000	67,500	0
Total TICs		0	13,530	265,000	70,000	0

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-1 S3753-01 07/22/04 1.0 ug/Kg	SS-2 S3753-02 07/22/04 1.0 ug/Kg	SS-3 S3753-03 07/22/04 1.0 ug/Kg	SS-4 S3753-04 07/22/04 1.0 ug/Kg	SS-5 S3753-05 07/22/04 1.0 ug/Kg	SS-5DL S3753-05DL 07/22/04 10.0 ug/Kg	SS-6 S3753-06 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	6.1 U	5.7 U	5.7 U	5.9 U	7.4 U	74 UD	6.4 U
Aroclor-1221	1,000	4.1 U	3.9 U	3.9 U	4.0 U	5.0 U	50 UD	4.4 U
Aroclor-1232	1,000	2.8 U	2.6 U	2.6 U	2.7 U	3.4 U	34 UD	3.0 U
Aroclor-1242	1,000	3.6 U	3.4 U	3.4 U	3.5 U	4.4 U	44 UD	3.8 U
Aroclor-1248	1,000	4.3 U	4.0 U	4.0 U	4.1 U	5.2 U	52 UD	4.5 U
Aroclor-1254	1,000	1.6 U	1.5 U	1.5 U	1.5 U	1.9 U	19 UD	1.7 U
Aroclor-1260	1,000	3.4 U	3.2 U	3.2 U	3.3 U	1200 EJ	1000 D	1700 EJ
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg
Arsenic	7.5 or SB/(5.89)	15.6	7.430	11.5	24.8	4.890		9.240
Barium	300 or SB/(52.5)	170	68.0	175	85.7	127		159
Cadmium	1 or SB/(1.93)	2.440	8.700	2.760	3.310	2.190		2.710
Chromium	10 or SB/(15.8)	88.7	58.2	18.2	74.3	14.6		27.0
Lead	SB/(87.9)	908 J	78.4 J	185 J	414 J	210 J		265 J
Selenium	2 or SB/(1.25)	2.500	1.400	1.030 J	3.210	2.150		1.100 J
Silver	SB/(0.117)	1.120 J	240	0.534 J	2.070	0.149 U		0.262 J
Mercury	0.1	0.40	0.13	0.11	0.18	0.34		0.39

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

• For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-6DL S3753-06DL 07/22/04 10.0 ug/Kg	SS-7 S3753-07 07/22/04 1.0 ug/Kg	SS-7DL S3753-07DL 07/22/04 10.0 ug/Kg	SS-8 S3753-08 07/22/04 1.0 ug/Kg	SS-9 S3753-09 07/22/04 1.0 ug/Kg	SS-10 S3753-10 07/22/04 1.0 ug/Kg	SS-11 S3753-11 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	64 UD	6.9 U	69 UD	6.1 U	5.9 U	6.2 U	6.2 U
Aroclor-1221	1,000	44 UD	4.7 U	47 UD	4.2 U	4.0 U	4.2 U	4.2 U
Aroclor-1232	1,000	30 UD	3.2 U	32 UD	2.8 U	2.7 U	2.9 U	2.9 U
Aroclor-1242	1,000	38 UD	4.1 U	41 UD	3.6 U	3.5 U	3.7 U	3.7 U
Aroclor-1248	1,000	45 UD	4.9 U	49 UD	4.3 U	4.1 U	4.4 U	4.3 U
Aroclor-1254	1,000	17 UD	1.8 U	18 UD	1.6 U	1.5 U	1.6 U	1.6 U
Aroclor-1260	1,000	1500 D	3600 EJ	3400 D	3.4 U	3.3 U	3.5 U	3.5 U
Units COMPOUND			mg/Kg		mg/Kg	mg/Kg	mg/Kg	mg/Kg
Arsenic	7.5 or SB/(5.89)		19.2		8.800	9.990	10.2	6.780
Barium	300 or SB/(52.5)		318		70.6	134	179	38.4
Cadmium	1 or SB/(1.93)		3.730		2.290	2.800	2.900	2.080
Chromium	10 or SB/(15.8)		146		15.4	21.3	18.9	12.6
Lead	SB/(87.9)		456 J		58.8 J	289 J	657 J	25.4 J
Selenium	2 or SB/(1.25)		2.820		1.860	1.140	1.760	1.130 J
Silver	SB/(0.117)		2.020		0.123 U	0.119 U	0.524 J	0.126 U
Mercury	0.1		1.3		0.07	0.11	0.22	0.02

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-12 S3753-12 07/22/04 1.0 ug/Kg	SS-13 S3753-13 07/22/04 1.0 ug/Kg	SS-14 S3753-14 07/22/04 1.0 ug/Kg	SS-14B S3753-15 07/22/04 1.0 ug/Kg	SS-15 S3753-16 07/22/04 1.0 ug/Kg	SS-16 S3753-17 07/22/04 1.0 ug/Kg	SS-17 S3753-18 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	5.7 U	5.9 U	5.5 U	5.6 U	6.2 U	5.5 U	6.3 U
Aroclor-1221	1,000	3.9 U	4.0 U	3.7 U	3.8 U	4.3 U	3.8 U	4.3 U
Aroclor-1232	1,000	2.7 U	2.7 U	2.5 U	2.6 U	2.9 U	2.6 U	2.9 U
Aroclor-1242	1,000	3.4 U	3.5 U	3.2 U	3.3 U	3.7 U	3.3 U	3.7 U
Aroclor-1248	1,000	4.0 U	4.2 U	3.8 U	3.9 U	4.4 U	3.9 U	4.4 U
Aroclor-1254	1,000	1.5 U	1.5 U	1.4 U	1.4 U	1.6 U	1.4 U	1.6 U
Aroclor-1260	1,000	3.2 U	3.4 U	3.1 U	3.2 U	3.5 U	3.1 U	3.6 U
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
Arsenic	7.5 or SB/(5.89)	6.770	7.340	7.550	6.570	6.580	5.070	8.840
Barium	300 or SB/(52.5)	66.1	121	83.5	72.2	78.9	374	164
Cadmium	1 or SB/(1.93)	2.090	1.720	2.060	1.570	2.240	1.610	2.620
Chromium	10 or SB/(15.8)	13.2	10.9	12.8	8.790	15.3	11.3	15.2
Lead	SB/(87.9)	80.6 J	447 J	166 J	141 J	71.6 J	262 J	793 J
Selenium	2 or SB/(1.25)	1.060 J	1.470	1.350	1.170	1.740	0.777 J	1.390
Silver	SB/(0.117)	0.115 U	0.121 U	0.112 U	0.113 U	0.621 J	0.113 U	0.127 U
Mercury	0.1	0.03	0.13	0.07	0.13	0.07	0.12	0.10

Qualifiers & Notes:	
U -	The compound was not detected at the indicated concentration.
J -	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.
B -	The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
P -	For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
E -	Value exceeds calibration range.
D -	Compound identified in analysis at a secondary dilution factor.
* -	For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.
NA-not analyzed	
MDL - Method Detection Limit	
** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.	

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-18 S3753-19 07/22/04 1.0 ug/Kg	SS-19 S3754-10 07/22/04 1.0 ug/Kg	SS-20 S3754-01 07/22/04 1.0 ug/Kg	SS-21 S3754-02 07/22/04 1.0 ug/Kg	SS-22 S3754-03 07/22/04 1.0 ug/Kg	SS-23 S3754-04 07/22/04 1.0 ug/Kg	SS-24 S3754-05 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	6.0 U	6.2 U	6.0 U	5.8 U	6.1 U	6.5 U	5.9 U
Aroclor-1221	1,000	4.1 U	4.2 U	4.1 U	3.9 U	4.2 U	4.5 U	4.0 U
Aroclor-1232	1,000	2.8 U	2.9 U	2.8 U	2.7 U	2.8 U	3.0 U	2.7 U
Aroclor-1242	1,000	3.6 U	3.7 U	3.5 U	3.4 U	3.6 U	3.9 U	3.5 U
Aroclor-1248	1,000	4.2 U	4.3 U	4.2 U	4.1 U	4.3 U	4.6 U	4.2 U
Aroclor-1254	1,000	1.6 U	1.6 U	1.5 U	1.5 U	1.6 U	1.7 U	1.5 U
Aroclor-1260	1,000	3.4 U	140	83	67	290	3.7 U	140
Units COMPOUND			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Arsenic	7.5 or SB/(5.89)	8.980	21.5	9.450	8.460	15.1	8.790	8.870
Barium	300 or SB/(52.5)	130	92.7	123	57.6	80.4	51.7	62.1
Cadmium	1 or SB/(1.93)	2.500	2.340	2.920	2.100	2.500	3.400	2.460
Chromium	10 or SB/(15.8)	17.0	123 J	90.0 J	14.4 J	24.4 J	44.9 J	16.1 J
Lead	SB/(87.9)	273 J	245 J	261 J	73.7 J	130 J	139 J	192 J
Selenium	2 or SB/(1.25)	0.930 J	1.140 J	1.300	1.510	1.720	1.940	1.580
Silver	SB/(0.117)	0.124 U	0.683 J	0.120 U	0.119 U	0.124 U	1.130 J	0.120 U
Mercury	0.1	0.08	0.57 J	0.27 J	0.11 J	0.11 J	0.10 J	0.08 J

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 1. Surficial Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	SS-25 S3754-06 07/22/04 1.0 ug/Kg	SS-26 S3753-20 07/22/04 1.0 ug/Kg	SS-27 S3754-07 07/22/04 1.0 ug/Kg	SS-28 S3754-08 07/22/04 1.0 ug/Kg	SS-29 S3754-09 07/22/04 1.0 ug/Kg
Aroclor-1016	1,000	5.3 U	6.4 U	6.6 U	5.6 U	5.7 U
Aroclor-1221	1,000	3.6 U	4.4 U	4.5 U	3.8 U	3.9 U
Aroclor-1232	1,000	2.5 U	3.0 U	3.0 U	2.6 U	2.6 U
Aroclor-1242	1,000	3.2 U	3.8 U	3.9 U	3.3 U	3.4 U
Aroclor-1248	1,000	3.7 U	4.5 U	4.6 U	3.9 U	4.0 U
Aroclor-1254	1,000	1.4 U	1.7 U	1.7 U	1.4 U	1.5 U
Aroclor-1260	1,000	50 PJ	3.6 U	99 PJ	86	3.2 U
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Arsenic	7.5 or SB/(5.89)	5.540	22.1	20.1	9.680	5.890
Barium	300 or SB/(52.5)	15.1 J	123	101	41.6	52.5
Cadmium	1 or SB/(1.93)	0.973	2.220	3.220	2.480	1.930
Chromium	10 or SB/(15.8)	5.940 J	627	32.7 J	15.6 J	15.8 J
Lead	SB/(87.9)	22.8 J	189 J	406 J	138 J	87.9 J
Selenium	2 or SB/(1.25)	0.320 U	3.050	2.120	0.602 J	1.250
Silver	SB/(0.117)	0.107 U	1.960	0.809 J	0.114 U	0.117 U
Mercury	0.1	0.03 J	0.18	0.27 J	0.24 J	0.04 J

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, **Total VOCs<10ppm**, Total Semi-VOCs<500ppm, and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

OIL STORAGE FACILITY

AOC-1

HUDSON RIVER

DELAVAL PROPERTY LINE (TYP.)

AOC-2

BURIED TANK

APPROXIMATE LOCATION OF FUEL LINE

HUDSON RIVER

FORMER WASTEWATER TREATMENT PLANT

EXISTING CONCRETE BULK HEAD

SS-1 SS-2 SS-3 SS-4 SS-5 SS-6 SS-7 SS-8 SS-9 SS-10 SS-11 SS-12 SS-13 SS-14 SS-15 SS-16 SS-17 SS-18 SS-19 SS-20 SS-21 SS-22 SS-23 SS-24 SS-25 SS-26 SS-27 SS-28 SS-29

ASPHALT DRIVE

CHAINLINK FENCE

RAILROAD TRACKS

CONC. RETAINING WALL

42" RCP

AOC-4

LEGEND

AREA OF CONCERN

SS-5 SURFICIAL SOIL SAMPLE LOCATION

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE – ALBANY, NEW YORK – 12205
518-453-4500

11205.1011.1102

DATE: OCTOBER, 2004

FIGURE 2

SURFICIAL SOIL SAMPLE LOCATION PLAN AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest\Figures\Figure2_AEC-surf-soil-11x17.dwg User: 330 10/28/2004 04:09 PM

Summary of Analytical Results for Subsurface Soils

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected[1]	Frequency of Samples Exceeding SCGs
VOCs (units in micrograms per kilogram (µg/kg))			
Acetone	200	34-3,500	4 of 21
Benzene	60	43-2,400	2 of 21
Carbon Disulfide	2,700	1.6-66	0 of 21
Chlorobenzene	1,700	13,000	1 of 21
Ethylbenzene	5,500	3.5-530	0 of 21
Methylene Chloride	100	2.6-67	0 of 21
Toluene	1,500	3.2-320	0 of 21
Tetrachloroethene	1,400	4.1-110	0 of 21
m/p-Xylene (Total)	1,200	1.1-4,900	2 of 21
o-Xylene	1,200	0.47-1300	1 of 21
SVOCs (units in micrograms per kilogram (µg/kg))			
Acenaphthylene	41,000	210-850	0 of 21
Acenaphthene	50,000	140-1400	0 of 21
Anthracene	50,000	62-3,200	0 of 21
Benzo(a)anthracene	224	130-11,000	13 of 21
Benzo(a)pyrene	61	96-12,000	11 of 21
Benzo(b)fluoranthene	1,100	85-19,000	5 of 21
Benzo(g,h,i)perylene	50,000	48-3,200	0 of 21
Benzo(k)fluoranthene	1,100	65-7,100	4 of 21
Bis(2-Ethylhexyl)phthalate	50,000	52-280	0 of 21
Carbazole		100-550	Detected in 4 of 21
Chrysene	400	160-11,000	10 of 21
Dibenz(a,h)anthracene	14	95-420	3 of 21
Dibenzofuran	6,200	59-160	of 21
Fluoranthene	50,000	250-12,000	of 21
Fluorene	50,000	49-1600	of 21
Indeno(1,2,3-cd)pyrene	3,200	73-1,800	0 of 21
2-Methylnapthalene	36,400	57-7,500	of 21
Naphthalene	13,000	91-340	0 of 21
Phenanthrene	50,000	180-8900	0 of 21
Pyrene	50,000	61-16,000	0 of 21
PCBs (units in micrograms per kilogram (µg/kg))			
Aroclor-1254	10,000	97-11,000	1 of 21
Aroclor-1260	10,000	60-340	0 of 21
METALS (units in milligrams per liter (mg/L))			

Arsenic	7.5	1.09-35.5	17 of 21
Barium	300	10.1-1,900	15 of 21
Cadmium	1	0.307-21.7	11 of 21
Chromium	10	4.17-1,730	13 of 21
Lead	500	16.4-17,200	12 of 21
Selenium	2	0.564-9.18	10 of 21
Silver		0.206-1.13	Detected in 7 of 21
Mercury	0.1	0.01-0.45	7 of 21

Note: 1. If a single value is noted, the referenced parameter was detected either only one time, or multiple times at the same concentration.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Volatile Organics											
Sample ID		TP-1S-1	TP-5S-1	TP-6S-1	TP-8S-1	TP-9S-1	TP-9S-1RE	TP-16S-1	TP-19S-1	TP-20S-1	TP-20S-1RE
Laboratory Sample No.		S3970-01	S3970-02	S3970-03	S3970-04	S3970-05	S3970-05RE	S3970-06	S3970-07	S3970-08	S3970-08RE
Sampling Date		08/02/04	08/02/04	08/02/04	08/03/04	08/03/04	08/03/04	08/03/04	08/04/04	08/04/04	08/04/04
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
COMPOUND											
Chloromethane		110 U	0.42 U	0.37 U	130 U	0.36 U	0.36 U	120 U	100 U	0.44 U	110 U
Vinyl Chloride	200	44 U	0.30 U	0.26 U	49 U	0.26 U	0.26 U	45 U	40 U	0.31 U	44 U
Bromomethane		130 U	0.90 U	0.80 U	140 U	0.77 U	0.77 U	130 U	120 U	0.94 U	130 U
Chloroethane	1,900	150 U	0.66 U	0.58 U	160 U	0.57 U	0.57 U	150 U	130 U	0.70 U	150 U
1,1-Dichloroethene	200	53 U	0.27 U	0.24 U	59 U	0.23 U	0.23 U	54 U	48 U	0.29 U	54 U
Acetone	200	540 U	34 J	8.4 U	610 U	8.1 U	8.1 U	3500 J	500 U	63	550 U
Carbon Disulfide	2,700	84 U	0.13 U	1.8 J	72 U	0.11 U	0.11 U	66 U	59 U	0.13 U	65 U
Methylene Chloride	100	100 U	4.4 J	4.5 J	110 U	2.6 J	1.8 J	110 U	94 U	0.91 U	100 U
trans-1,2-Dichloroethene	300	85 U	0.47 U	0.42 U	94 U	0.40 U	0.40 U	87 U	77 U	0.49 U	86 U
1,1-Dichloroethane	200	35 U	0.45 U	0.40 U	40 U	0.38 U	0.38 U	36 U	32 U	0.47 U	36 U
2-Butanone	300	470 U	2.9 U	2.6 U	520 U	2.5 U	2.5 U	480 U	430 U	3.0 U	470 U
Carbon Tetrachloride	600	77 U	0.38 U	0.33 U	86 U	0.32 U	0.32 U	79 U	71 U	0.40 U	78 U
cis-1,2-Dichloroethene		130 U	0.45 U	0.40 U	140 U	0.38 U	0.38 U	130 U	120 U	0.47 U	130 U
Chloroform	300	95 U	0.30 U	0.27 U	110 U	0.26 U	0.26 U	97 U	87 U	0.32 U	96 U
1,1,1-Trichloroethane	800	67 U	0.34 U	0.30 U	75 U	0.29 U	0.29 U	69 U	61 U	0.36 U	68 U
Benzene	60	40 U	0.26 U	0.23 U	44 U	0.22 U	0.22 U	2300	36 U	0.27 U	40 U
1,2-Dichloroethane	100	53 U	3.9 U	3.5 U	59 U	3.3 U	3.3 U	54 U	48 U	4.1 U	53 U
Trichloroethene	700	110 U	0.41 U	0.36 U	120 U	0.35 U	0.35 U	110 U	100 U	0.43 U	110 U
1,2-Dichloropropane		52 U	0.42 U	0.38 U	58 U	0.36 U	0.36 U	54 U	48 U	0.45 U	53 U
Bromodichloromethane		57 U	0.42 U	0.37 U	64 U	0.36 U	0.36 U	59 U	52 U	0.44 U	58 U
4-Methyl-2-Pentanone	1,000	220 U	3.0 U	2.7 U	240 U	2.6 U	2.6 U	220 U	200 U	3.2 U	220 U
Toluene	1,500	64 U	0.33 U	0.29 U	290 J	3.2 J	2.8 J	150 J	200 J	0.35 U	64 U
t-1,3-Dichloropropene		70 U	0.32 U	0.29 U	78 U	0.28 U	0.28 U	72 U	64 U	0.34 U	71 U
cis-1,3-Dichloropropene		25 U	0.25 U	0.22 U	28 U	0.21 U	0.21 U	26 U	23 U	0.26 U	25 U
1,1,2-Trichloroethane		85 U	0.64 U	0.57 U	95 U	0.55 U	0.55 U	87 U	78 U	0.67 U	86 U
2-Hexanone		110 U	4.0 U	3.6 U	120 U	3.5 U	3.5 U	110 U	99 U	4.3 U	110 U
Dibromochloromethane		62 U	0.37 U	0.33 U	69 U	0.32 U	0.32 U	64 U	57 U	0.39 U	63 U
Tetrachloroethene	1,400	54 U	0.80 U	0.71 U	61 U	0.69 U	0.69 U	56 U	50 U	9.6	55 U
Chlorobenzene	1,700	81 U	0.45 U	0.40 U	68 U	0.38 U	0.38 U	13000	55 U	0.47 U	61 U
Ethyl Benzene	5,500	67 U	0.32 U	0.28 U	530 J	0.27 U	0.27 U	69 U	420 J	0.33 U	68 U
m/p-Xylenes	1,200	560 J	0.65 U	1.1 J	4900	3.3 J	2.8 J	180 U	1200 J	0.69 U	180 U
o-Xylene	1,200	60 U	0.55 U	0.49 U	810 J	0.47 U	0.47 J	62 U	1300	0.58 U	81 U
Styrene		56 U	0.40 U	0.35 U	63 U	0.34 U	0.34 U	58 U	52 U	0.42 U	57 U
Bromoform		41 U	0.38 U	0.34 U	48 U	0.32 U	0.32 U	43 U	38 U	0.40 U	42 U
1,1,2,2-Tetrachloroethane	600	81 U	0.67 U	0.59 U	91 U	0.57 U	0.57 U	84 U	75 U	0.71 U	83 U
Total Confident Conc. VOC		560	38.4	7.2	6330	9.1	7.4	18950	3120	72.8	0
Total TICs		22400	0	385	235000	299	0	101300	99700	4140	0

Qualifiers & Notes:

U - **The compound** was not detected at the indicated concentration

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B **The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of** the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor

* For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Volatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-23S-1 S3970-09 06/04/04 1.0 ug/Kg	TP-24S-1 S3970-10 06/04/04 1.0 ug/Kg	TP-28S-1 S4063-01 06/08/04 1.0 ug/Kg	TP-30S-1 S4063-02 06/06/04 10.0 ug/Kg	TP-34S-1 S4063-03 06/06/04 1.0 ug/Kg	TP-35S-1 S4063-04 06/08/04 1.0 ug/Kg	TP-37S-1 S4063-05 06/06/04 5.0 ug/Kg	TP-38S-1 S4063-06 06/06/04 1.0 ug/Kg	TP-39S-1 S4063-07 06/06/04 1.0 ug/Kg	TP-41S-1 S4063-08 06/06/04 1.0 ug/Kg	TP-42S-1 S4063-09 06/06/04 1.0 ug/Kg
Chloromethane		120 U	0.48 U	0.40 U	3.9 U	0.39 U	0.41 U	2.0 U	0.43 U	0.39 U	0.42 U	0.41 U
Vinyl Chloride	200	48 U	0.34 U	0.28 U	2.8 U	0.28 U	0.29 U	1.4 U	0.31 U	0.28 U	0.30 U	0.29 U
Bromomethane		130 U	1.0 U	0.85 U	8.4 U	0.83 U	0.87 U	4.3 U	0.92 U	0.83 U	0.91 U	0.87 U
Chloroethane	1,900	150 U	0.76 U	0.63 U	6.2 U	0.62 U	0.65 U	3.2 U	0.68 U	0.62 U	0.67 U	0.65 U
1,1-Dichloroethene	200	55 U	0.31 U	0.26 U	2.6 U	0.25 U	0.27 U	1.3 U	0.28 U	0.25 U	0.28 U	0.27 U
Acetone	200	570 U	100	9.0 U	270 J	8.8 U	9.2 U	250 J	61 J	8.8 U	9.6 U	9.2 U
Carbon Disulfide	2,700	67 U	5.2 J	0.12 U	1.2 U	0.12 U	0.12 U	56	0.13 U	0.12 U	0.13 U	0.12 U
Methylene Chloride	100	110 U	4.3 J	0.82 U	8.1 U	0.80 U	0.84 U	4.1 U	0.88 U	0.80 U	0.87 U	0.84 U
trans-1,2-Dichloroethene	300	88 U	0.54 U	0.45 U	4.4 U	0.44 U	0.46 U	2.3 U	0.48 U	0.44 U	0.48 U	0.46 U
1,1-Dichloroethane	200	37 U	0.51 U	0.43 U	4.2 U	0.42 U	0.44 U	2.2 U	0.46 U	0.42 U	0.45 U	0.44 U
2-Butanone	300	480 U	16 J	2.7 U	27 U	2.7 U	2.8 U	14 U	3.0 U	2.7 U	2.9 U	2.8 U
Carbon Tetrachloride	600	80 U	0.43 U	0.36 U	3.5 U	0.35 U	0.37 U	1.8 U	0.39 U	0.35 U	0.38 U	0.37 U
cis-1,2-Dichloroethene		130 U	0.51 U	0.42 U	4.2 U	0.41 U	0.43 U	2.1 U	0.46 U	0.41 U	0.45 U	0.43 U
Chloroform	300	98 U	0.34 U	0.29 U	2.8 U	0.28 U	0.29 U	1.4 U	0.31 U	0.28 U	0.30 U	0.29 U
1,1,1-Trichloroethane	800	70 U	0.39 U	0.33 U	3.2 U	0.32 U	0.33 U	1.7 U	0.35 U	0.32 U	0.35 U	0.33 U
Benzene	60	41 U	0.29 U	0.24 U	43 J	0.24 U	0.25 U	1.2 U	0.26 U	0.24 U	0.26 U	0.25 U
1,2-Dichloroethane	100	55 U	4.5 U	3.7 U	37 U	3.6 U	3.8 U	19 U	4.0 U	3.6 U	3.9 U	3.8 U
Trichloroethene	700	110 U	0.48 U	0.39 U	3.8 U	0.38 U	0.40 U	2.0 U	0.42 U	0.38 U	0.41 U	0.40 U
1,2-Dichloropropane		54 U	0.49 U	0.40 U	4.0 U	0.39 U	0.41 U	2.0 U	0.44 U	0.39 U	0.43 U	0.41 U
Bromodichloromethane		60 U	0.48 U	0.40 U	4.0 U	0.39 U	0.41 U	2.0 U	0.43 U	0.39 U	0.43 U	0.41 U
4-Methyl-2-Pentanone	1,000	230 U	3.5 U	2.9 U	29 U	2.8 U	3.0 U	15 U	3.1 U	2.8 U	3.1 U	3.0 U
Toluene	1,500	66 U	0.38 U	0.31 U	320	0.30 U	0.32 U	1.6 U	0.34 U	0.30 U	0.33 U	0.32 U
t-1,3-Dichloropropene		73 U	0.37 U	0.31 U	3.0 U	0.30 U	0.32 U	1.6 U	0.33 U	0.30 U	0.33 U	0.32 U
cis-1,3-Dichloropropene		26 U	0.28 U	0.23 U	2.3 U	0.23 U	0.24 U	1.2 U	0.25 U	0.23 U	0.25 U	0.24 U
1,1,2-Trichloroethane		89 U	0.73 U	0.61 U	6.0 U	0.60 U	0.62 U	3.1 U	0.66 U	0.60 U	0.65 U	0.62 U
2-Hexanone		110 U	4.6 U	3.9 U	38 U	3.8 U	3.9 U	19 U	4.2 U	3.8 U	4.1 U	3.9 U
Dibromochloromethane		65 U	0.42 U	0.35 U	3.5 U	0.34 U	0.36 U	1.8 U	0.38 U	0.34 U	0.37 U	0.36 U
Tetrachloroethene	1,400	57 U	0.92 U	0.77 U	110	0.75 U	9.3	3.9 U	11	0.75 U	5.0 J	4.1 J
Chlorobenzene	1,700	63 U	0.51 U	0.42 U	4.2 U	0.41 U	0.43 U	2.1 U	0.46 U	0.41 U	0.45 U	0.43 U
Ethyl Benzene	5,500	70 U	0.36 U	0.30 U	350	0.29 U	0.31 U	1.5 U	0.32 U	0.29 U	0.32 U	3.5 J
m/p-Xylenes	1,200	170 U	0.74 U	0.62 U	970	0.60 U	0.63 U	3.1 U	0.67 U	0.60 U	0.66 U	3.1 J
o-Xylene	1,200	63 U	0.63 U	0.52 U	1100	0.51 U	0.53 U	2.6 U	0.56 U	0.51 U	0.55 U	2.6 J
Styrene		59 U	0.45 U	0.36 U	3.7 U	0.37 U	0.39 U	1.9 U	0.41 U	0.37 U	0.40 U	0.39 U
Bromoform		43 U	0.43 U	0.36 U	3.6 U	0.35 U	0.37 U	1.8 U	0.39 U	0.35 U	0.38 U	0.37 U
1,1,2,2-Tetrachloroethane	600	85 U	0.77 U	0.64 U	6.3 U	0.62 U	0.65 U	3.2 U	0.69 U	0.62 U	0.68 U	0.65 U
Total Confident Conc. VOC		0	125.5	0	3163	0	9.3	306	72	0	5	13.3
Total TICs		103700	0	0	22400	3551	2460	13520	2000	1980	7320	225

Qualifiers & Notes:

U - The compound was not detected at tha indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Volatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	AT-7S-1 S3697-01 07/29/04 1.0 ug/Kg	B-7(14-16) S4313-01 08/18/04 10.0 ug/Kg	B-7(14-16)RE S4313-01RE 08/18/04 10.0 ug/Kg	TRIPBLANK S4063-10 08/06/04 1.0 ug/L
Chloromethane		0.38 U	3.9 U	3.9 U	0.68 U
Vinyl Chloride	200	0.27 U	2.8 U	2.8 U	0.27 U
Bromomethane		0.82 U	8.4 U	8.4 U	0.78 U
Chloroethane	1,900	0.81 U	8.2 U	6.2 U	0.88 U
1,1-Dichloroethene	200	0.25 U	2.8 U	2.8 U	0.32 U
Acetone	200	8.7 U	420	360	3.3 U
Carbon Disulfide	2,700	0.12 U	1.2 U	1.2 U	0.39 U
Methylene Chloride	100	0.79 U	67	48 J	0.62 U
trans-1,2-Dichloroethene	300	0.43 U	4.4 U	4.4 U	0.51 U
1,1-Dichloroethane	200	0.41 U	4.2 U	4.2 U	0.22 U
2-Butanone	300	2.8 U	27 U	27 U	2.8 U
Carbon Tetrachloride	600	0.35 U	3.5 U	3.5 U	0.47 U
cis-1,2-Dichloroethene		0.41 U	4.2 U	4.2 U	0.77 U
Chloroform	300	0.28 U	2.8 U	2.8 U	0.58 U
1,1,1-Trichloroethane	800	0.32 U	3.2 U	3.2 U	0.41 U
Benzene	60	0.23 U	2.4 U	2.4 U	0.24 U
1,2-Dichloroethane	100	3.6 U	37 U	37 U	0.32 U
Trichloroethene	700	0.37 U	3.8 U	3.8 U	0.67 U
1,2-Dichloropropane		0.39 U	4.0 U	4.0 U	0.63 U
Bromodichloromethane		0.39 U	4.0 U	4.0 U	0.35 U
4-Methyl-2-Pentanone	1,000	2.8 U	29 U	29 U	1.3 U
Toluene	1,500	0.30 U	3.1 U	3.1 U	0.39 U
t-1,3-Dichloropropene		0.30 U	3.0 U	3.0 U	0.42 U
cis-1,3-Dichloropropene		0.23 U	2.3 U	2.3 U	0.15 U
1,1,2-Trichloroethene		0.59 U	6.0 U	6.0 U	0.52 U
2-Hexanone		3.7 U	38 U	38 U	0.66 U
Dibromochloromethane		0.34 U	3.5 U	3.5 U	0.38 U
Tetrachloroethene	1,400	0.74 U	7.8 U	7.8 U	0.33 U
Chlorobenzene	1,700	0.41 U	4.2 U	4.2 U	0.37 U
Ethyl Benzene	5,500	0.29 U	3.0 U	3.0 U	0.41 U
m/p-Xylenes	1,200	0.60 U	55 J	26 J	0.96 U
o-Xylene	1,200	0.50 U	5.1 U	5.1 U	0.37 U
Styrene		0.36 U	3.7 U	3.7 U	0.34 U
Bromoform		0.35 U	3.6 U	3.6 U	0.25 U
1,1,2,2-Tetrachloroethane	600	0.62 U	6.3 U	6.3 U	0.50 U
Total Confident Conc. VOC		0	542	434	0
Total TICs		18	16860	0	

Qualifiers & Notes

	The compound was not detected at the indicated concentration.
J -	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.
B -	The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
P -	For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
E -	Value exceeds calibration range.
D -	Compound identified in analysis at a secondary dilution factor.
-	For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** As per TAGM #4046 Total VOCs<10ppm, Total Semi-VOCs<500ppm and individual Semi-VOCs<50ppm.

1 Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-1S-1 S3970-01 08/02/04 1.0 ug/Kg	TP-1S-1RE S3970-01RE 08/02/04 1.0 ug/Kg	TP-5S-1 S3970-02 08/02/04 1.0 ug/Kg	TP-6S-1 S3970-03 08/02/04 1.0 ug/Kg	TP-6S-1DL S3970-03DL 08/02/04 5.0 ug/Kg	TP-8S-1 S3970-04 08/03/04 1.0 ug/Kg	TP-8S-1RE S3970-04RE 08/03/04 1.0 ug/Kg	TP-9S-1 S3970-05 08/03/04 1.0 ug/Kg	TP-9S-1RE S3970-05RE 08/03/04 1.0 ug/Kg	TP-16S-1 S3970-06 08/03/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		21 U	21 U	20 U	36 U	180 UD	48 U	48 U	180 U	160 U	220 U
1,2-Dichlorobenzene	7,900	23 U	23 U	22 U	40 U	200 UD	53 U	53 U	190 U	190 U	240 U
1,3-Dichlorobenzene	1,600	16 U	18 U	15 U	27 U	140 UD	38 U	36 U	130 U	130 U	160 U
1,4-Dichlorobenzene	8,500	16 U	18 U	17 U	31 U	150 UD	40 U	40 U	150 U	150 U	160 U
2,2-oxybis(1-Chloropropane)		23 U	23 U	22 U	40 U	200 UD	53 U	53 U	190 U	190 U	240 U
N-Nitroso-di-n-propylamine		19 U	19 U	18 U	32 U	160 UD	43 U	43 U	160 U	160 U	200 U
Hexachloroethane		21 U	21 U	20 U	35 U	180 UD	48 U	48 U	170 U	170 U	210 U
Nitrobenzene	200	22 U	22 U	21 U	37 U	190 UD	49 U	49 U	180 U	180 U	220 U
Isophorone	4,400	16 U	16 U	15 U	27 U	140 UD	38 U	36 U	130 U	130 U	160 U
bis(2-Chloroethoxy)methane		20 U	20 U	19 U	33 U	170 UD	44 U	44 U	160 U	160 U	200 U
1,2,4-Trichlorobenzene	3,400	12 U	12 U	12 U	21 U	110 UD	28 U	26 U	100 U	100 U	130 U
Naphthalene	13,000	9.4 U	9.4 U	91 J	18 U	80 UD	320 J	340 J	78 U	78 U	98 U
4-Chloroaniline	220 or MDL	160 U	160 U	150 U	270 U	1400 UD	360 U	360 U	1300 U	1300 U	1600 U
Hexachlorobutadiene		15 U	15 U	14 U	26 U	130 UD	34 U	34 U	130 U	130 U	160 U
2-Methylnaphthalene	36,400	57 J	54 J	7.1 U	13 U	63 UD	130 J	130 J	82 U	82 U	76 U
Hexachlorocyclopentadiene		11 U	11 U	10 U	18 U	92 UD	24 U	24 U	90 U	90 U	110 U
2-Chloronaphthalene		9.0 U	9.0 U	8.6 U	15 U	76 UD	20 U	20 U	75 U	75 U	92 U
2-Nitroaniline	430 or MDL	16 U	16 U	15 U	27 U	130 UD	35 U	35 U	130 U	130 U	160 U
Dimethylphthalate	2,000	10 U	10 U	9.9 U	18 U	88 UD	23 U	23 U	85 U	85 U	110 U
Acenaphthylene	41,000	13 U	13 U	12 U	850	640 JD	300 J	350 J	110 U	110 U	130 U
2,6-Dinitrotoluene	1,000	18 U	18 U	18 U	31 U	160 UD	41 U	41 U	150 U	150 U	190 U
3-Nitroaniline	500 or MDL	70 U	70 U	67 U	120 U	590 UD	160 U	160 U	580 U	580 U	710 U
Acenaphthene	50,000**	9.5 U	9.5 U	9.1 U	16 U	81 UD	780 J	760 J	79 U	79 U	98 U
Dibenzofuran	6,200	14 U	14 U	59 J	24 U	120 UD	150 J	160 J	120 U	120 U	150 U
2,4-Dinitrotoluene		8.6 U	8.6 U	8.2 U	15 U	73 UD	19 U	19 U	71 U	71 U	88 U
Diethylphthalate	71,000	14 U	14 U	13 U	23 U	120 UD	31 U	31 U	110 U	110 U	140 U
4-Chlorophenyl-phenylether		11 U	11 U	10 U	18 U	91 UD	24 U	24 U	89 U	89 U	110 U
Fluorene	50,000**	49 J	48 J	68 J	190 J	100 UD	910 J	830 J	100 U	100 U	130 U
4-Nitroaniline		34 U	34 U	32 U	57 U	290 UD	76 U	76 U	280 U	280 U	350 U
N-Nitrosodiphenylamine		11 U	11 U	10 U	19 U	93 UD	25 U	25 U	91 U	91 U	110 U
4-Bromophenyl-phenylether		11 U	11 U	11 U	19 U	96 UD	28 U	26 U	94 U	94 U	120 U
Hexachlorobenzene	410	8.1 U	8.1 U	7.7 U	14 U	69 UD	18 U	18 U	67 U	67 U	83 U
Phenanthrene	50,000**	240 J	230 J	1400	3300	2100 JD	4200 J	4300 J	80 U	80 U	1000 J
Anthracene	50,000**	62 J	69 J	100 J	710 J	570 JD	670 J	920 J	85 U	85 U	450 J
Carbazole		9.5 U	9.5 U	100 J	18 U	81 UD	420 J	460 J	79 U	79 U	98 U
Di-n-butylphthalate	8,100	5.7 U	5.7 U	5.5 U	9.8 U	49 UD	13 U	13 U	46 U	48 U	59 U
Fluoranthene	50,000**	250 J	250 J	2100	12000 EJ	4500 D	4400 J	6100 J	50 U	50 U	2100 J
Pyrene	50,000**	290 J	320 J	2400	7700 EJ	5200 D	6300	5600	64 U	380 J	2400 J
Butylbenzylphthalate	50,000**	14 U	14 U	14 U	25 U	120 UD	33 U	33 U	120 U	120 U	150 U
3,3-Dichlorobenzidine		69 U	89 U	68 U	120 U	590 UD	160 U	160 U	570 U	570 U	710 U
Benzo(a)anthracene	224 or MDL	130 J	130 J	630	3800	3100 JD	1400	1400	54 U	54 U	1600 J
Chrysene	400	150 J	160 J	1100	4000	3300 JD	2600	2700	110 U	110 U	2400 J
bis(2-Ethylhexyl)phthalate	50,000**	9.9 U	9.9 U	9.5 U	17 U	84 UD	22 U	22 U	82 U	82 U	100 U
Di-n-octyl phthalate	50,000**	10 U	10 U	9.9 U	18 U	88 UD	23 U	23 U	85 U	85 U	110 U
Benzo(b)fluoranthene	1,100	85 J	77 J	720	3700	2300 JD	1800	1400	190 U	190 U	2200 J
Benzo(k)fluoranthene	1,100	55 J	65 J	290 J	1400	990 JD	1700	1500	120 U	120 U	1000 J
Benzo(a)pyrene	61 or MDL	96 J	98 J	530	2500	1900 JD	1400	1400	62 U	62 U	1700 J
Indeno(1,2,3-cd)pyrene	3,200	73 J	50 J	460	530 J	1100 JD	23 U	130 J	87 U	87 U	1000 J
Dibenz(a,h)anthracene	14 or MDL	13 U	13 U	12 U	95 J	110 UD	28 U	26 U	100 U	100 U	130 U
Benzo(g,h,i)perylene	50,000**	48 J	19 U	340 J	500 J	760 JD	42 U	120 J	160 U	160 U	810 J
Total Confident Conc. SVOC		1565	1551	10368	21575	26480	27480	26600	0	360	16860
Total TICs		2670	0	2770	12300	0	69100	0	39100	0	100000

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range

D - Compound identified in analysis at a secondary dilution factor

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-19S-1 S3970-07 08/04/04 10.0 ug/Kg	TP-19S-1RE S3970-07RE 08/04/04 10.0 ug/Kg	TP-20S-1 S3970-08 08/04/04 1.0 ug/Kg	TP-23S-1 S3970-09 08/04/04 1.0 ug/Kg	TP-23S-1RE S3970-09RE 08/04/04 1.0 ug/Kg	TP-24S-1 S3970-10 08/04/04 1.0 ug/Kg	TP-24S-1RE S3970-10RE 08/04/04 1.0 ug/Kg	TP-28S-1 S4063-01 08/08/04 1.0 ug/Kg	TP-30S-1 S4063-02 08/08/04 5.0 ug/Kg	TP-34S-1 S4063-03 08/08/04 1.0 ug/Kg	TP-35S-1 S4063-04 08/08/04 1.0 ug/Kg
bis(2-Chloroethyl)ether		1900 U	1900 U	43 U	44 U	44 U	23 U	23 U	39 U	960 U	38 U	20 U
1,2-Dichlorobenzene	7,900	2100 U	2100 U	48 U	49 U	49 U	26 U	26 U	43 U	1100 U	42 U	22 U
1,3-Dichlorobenzene	1,600	1500 U	1500 U	32 U	33 U	33 U	17 U	17 U	29 U	720 U	29 U	15 U
1,4-Dichlorobenzene	8,500	1600 U	1600 U	36 U	36 U	36 U	20 U	20 U	33 U	810 U	32 U	17 U
2,2-oxybis(1-Chloropropane)		2100 U	2100 U	47 U	49 U	49 U	26 U	26 U	43 U	1100 U	42 U	22 U
N-Nitroso-di-n-propylamine		1700 U	1700 U	39 U	40 U	40 U	21 U	21 U	35 U	860 U	34 U	18 U
Hexachloroethane		1900 U	1900 U	42 U	43 U	43 U	23 U	23 U	38 U	930 U	37 U	19 U
Nitrobenzene	200	2000 U	2000 U	44 U	46 U	46 U	24 U	24 U	40 U	990 U	39 U	21 U
Isophorone	4,400	1500 U	1500 U	32 U	34 U	34 U	18 U	18 U	29 U	720 U	29 U	15 U
bis(2-Chloroethoxy)methane		1800 U	1800 U	40 U	41 U	41 U	22 U	22 U	36 U	890 U	35 U	18 U
1,2,4-Trichlorobenzene	3,400	1100 U	1100 U	25 U	26 U	26 U	14 U	14 U	23 U	560 U	22 U	12 U
Naphthalene	13,000	860 U	860 U	19 U	20 U	20 U	10 U	10 U	150 J	420 U	240 J	8.6 U
4-Chloroaniline	220 or MDL	15000 U	15000 U	320 U	330 U	330 U	180 U	180 U	290 U	7200 U	290 U	150 U
Hexachlorobutadiene		1400 U	1400 U	31 U	32 U	32 U	17 U	17 U	28 U	680 U	27 U	14 U
2-Methylnaphthalene	36,400	660 U	680 U	15 U	16 U	18 U	8.2 U	8.2 U	14 U	7500 J	110 J	7.0 U
Hexachlorocyclopentadiene		990 U	990 U	22 U	23 U	23 U	12 U	12 U	20 U	490 U	19 U	10 U
2-Chloronaphthalene		820 U	820 U	18 U	19 U	19 U	9.9 U	9.9 U	18 U	410 U	18 U	8.4 U
2-Nitroaniline	430 or MDL	1400 U	1400 U	32 U	33 U	33 U	17 U	17 U	29 U	710 U	28 U	15 U
Dimethylphthalate	2,000	940 U	940 U	21 U	22 U	22 U	11 U	11 U	19 U	460 U	19 U	9.7 U
Acenaphthylene	41,000	1200 U	1200 U	26 U	27 U	27 U	14 U	14 U	280 J	580 U	210 J	12 U
2,6-Dinitrotoluene	1,000	1700 U	1700 U	37 U	38 U	38 U	20 U	20 U	34 U	830 U	33 U	17 U
3-Nitroaniline	500 or MDL	6400 U	8400 U	140 U	150 U	150 U	77 U	77 U	130 U	3100 U	130 U	65 U
Acenaphthene	50,000**	870 U	870 U	19 U	20 U	20 U	10 U	10 U	170 J	430 U	140 J	8.9 U
Dibenzofuran	6,200	1300 U	1300 U	29 U	30 U	30 U	16 U	16 U	140 J	640 U	28 U	13 U
2,4-Dinitrotoluene		790 U	790 U	17 U	18 U	18 U	9.5 U	9.5 U	16 U	390 U	15 U	8.1 U
Diethylphthalate	71,000	1200 U	1200 U	27 U	28 U	28 U	15 U	15 U	25 U	610 U	24 U	13 U
4-Chlorophenyl-phenylether		980 U	980 U	22 U	22 U	22 U	12 U	12 U	20 U	480 U	19 U	10 U
Fluorene	50,000**	1100 U	1100 U	25 U	26 U	26 U	13 U	13 U	160 J	550 U	280 J	11 U
4-Nitroaniline		3100 U	3100 U	88 U	71 U	71 U	37 U	37 U	62 U	1500 U	61 U	32 U
N-Nitrosodiphenylamine		1000 U	1000 U	22 U	23 U	23 U	12 U	12 U	20 U	490 U	20 U	10 U
4-Bromophenyl-phenylether		1000 U	1000 U	23 U	24 U	24 U	12 U	12 U	21 U	510 U	20 U	11 U
Hexachlorobenzene	410	740 U	740 U	16 U	17 U	17 U	8.9 U	8.9 U	15 U	380 U	15 U	7.6 U
Phenanthrene	50,000**	880 U	880 U	450 J	340 J	320 J	11 U	11 U	2700	5100 J	740 J	9.1 U
Anthracene	50,000**	940 U	940 U	95 J	22 U	91 J	11 U	11 U	590 J	460 U	290 J	9.7 U
Carbazole		870 U	870 U	19 U	20 U	20 U	10 U	10 U	410 J	430 U	17 U	8.9 U
Di-n-butylphthalate	8,100	520 U	520 U	12 U	12 U	12 U	6.3 U	6.3 U	10 U	260 U	10 U	5.4 U
Fluoranthene	50,000**	550 U	550 U	510 J	510 J	530 J	8.6 U	6.8 U	4900	270 U	2900	5.8 U
Pyrene	50,000**	700 U	700 U	850 J	630 J	650 J	8.5 U	8.5 U	4900	350 U	3100	61 J
Butylbenzylphthalate	50,000**	1300 U	1300 U	29 U	30 U	30 U	16 U	16 U	26 U	650 U	26 U	14 U
3,3-Dichlorobenzidine		6300 U	6300 U	140 U	140 U	140 U	76 U	76 U	130 U	3100 U	120 U	65 U
Benzo(a)anthracene	224 or MDL	590 U	590 U	290 J	330 J	320 J	7.2 U	7.2 U	3100	2500 J	1100	6.1 U
Chrysene	400	1200 U	1200 U	360 J	430 J	410 J	15 U	15 U	2600	3800 J	1100	13 U
bis(2-Ethylhexyl)phthalate	50,000**	900 U	900 U	20 U	21 U	21 U	11 U	11 U	140 J	450 U	130 J	76 J
Di-n-octyl phthalate	50,000**	940 U	940 U	21 U	22 U	22 U	11 U	11 U	19 U	480 U	19 U	9.7 U
Benzo(b)fluoranthene	1,100	2100 U	2100 U	260 J	450 J	480 J	25 U	25 U	2600	1000 U	1000	22 U
Benzo(k)fluoranthene	1,100	1300 U	1300 U	110 J	210 J	210 J	16 U	16 U	1300	670 U	370 J	14 U
Benzo(a)pyrene	61 or MDL	680 U	680 U	220 J	330 J	350 J	8.2 U	8.2 U	2100	340 U	580 J	7.0 U
Indeno(1,2,3-cd)pyrene	3,200	950 U	950 U	21 U	120 J	22 U	11 U	11 U	1200	470 U	310 J	9.6 U
Dibenz(a,h)anthracene	14 or MDL	1200 U	1200 U	26 U	26 U	26 U	14 U	14 U	180 J	570 U	23 U	12 U
Benzo(g,h,i)perylene	50,000**	1700 U	1700 U	36 U	110 J	100 J	21 U	21 U	1100	850 U	280 J	18 U
Total Confident Conc. SVOC		0	0	2945	3460	3461	0	0	26720	18900	12660	137
Total TICs		7900	0	4900	39400	0	590	0	7580	260000	7590	9130

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor

' For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-37S-1 S4063-05 08/06/04 1.0 ug/Kg	TP-38S-1 S4063-06 08/06/04 1.0 ug/Kg	TP-39S-1 S4063-07 08/06/04 1.0 ug/Kg	TP-41S-1 S4063-08 08/06/04 1.0 ug/Kg	TP-42S-1 S4063-09 08/06/04 1.0 ug/Kg	AT-7S-1 S3897-01 07/29/04 1.0 ug/Kg	B-7(14-16) S4313-01 08/16/04 2.0 ug/Kg	B-7(14-16)DL S4313-01RE 08/16/04 10.0 ug/Kg
bis(2-Chloroethyl)ether		20 U	42 U	19 U	21 U	40 U	190 U	77 U	390 UD
1,2-Dichlorobenzene	7,900	22 U	46 U	21 U	23 U	44 U	210 U	85 U	430 UD
1,3-Dichlorobenzene	1,600	15 U	31 U	14 U	16 U	30 U	140 U	58 U	290 UD
1,4-Dichlorobenzene	8,500	17 U	35 U	16 U	18 U	34 U	160 U	65 U	330 UD
2,2-oxybis(1-Chloropropane)		22 U	46 U	21 U	23 U	44 U	210 U	85 U	420 UD
N-Nitroso-di-n-propylamine		18 U	37 U	17 U	19 U	36 U	170 U	69 U	340 UD
Hexachloroethane		19 U	40 U	18 U	20 U	39 U	180 U	75 U	370 UD
Nitrobenzene	200	20 U	43 U	19 U	22 U	41 U	190 U	79 U	400 UD
Isophorone	4,400	15 U	32 U	14 U	16 U	30 U	140 U	58 U	290 UD
bis(2-Chloroethoxy)methane		18 U	39 U	17 U	19 U	37 U	180 U	71 U	360 UD
1,2,4-Trichlorobenzene	3,400	12 U	24 U	11 U	12 U	23 U	110 U	45 U	220 UD
Naphthalene	13,000	8.7 U	110 J	8.3 U	9.2 U	18 U	84 U	490 J	170 UD
4-Chloroaniline	220 or MDL	150 U	310 U	140 U	160 U	300 U	1400 U	580 U	2900 UD
Hexachlorobutadiene		14 U	30 U	13 U	15 U	28 U	130 U	55 U	270 UD
2-Methylnaphthalene	36,400	8.9 U	190 J	8.6 U	7.3 U	14 U	66 U	300 J	130 UD
Hexachlorocyclopentadiene		10 U	21 U	9.6 U	11 U	20 U	96 U	39 U	200 UD
2-Chloronaphthalene		8.4 U	16 U	8.0 U	8.8 U	17 U	80 U	33 U	160 UD
2-Nitroaniline	430 or MDL	15 U	31 U	14 U	15 U	29 U	140 U	57 U	280 UD
Dimethylphthalate	2,000	9.6 U	20 U	9.1 U	10 U	19 U	92 U	37 U	190 UD
Acenaphthylene	41,000	12 U	25 U	11 U	13 U	24 U	110 U	47 U	230 UD
2,6-Dinitrotoluene	1,000	17 U	36 U	16 U	18 U	34 U	160 U	67 U	330 UD
3-Nitroaniline	500 or MDL	65 U	140 U	62 U	68 U	130 U	620 U	250 U	1300 UD
Acenaphthene	50,000**	8.8 U	19 U	8.4 U	9.3 U	18 U	85 U	1400 J	1500 JD
Dibenzofuran	6,200	13 U	28 U	13 U	14 U	27 U	130 U	51 U	260 UD
2,4-Dinitrotoluene		8.0 U	17 U	7.6 U	8.5 U	16 U	77 U	31 U	160 UD
Diethylphthalate	71,000	13 U	27 U	12 U	13 U	25 U	120 U	49 U	250 UD
4-Chlorophenyl-phenylether		9.9 U	21 U	9.5 U	10 U	20 U	95 U	39 U	190 UD
Fluorene	50,000**	11 U	24 U	11 U	12 U	23 U	110 U	1800	1800 JD
4-Nitroaniline		31 U	66 U	30 U	33 U	63 U	300 U	120 U	610 UD
N-Nitrosodiphenylamine		10 U	22 U	9.7 U	11 U	21 U	97 U	40 U	200 UD
4-Bromophenyl-phenylether		11 U	22 U	10 U	11 U	21 U	100 U	41 U	210 UD
Hexachlorobenzene	410	7.5 U	16 U	7.2 U	7.9 U	15 U	72 U	29 U	150 UD
Phenanthrene	50,000**	9.0 U	180 J	8.6 U	9.5 U	410 J	86 U	8900	10000 D
Anthracene	50,000**	9.6 U	20 U	9.1 U	10 U	120 J	92 U	3200	3300 JD
Carbazole		8.8 U	19 U	8.4 U	9.3 U	18 U	85 U	550 J	170 UD
Di-n-butylphthalate	8,100	5.3 U	11 U	5.1 U	5.6 U	11 U	51 U	21 U	100 UD
Fluoranthene	50,000**	5.6 U	12 U	5.3 U	5.9 U	500 J	420 J	11000	18000 D
Pyrene	50,000**	7.1 U	15 U	6.8 U	7.6 U	500 J	670 J	16000 E	18000 D
Butylbenzylphthalate	50,000**	13 U	28 U	13 U	14 U	27 U	130 U	52 U	260 UD
3,3-Dichlorobenzidine		64 U	140 U	61 U	68 U	130 U	620 U	260 J	1300 UD
Benzo(a)anthracene	224 or MDL	6.1 U	13 U	5.8 U	6.4 U	240 J	58 U	11000	14000 D
Chrysene	400	13 U	120 J	12 U	13 U	270 J	120 U	11000	13000 D
bis(2-Ethylhexyl)phthalate	50,000**	44 J	19 U	52 J	74 J	19 U	86 U	280 J	180 UD
Di-n-octyl phthalate	50,000**	9.8 U	20 U	9.1 U	10 U	19 U	92 U	37 U	190 UD
Benzo(b)fluoranthene	1,100	21 U	45 U	20 U	23 U	200 J	200 U	19000 E	18000 D
Benzo(k)fluoranthene	1,100	14 U	29 U	13 U	14 U	100 J	130 U	7100	7500 JD
Benzo(a)pyrene	61 or MDL	6.9 U	15 U	6.6 U	7.3 U	170 J	66 U	12000	12000 D
Indeno(1,2,3-cd)pyrene	3,200	9.7 U	20 U	9.3 U	10 U	90 J	93 U	1800	2200 JD
Dibenz(a,h)anthracene	14 or MDL	12 U	25 U	11 U	12 U	24 U	110 U	420 J	230 UD
Benzo(g,h,i)perylene	50,000**	17 U	37 U	17 U	18 U	35 U	170 U	3200	3300 JD
Total Confident Conc. SVOC		44	600	52	74	2600	1090	109500	122600
Total TICs		6660	16200	4970	4450	2050	5410	53600	0

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046. Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Clean-up Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-1S-1 S3970-01 08/02/04 1.0 ug/Kg	TP-5S-1 S3970-02 08/02/04 1.0 ug/Kg	TP-6S-1 S3970-03 08/02/04 1.0 ug/Kg	TP-8S-1 S3970-04 08/03/04 1.0 ug/Kg	TP-8S-1DL S3970-04DL 08/03/04 100.0 ug/Kg	TP-9S-1 S3970-05 08/03/04 1.0 ug/Kg	TP-9S-1DL S3970-05DL 08/03/04 10.0 ug/Kg	TP-16S-1 S3970-06 08/03/04 1.0 ug/Kg	TP-16S-1DL S3970-06DL 08/03/04 100.0 ug/Kg	TP-19S-1 S3970-07 08/04/04 1.0 ug/Kg
Aroclor-1016	10,000	6.8 U	6.5 U	5.8 U	7.8 U	760 UD	5.6 U	56 UD	7.0 U	700 UD	6.2 U
Aroclor-1221	10,000	4.6 U	4.4 U	3.9 U	5.2 U	520 UD	3.8 U	38 UD	4.7 U	470 UD	4.2 U
Aroclor-1232	10,000	3.1 U	3.0 U	2.7 U	3.5 U	350 UD	2.6 U	28 UD	3.2 U	320 UD	2.8 U
Aroclor-1242	10,000	4.0 U	3.9 U	3.4 U	4.5 U	450 UD	3.3 U	33 UD	4.1 U	410 UD	3.7 U
Aroclor-1248	10,000	4.8 U	4.6 U	4.1 U	5.4 U	540 UD	3.9 U	39 UD	4.9 U	490 UD	4.3 U
Aroclor-1254	10,000	1.8 U	1.7 U	1.5 U	11000 EP	6000 DP	1000 EJ	390 DPJ	5700 EP	2400 DP	1.6 U
Aroclor-1260	10,000	3.8 U	3.7 U	60	4.3 U	430 UD	3.2 U	32 UD	3.9 U	390 UD	3.5 U
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Mercury	0.1	0.17 J	0.36 J	0.23 J	0.09 J	NA	0.01 J	NA	0.06 J	NA	0.22 J
Arsenic	7.5 or SB/(5.89)	6.810	7.500	10.7	35.5	NA	1.090 J	NA	15.5	NA	8.830
Barium	300 or SB/(52.5)	77.5	103	81.2	778	NA	10.1 J	NA	48.1	NA	325
Cadmium	1 or SB/(1.93)	3.090	2.330	4.350	21.7	NA	0.356 J	NA	3.880	NA	3.260
Chromium	10 or SB/(15.8)	14.4	9.830	33.7	1730	NA	4.170	NA	33.8	NA	54.3
Lead	SB/(87.9)	155	229	445	17200 D	NA	21.3	NA	104	NA	303
Selenium	2 or SB/(1.25)	1.220 J	0.857 J	1.310	9.180	NA	0.341 U	NA	2.480	NA	0.711 J
Silver	SB/(0.117)	0.385 J	0.133 U	0.640 J	40.6	NA	0.115 U	NA	1.090 J	NA	0.128 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and individual Semi-VOCs<50ppm.

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

PCBs and Metals Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-20S-1 S3970-08 08/04/04 1.0 ug/Kg	TP-23S-1 S3970-09 08/04/04 1.0 ug/Kg	TP-24S-1 S3970-10 08/04/04 1.0 ug/Kg	TP-28S-1 S4063-01 08/08/04 1.0 ug/Kg	TP-30S-1 S4063-02 08/08/04 1.0 ug/Kg	TP-34S-1 S4063-03 08/08/04 1.0 ug/Kg	TP-35S-1 S4083-04 08/08/04 1.0 ug/Kg	TP-37S-1 S4083-05 08/06/04 1.0 ug/Kg	TP-38S-1 S4063-06 08/06/04 1.0 ug/Kg	TP-39S-1 S4063-07 08/08/04 1.0 ug/Kg	TP-41S-1 S4063-08 08/06/04 1.0 ug/Kg
Aroclor-1016	10,000	6.8 U	7.1 U	7.4 U	6.2 U	6.1 UJ	6.0 UJ	6.4 UJ	6.3 UJ	6.7 UJ	6.0 UJ	6.5 UJ
Aroclor-1221	10,000	4.7 U	4.8 U	5.1 U	4.2 U	4.2 UJ	4.1 UJ	4.4 UJ	4.3 UJ	4.5 UJ	4.1 UJ	4.5 UJ
Aroclor-1232	10,000	3.2 U	3.3 U	3.4 U	2.9 U	2.8 UJ	2.8 UJ	3.0 UJ	2.9 UJ	3.1 UJ	2.8 UJ	3.0 UJ
Aroclor-1242	10,000	4.1 U	4.2 U	4.4 U	3.7 U	3.6 UJ	3.6 UJ	3.8 UJ	3.7 UJ	4.0 UJ	3.6 UJ	3.9 UJ
Aroclor-1248	10,000	4.8 U	5.0 U	5.2 U	4.4 U	4.3 UJ	4.2 UJ	4.5 UJ	4.4 UJ	4.7 UJ	4.2 UJ	4.6 UJ
Aroclor-1254	10,000	1.8 U	97 PJ	1.9 U	1.6 U	1.6 UJ	1.6 UJ	1.7 UJ	1.6 UJ	1.7 UJ	1.6 UJ	1.7 UJ
Aroclor-1260	10,000	3.9 U	4.0 U	4.2 U	180 PJ	3.5 UJ	3.4 UJ	3.6 UJ	3.5 UJ	3.8 UJ	3.4 UJ	3.7 UJ
Units COMPOUND				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Mercury	0.1	0.45 J	0.01 U	0.03 J	0.01	1.4	0.17	0.03	0.06	0.05	0.03	0.04
Arsenic	7.5 or SB/(5.89)	14.9	12.2	5.800	6.020	16.6	5.550	7.670	8.430	6.790	6.350	8.700
Barium	300 or SB/(52.5)	66.3	326	70.9	177	1900	147	33.8	52.7	59.2	50.5	45.7
Cadmium	1 or SB/(1.93)	13.5	3.020	2.330	0.684	7.220	1.760	1.260	0.652	1.030	0.733	1.370
Chromium	10 or SB/(15.8)	55.5	19.8	18.8	13.6	85.0	89.5	36.2	14.0	17.1	13.0	18.3
Lead	SB/(87.9)	199	137	16.4	244	2930	518	31.1	17.5	55.4	43.1	23.7
Selenium	2 or SB/(1.25)	3.450	2.040	0.916 J	1.920	2.250	1.240	1.690	1.010 J	0.584 J	0.831 J	2.070
Silver	SB/(0.117)	1.130 J	0.144 U	0.206 J	0.124 U	0.124 U	0.123 U	0.130 U	0.126 U	0.137 U	0.122 U	0.134 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.
B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
E - Value exceeds calibration range.
D - Compound identified in analysis at a secondary dilution factor
- For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference
NA-not analyzed
MDL - Method Detection Limit
** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Semi-VOCs<50ppm.
1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil.

Table 2. Subsurface Soil Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard

PCBs and Metals Sample ID Laboratory Sample No Sampling Date Dilution Factor Units COMPOUND	NYSDEC Recommended Soil Cleanup Objective Concentration[1]	TP-42S-1 S4063-09 08/08/04 1.0 ug/Kg	AT-7S-1 S3897-01 07/29/04 1.0 ug/Kg	B-7(14-16) S4313-01 8/18/04 1.0 ug/Kg
Aroclor-1016	10,000	6.4 UJ	6.0 U	6.2 U
Aroclor-1221	10,000	4.4 UJ	4.1 U	4.2 U
Aroclor-1232	10,000	3.0 UJ	2.8 U	2.8 U
Aroclor-1242	10,000	3.8 UJ	3.6 U	3.7 U
Aroclor-1248	10,000	4.5 UJ	4.2 U	4.3 U
Aroclor-1254	10,000	1.7 UJ	1.8 U	1.6 U
Aroclor-1260	10,000	3.6 UJ	3.4 U	340
Units COMPOUND		mg/Kg	mg/Kg	mg/Kg
Mercury	0.1	0.01 U	0.01 UJ	0.01 U
Arsenic	7.5 or SB/(5.89)	8.140	18.8	0.308 J
Barium	300 or SB/(52.5)	126	75.7	11.4 J
Cadmium	1 or SB/(1.93)	0.712	2.260	0.307 J
Chromium	10 or SB/(15.8)	8.880	29.2	5.840 J
Lead	SB/(67.9)	71.1	119	26.8
Selenium	2 or SB/(1.25)	1.020 J	2.690	1.200 J
Silver	SB/(0.117)	0.127 U	0.777 J	0.125 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%

E - Value exceeds calibration range.

D - Compound identified in analysis at a secondary dilution factor.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

MDL - Method Detection Limit

** - As per TAGM #4046, Total VOCs<10ppm., Total Semi-VOCs<500ppm., and Individual Se

1. Shaded values exceed TAGM 4046 Recommended Cleanup Objectives for Subsurface Soil

OIL STORAGE FACILITY

AOC-1

HUDSON RIVER

DELAVAL PROPERTY LINE (TYP.)

AOC-2

BURIED TANK

APPROXIMATE LOCATION OF FUEL LINE

FORMER WASTEWATER TREATMENT PLANT

HUDSON RIVER

AOC-4

LEGEND

AREA OF CONCERN

TP-1 — ENVIRONMENTAL EXPLORATORY TEST PIT

AT-1 — ARCHEOLOGICAL TEST PIT

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CHA DRAWING COPYRIGHT © 2004

CLOUGH, HARBOUR & ASSOCIATES LLP

ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

III WINNERS CIRCLE – ALBANY, NEW YORK – 12205

518-453-4500

11205.1011.1102

DATE: OCTOBER, 2004

FIGURE 3

TEST PIT LOCATION PLAN AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY

CITY OF POUGHKEEPSIE

DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest\Figures\Figure3_AEC-testpits-11x17.dwg User: 330 10/28/2004 04:12 PM

Summary of Analytical Results for Groundwater

Contaminant of Concern	Standard, Criteria and Guidance Value	Concentration Range Detected[1]	Frequency of Samples Exceeding SCGs
VOCs (units in micrograms per kilogram (µg/kg))			
cis-1,2-Dichloroethene	5	49	1 of 8
Trichloroethene	5	5.0	1 of 8
SVOCs (units in micrograms per kilogram (µg/kg))			
Acenaphthene	20[2]	2.6	0 of 8
Bis(2-Ethylhexyl)phthalate	5	1.2-1.8	0 of 8
Di-n-butylphthalate	50[2]	3.9	0 of 8
Fluorene	50[2]	2.2	0 of 8
Naphthalene	10	1.5	0 of 8
Phenanthrene	50[2]	1.1	0 of 8
PCBs (units in micrograms per kilogram (µg/kg))			
Aroclor-1260	0.09	4.7	1 of 8
METALS (units in milligrams per liter (mg/L))			
Barium	1,000	16.1-204	0 of 8
Chromium	50	1.8-3.1	0 of 8
Lead	25	21-39.2	1 of 8
Mercury	0.7	0.03-0.08	0 of 8

Note: 1. If a single value is noted, the referenced parameter was detected either only one time, or multiple times at the same concentration.

2. Indicates value is a guidance value rather than a standard.

Table 3. Ground Water Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Volatile Organics Sample ID Sampling Date Dilution Factor Units COMPOUND	TOGS 1.1.1 Standard or Guidance Value[1]	MW-1 S4507-01 09/01/04 1.0 ug/L	CHA-1 S4507-02 09/01/04 1.0 ug/L	CHA-2 S4507-03 09/01/04 1.0 ug/L	CHA-2 S5229-01 10/15/2004 1.0 ug/L	CHA-3 S4507-04 09/01/04 1.0 ug/L	CHA-4 S4507-07 09/01/04 1.0 ug/L	CHA-5 S4507-08 09/01/04 1.0 ug/L	CHA-6 S4507-09 09/01/04 1.0 ug/L	CHA-10 S4507-10 09/01/04 1.0 ug/L	TRIPBLANK S4507-11 09/01/04 1.0 ug/L
Chloromethane		0.68 U	0.68 U	0.68 U	NA	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Vinyl Chloride	2	0.27 U	0.27 U	0.27 U	NA	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Bromomethane	5	0.78 U	0.78 U	0.78 U	NA	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Chloroethane	5	0.88 U	0.88 U	0.88 U	NA	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
1,1-Dichloroethene	5	0.32 U	0.32 U	0.32 U	NA	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Acetone	50[2]	3.3 U	3.3 U	3.3 U	NA	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Carbon Disulfide		0.39 U	0.39 U	0.39 U	NA	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Methylene Chloride	5	0.62 U	0.62 U	0.62 U	NA	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
trans-1,2-Dichloroethene	5	0.51 U	0.51 U	0.51 U	NA	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,1-Dichloroethane	5	0.22 U	0.22 U	0.22 U	NA	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
2-Butanone		2.8 U	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Carbon Tetrachloride	5	0.47 U	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
cis-1,2-Dichloroethene	5	0.77 U	0.77 U	0.77 U	NA	0.77 U	49	0.77 U	0.77 U	0.77 U	0.77 U
Chloroform	7	0.58 U	0.58 U	0.58 U	NA	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
1,1,1-Trichloroethane	5	0.41 U	0.41 U	0.41 U	NA	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Benzene	0.7	0.24 U	0.24 U	0.24 U	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloroethane	0.6	0.32 U	0.32 U	0.32 U	NA	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Trichloroethene	5	0.67 U	5.0	0.67 U	NA	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-Dichloropropane	1	0.63 U	0.63 U	0.63 U	NA	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Bromodichloromethane	50[2]	0.35 U	0.35 U	0.35 U	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
4-Methyl-2-Pentanone		1.3 U	1.3 U	1.3 U	NA	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Toluene	5	0.39 U	0.39 U	0.39 U	NA	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
t-1,3-Dichloropropene	0.4	0.42 U	0.42 U	0.42 U	NA	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
cis-1,3-Dichloropropene	0.4	0.15 U	0.15 U	0.15 U	NA	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1,2-Trichloroethane	1	0.52 U	0.52 U	0.52 U	NA	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
2-Hexanone	50[2]	0.66 U	0.66 U	0.66 U	NA	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Dibromochloromethane	50[2]	0.38 U	0.38 U	0.38 U	NA	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Tetrachloroethene	5	0.33 U	0.33 U	0.33 U	NA	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chlorobenzene	5	0.37 U	0.37 U	0.37 U	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Ethyl Benzene	5	0.41 U	0.41 U	0.41 U	NA	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
m/p-Xylenes	5	0.96 U	0.96 U	0.96 U	NA	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
o-Xylene	5	0.37 U	0.37 U	0.37 U	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Styrene	5	0.34 U	0.34 U	0.34 U	NA	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Bromoform	50[2]	0.25 U	0.25 U	0.25 U	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	5	0.50 U	0.50 U	0.50 U	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Total Confident Conc. VOC		0	5	0		0	49	0	0	0	0
Total TICs		0	0	19		0	0	0	0	0	0

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

1. Shaded values exceed TOGS 1.1.1 Standard or Guidance Value for Class GA Groundwater.

2. Indicates value is a guidance value rather than a standard.

Table 3. Ground Water Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Semivolatile Organics Sample ID Laboratory Sample No. Sampling Date Dilution Factor Units COMPOUND	TOGS 1.1.1 Standard or Guidance Value[1]	MW-1 S4507-01 09/01/04 1.0 ug/L	CHA-1 S4507-02 09/01/04 1.0 ug/L	CHA-2 S4507-03 09/01/04 1.0 ug/L	CHA-2 S5229-01 10/15/2004 1.0 ug/L	CHA-3 S4507-04 09/01/04 1.0 ug/L	CHA-4 S4507-07 09/01/04 1.0 ug/L	CHA-5 S4507-08 09/01/04 1.0 ug/L	CHA-6 S4507-09 09/01/04 1.0 ug/L	CHA-10 S4507-10 09/01/04 1.0 ug/L
bis(2-Chloroethyl)ether	1	0.330 U	0.330 U	0.330 U	NA	0.330 U	0.330 U	0.330 U	0.330 U	0.330 U
1,2-Dichlorobenzene	3	0.590 U	0.590 U	0.590 U	NA	0.590 U	0.590 U	0.590 U	0.590 U	0.590 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	0.670 U	0.680 U	0.680 U	NA	0.670 U	0.670 U	0.680 U	0.670 U	0.670 U
2,2-oxybis(1-Chloropropane)		0.830 U	0.840 U	0.840 U	NA	0.830 U	0.830 U	0.840 U	0.830 U	0.830 U
N-Nitroso-di-n-propylamine		0.770 U	0.770 U	0.770 U	NA	0.770 U	0.770 U	0.770 U	0.770 U	0.770 U
Hexachloroethane	5	0.910 U	0.920 U	0.920 U	NA	0.910 U	0.910 U	0.920 U	0.910 U	0.910 U
Nitrobenzene	0.4	0.380 U	0.380 U	0.380 U	NA	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U
Isophorone	50[2]	0.480 U	0.480 U	0.480 U	NA	0.480 U	0.480 U	0.480 U	0.480 U	0.480 U
bis(2-Chloroethoxy)methane	5	0.440 U	0.450 U	0.450 U	NA	0.440 U	0.440 U	0.450 U	0.440 U	0.440 U
1,2,4-Trichlorobenzene	5	0.410 U	0.410 U	0.410 U	NA	0.410 U	0.410 U	0.410 U	0.410 U	0.410 U
Naphthalene	10	0.270 U	0.270 U	1.5 J	NA	0.270 U	0.270 U	0.270 U	0.270 U	0.270 U
4-Chloroaniline	5	4.1 U	4.1 U	4.1 U	NA	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Hexachlorobutadiene	0.5	0.380 U	0.380 U	0.380 U	NA	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U
2-Methylnaphthalene	50[2]	0.500 U	0.500 U	0.500 U	NA	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Hexachlorocyclopentadiene	5	0.450 U	0.460 U	0.460 U	NA	0.450 U	0.450 U	0.460 U	0.450 U	0.450 U
2-Chloronaphthalene	10[2]	0.390 U	0.390 U	0.390 U	NA	0.390 U	0.390 U	0.390 U	0.390 U	0.390 U
2-Nitroaniline	5	0.300 U	0.300 U	0.300 U	NA	0.300 U	0.300 U	0.300 U	0.300 U	0.300 U
Dimethylphthalate	50[2]	0.260 U	0.260 U	0.260 U	NA	0.260 U	0.260 U	0.260 U	0.260 U	0.260 U
Acenaphthylene	20	0.430 U	0.440 U	0.440 U	NA	0.430 U	0.430 U	0.440 U	0.430 U	0.430 U
2,6-Dinitrotoluene	5	0.410 U	0.420 U	0.420 U	NA	0.410 U	0.410 U	0.420 U	0.410 U	0.410 U
3-Nitroaniline	5	1.0 U	1.1 U	1.1 U	NA	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U
Acenaphthene	20[2]	0.240 U	0.240 U	0.240 U	NA	0.240 U	0.240 U	0.240 U	2.6 J	0.240 U
Dibenzofuran		0.310 U	0.320 U	0.320 U	NA	0.310 U	0.310 U	0.320 U	0.310 U	0.310 U
2,4-Dinitrotoluene	5	0.340 U	0.340 U	0.340 U	NA	0.340 U	0.340 U	0.340 U	0.340 U	0.340 U
Diethylphthalate	50[2]	0.340 U	0.340 U	0.340 U	NA	0.340 U	0.340 U	0.340 U	0.340 U	0.340 U
4-Chlorophenyl-phenylether		0.360 U	0.370 U	0.370 U	NA	0.360 U	0.360 U	0.370 U	0.360 U	0.360 U
Fluorene	50[2]	0.170 U	0.170 U	0.170 U	NA	0.170 U	0.170 U	0.170 U	2.2 J	0.170 U
4-Nitroaniline	5	0.830 U	0.840 U	0.840 U	NA	0.830 U	0.830 U	0.840 U	0.830 U	0.830 U
N-Nitrosodiphenylamine	50[2]	0.280 U	0.280 U	0.280 U	NA	0.280 U	0.280 U	0.280 U	0.280 U	0.280 U
4-Bromophenyl-phenylether		0.170 U	0.170 U	0.170 U	NA	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
Hexachlorobenzene	0.04	0.230 U	0.230 U	0.230 U	NA	0.230 U	0.230 U	0.230 U	0.230 U	0.230 U
Phenanthrene	50[2]	0.270 U	0.280 U	0.280 U	NA	0.270 U	0.270 U	0.280 U	1.1 J	0.270 U
Anthracene	50[2]	0.160 U	0.160 U	0.160 U	NA	0.160 U	0.160 U	0.160 U	0.160 U	0.160 U
Carbazole		0.310 U	0.310 U	0.310 U	NA	0.310 U	0.310 U	0.310 U	0.310 U	0.310 U
Di-n-butylphthalate	50[2]	0.098 U	0.099 U	0.099 U	NA	3.9 J	0.098 U	0.099 U	0.098 U	0.098 U
Fluoranthene	50[2]	0.210 U	0.210 U	0.210 U	NA	0.210 U	0.210 U	0.210 U	0.210 U	0.210 U
Pyrene	50[2]	0.250 U	0.250 U	0.250 U	NA	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Butylbenzylphthalate	50[2]	0.300 U	0.300 U	0.300 U	NA	0.300 U	0.300 U	0.300 U	0.300 U	0.300 U
3,3-Dichlorobenzidine	5	1.6 U	1.6 U	1.6 U	NA	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Benzo(a)anthracene	0.002[2]	0.220 U	0.230 U	0.230 U	NA	0.220 U	0.220 U	0.230 U	0.220 U	0.220 U
Chrysene	0.002[2]	0.380 U	0.390 U	0.390 U	NA	0.380 U	0.380 U	0.390 U	0.380 U	0.380 U
bis(2-Ethylhexyl)phthalate	5	0.340 U	0.350 U	1.7 J	NA	0.340 U	0.340 U	1.2 J	1.8 J	0.340 U
Di-n-octyl phthalate	50[2]	0.170 U	0.170 U	0.170 U	NA	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
Benzo(b)fluoranthene	0.002[2]	0.230 U	0.230 U	0.230 U	NA	0.230 U	0.230 U	0.230 U	0.230 U	0.230 U
Benzo(k)fluoranthene	0.002[2]	0.380 U	0.390 U	0.390 U	NA	0.380 U	0.380 U	0.390 U	0.380 U	0.380 U
Benzo(a)pyrene	ND	0.450 U	0.450 U	0.450 U	NA	0.450 U	0.450 U	0.450 U	0.450 U	0.450 U
Indeno(1,2,3-cd)pyrene	0.002[2]	0.290 U	0.290 U	0.290 U	NA	0.290 U	0.290 U	0.290 U	0.290 U	0.290 U
Dibenz(a,h)anthracene	50	0.290 U	0.290 U	0.290 U	NA	0.290 U	0.290 U	0.290 U	0.290 U	0.290 U
Benzo(g,h,i)perylene		0.420 U	0.430 U	0.430 U	NA	0.420 U	0.420 U	0.430 U	0.420 U	0.420 U
Total Confident Conc. SVOC		0	0	3.2		3.9	0	1.2	7.7	0
Total TICs		6.6	6.2	131		8	6.6	24.1	311	7.4

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

1. Shaded values exceed TOGS 1.1.1 Standard or Guidance Value for Class GA Groundwater.

2. Indicates value is a guidance value rather than a standard.

Table 3. Ground Water Sample Laboratory Results Summary
DeLaval Property
Pine Street and Rinaldi Boulevard
Poughkeepsie, New York

Sample ID		MW-1	CHA-1	CHA-2	CHA-2	CHA-3	CHA-4	CHA-5	CHA-6	CHA-10
		S4507-01	S4507-02	S4507-03	S5229-01	S4507-04	S4507-07	S4507-08	S4507-09	S4507-10
Sampling Date	TOGS 1.1.1	9/1/04	9/1/04	9/1/04	10/15/2004	9/1/04	9/1/04	9/1/04	9/1/04	9/1/04
Dilution Factor	Standard or	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units	Guidance	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	Value[1]									
Aroclor-1016	0.09	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U	0.130 U
Aroclor-1221	0.09	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Aroclor-1232	0.09	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Aroclor-1242	0.09	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U	0.140 U
Aroclor-1248	0.09	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
Aroclor-1254	0.09	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Aroclor-1260	0.09	0.0630 U	0.0620 U	4.7 P	0.31 J	0.0640 U	0.0620 U	0.0640 U	0.0620 U	0.0630 U
Units		ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND										
Arsenic	25	4.8 U	4.8 U	4.8 U	NA	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Barium	1,000	67.3 J	78.8 J	204	NA	16.1 J	117 J	46.8 J	81.4 J	80.1 J
Cadmium	5	0.99 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
Chromium	50	1.2 U	2.7 J	1.2 U	NA	3.1 J	2.4 J	1.8 J	1.2 U	1.2 U
Lead	25	1.8 U	22.2	1.8 U	NA	21.0	1.8 U	39.2	1.8 U	1.8 U
Selenium	10	5.2 U	5.2 U	5.2 U	NA	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Silver	50	3.4 U	3.4 U	3.4 U	NA	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Mercury	0.7	0.06 J	0.03 J	0.03 U	NA	0.04 J	0.03 U	0.08 J	0.04 J	0.03 U

Qualifiers & Notes:

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit, but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

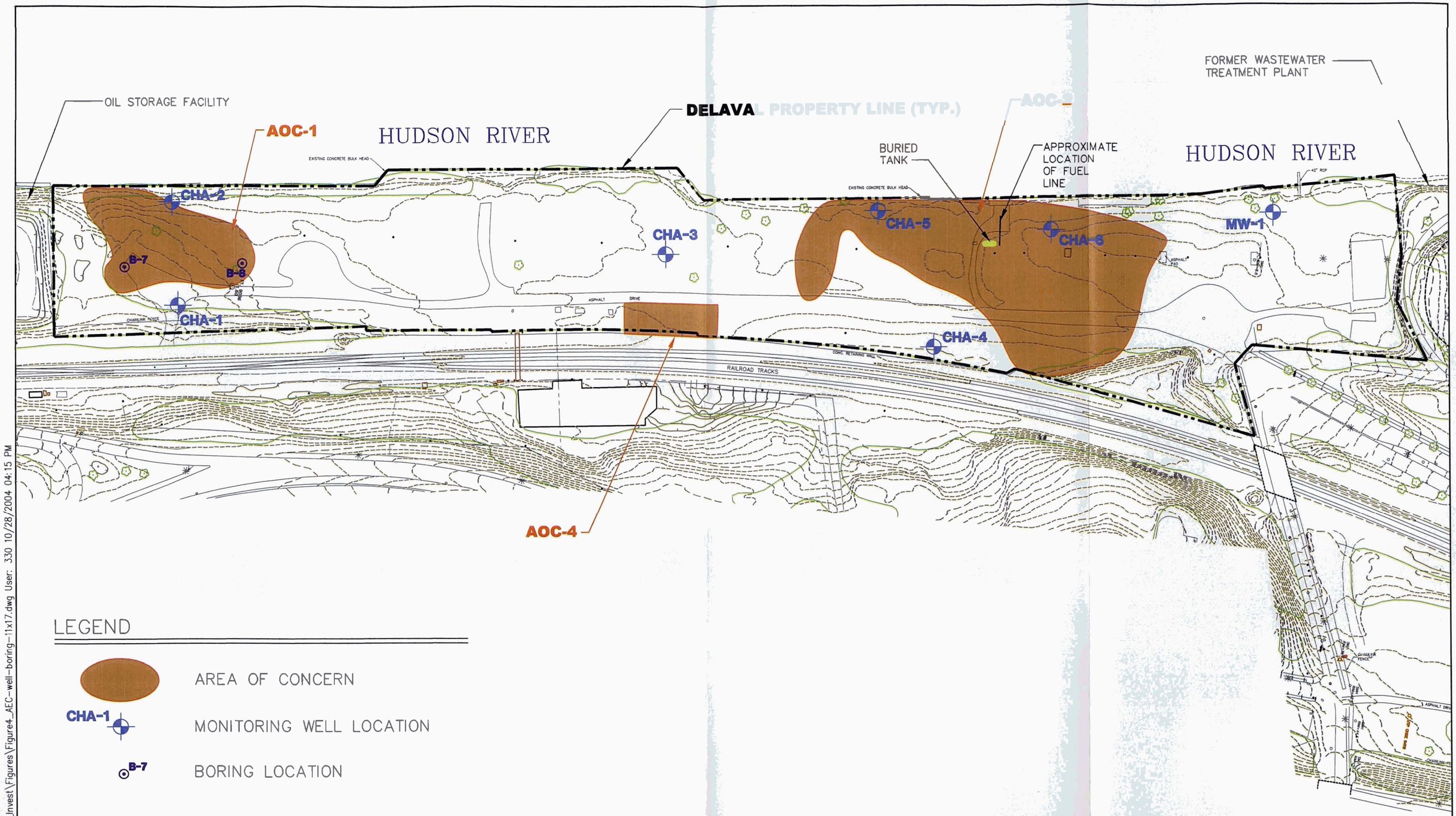
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NA-not analyzed

1. Shaded values exceed TOGS 1.1.1 Standard or Guidance Value for Class GA Groundwater.

2. Indicates value is a guidance value rather than a standard.



LEGEND

- AREA OF CONCERN
- CHA-1 — MONITORING WELL LOCATION
- B-7 — BORING LOCATION

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE – ALBANY, NEW YORK – 12205
518-453-4500

11205.1011.1102

DATE: OCTOBER, 2004

FIGURE 4

MONITORING WELL AND BORING LOCATION PLAN AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest\Figures\Figure4_AEC-well-boring-11x17.dwg User: 330 10/28/2004 04:15 PM

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

GROUNDWATER LEVEL ELEVATION DATA

PROJECT: DeLaval Property Supplemental Investigation
CLIENT: City of Poughkeepsie
INSPECTOR: James Herrick and Robert Hall

FILE NO.: 11205.1011.1102
DATE: 8/26/04

WELL	TOP OF RISER ELEVATION (ft.)	WATER DEPTH (ft.)	WATER ELEVATION (ft.)	TIME (hrs.)	COMMENTS
MW-1	92.89	6.59	86.30	1400	No odor
CHA #1	103.84	16.07	87.77	1425	No odor
CHA #2	97.03	10.06	86.97	1430	No odor
CHA #3	95.24	9.52	85.72	1420	No odor
CHA #4	100.24	13.22	87.02	1410	No odor
CHA #5	92.28	6.50	85.78	1405	No odor
CHA #6	96.92	11.36	85.56	1400	Strong petroleum/solvent like odor

Note #1: The top of a fire hydrant located immediately north of the entrance to the site on Rinaldi Blvd. was utilized as a Bench Mark for elevation survey purposes. This was assumed to have an elevation of **100 ft.**

Note #2: Tide in Hudson River is coming in. Two empty 55 gallon drums were left near CHA #6 for future purge water.

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

GROUNDWATER LEVEL ELEVATION DATA

PROJECT: DeLaval Property Supplemental Investigation
CLIENT: City of Poughkeepsie
INSPECTOR: James Herrick and Robert Hall

FILE NO.: 11205.1011.1102
DATE: 9/1/04

WELL	TOP OF RISER ELEVATION (ft.)	WATER DEPTH (ft.)	WATER ELEVATION (ft.)	TIME (hrs.)	COMMENTS
MW-1	92.89	6.74	86.15	1120	No odor
CHA #1	103.84	16.22	87.62	1135	No odor
CHA #2	97.03	10.10	86.93	1138	Slight petroleum odor
CHA #3	95.24	9.55	85.69	1130	No odor
CHA #4	100.24	13.50	86.74	1125	No odor
CHA #5	92.28	6.40	85.88	1140	No odor
CHA #6	96.92	11.00	85.92	1145	Paint/solvent like odor

Note #1: The top of a fire hydrant located immediately north of the entrance to the site on Rinaldi Blvd. was utilized as a Bench Mark for elevation survey purposes. This was assumed to have an elevation of **100 ft.**

Note #2: Purged water from CHA #'s 2, 5 and 6 was drummed, labeled and left on-site. One empty drum remains on-site.

Note #3: Metals were sampled as tide was rising.

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

GROUNDWATER LEVEL ELEVATION DATA

PROJECT: DeLaval Property Supplemental Investigation
CLIENT: City of Poughkeepsie
INSPECTOR: James Herrick

FILE NO.: 11205.1011.1102
DATE: 10/15/04

WELL	TOP OF RISER ELEVATION (ft.)	WATER DEPTH (ft.)	WATER ELEVATION (ft.)	TIME (hrs.)	COMMENTS
MW-1	92.89	5.60	87.29	1135	No odor
CHA #1	103.84	16.28	87.56	1120	No odor
CHA #2	97.03	9.90	87.13	1030	Slight petroleum odor
CHA #3	95.24	8.36	86.88	1125	No odor
CHA #4	100.24	13.44	86.80	1130	No odor
CHA #5	92.28	5.02	87.26	1200	No odor
CHA #6	96.92	9.26	87.66	1140	Paint/solvent like odor

Note #1: The top of a fire hydrant located immediately north of the entrance to the site on Rinaldi Blvd. was utilized as a Bench Mark for elevation survey purposes. This was assumed to have an elevation of **100 ft.**

Note #2: Purged water from CHA #'s 2 was drummed, labeled and left on-site.

Note #3: Well CHA-2 sample for PCBs only. No 0other wells were sampled.

OIL STORAGE FACILITY

AOC-1

HUDSON RIVER

DELAVAL PROPERTY LINE (TYP.)

AOC-2

BURIED TANK

APPROXIMATE LOCATION OF FUEL LINE

FORMER WASTEWATER TREATMENT PLANT

HUDSON RIVER

AOC-4

CHA-1 87.82

CHA-2 86.93

CHA-3 85.69

CHA-4 86.74

CHA-5 85.22

CHA-6 85.52

MW-1 86.15

87.00 87.25 87.50 86.75 86.50 86.25 86.00 85.75 85.25

RAILROAD TRACKS

LEGEND

AREA OF CONCERN

CHA-1 87.82 — MONITORING WELL LOCATION; GROUNDWATER ELEVATION

87.00 — GROUNDWATER CONTOUR (GROUNDWATER ELEVATIONS MEASURED ON 9-1-2004)

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE – ALBANY, NEW YORK – 12205
518-453-4500

11205.1011.1102

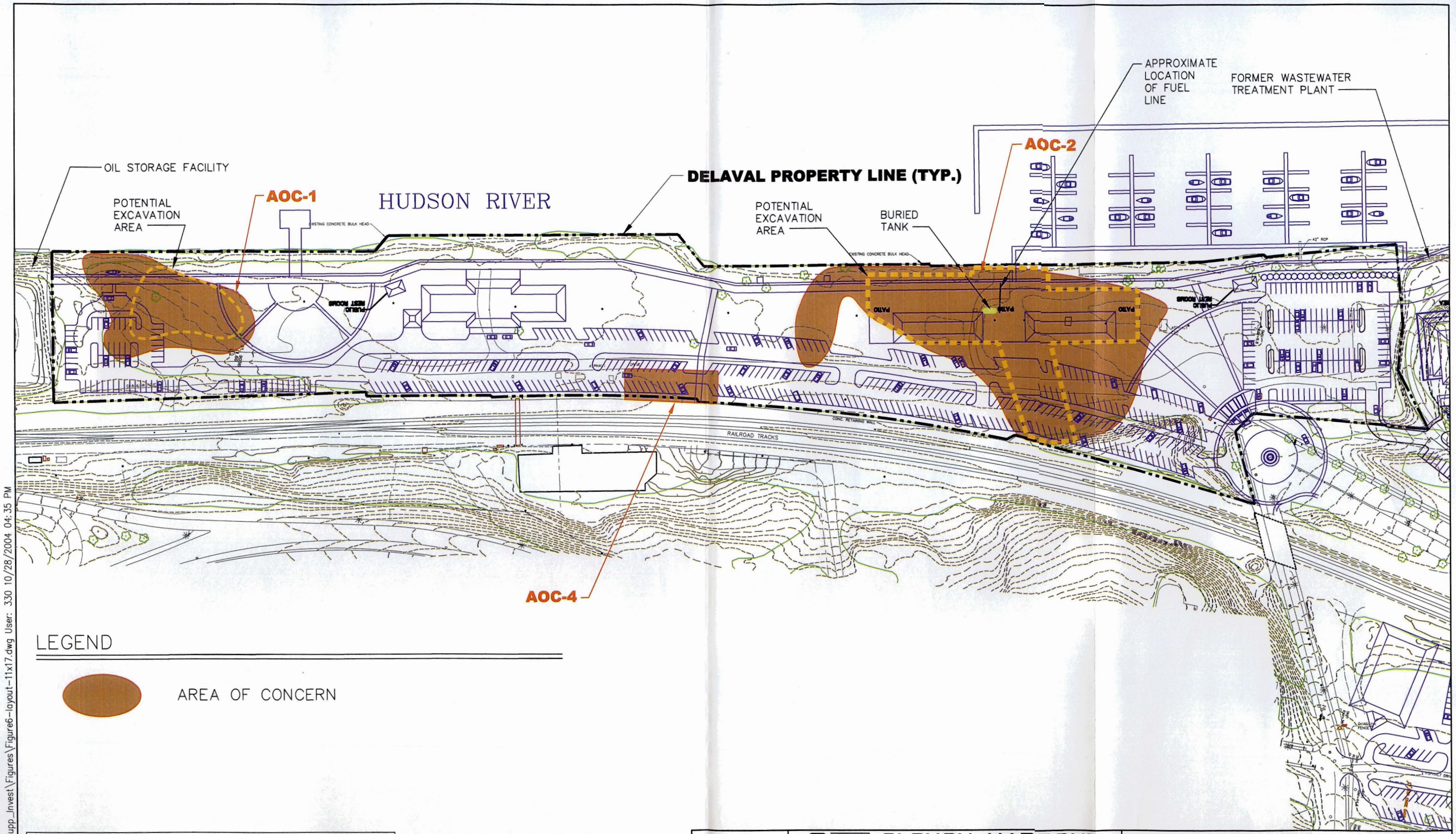
DATE: OCTOBER, 2004

FIGURE 5

GROUNDWATER CONTOUR MAP AND AREAS OF ENVIRONMENTAL CONCERN

DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest\Figures\Figure5_AEC-GW-10-1-04-11x17.dwg User: 330 10/28/2004 04:18 PM



LEGEND

AREA OF CONCERN

NOTE:

BASEMAP PROVIDED FROM THE CHAZEN COMPANIES (TCC) PHASE SUBSURFACE INVESTIGATION REPORT, DATED MAY 2001.

0 150 300

Scale in feet

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE – ALBANY, NEW YORK – 12205
518-453-4500

11205.1011.1102

DATE: OCTOBER, 2004

FIGURE 6
PROPOSED LAYOUT PLAN,
AREAS OF ENVIRONMENTAL CONCERN AND POTENTIAL EXCAVATION AREAS
DEVAVAL PROPERTY
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, STATE OF NEW YORK

File: M:\11205\Rpt\Supp_Invest\Figures\Figure6-layout-11x17.dwg User: 330 10/28/2004 04:35 PM