Site Characterization and Remedial Investigation Summary Report

2 Love Road Site BCP Site No. C314113

Herbert Redl Properties Poughkeepsie, NY

July 2006



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Remedial Bureau C
Division of Environmental Remediation



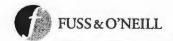
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SITE CHARACTERIZATION AND REMEDIAL INVESTIGATION SUMMARY REPORT HERBERT REDL PROPERTIES – 2 LOVE ROAD

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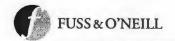
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1.0 INTRODUCTION

This report presents a summary of the remedial investigation conducted at 2 Love Road in the Town of Poughkeepsie, Dutchess County, New York (Figure 1). The new owners of the property intend to restore the site to commercial use and have received approval from the Town to construct a self storage facility. During some preliminary geotechnical work prior to construction, the current owner of the property (the BCP Volunteer) encountered petroleum-impacted soil in the vicinity of the existing foundations. As a result of this discovery, the Volunteer wishes to remediate the site in accordance with the requirements outlined in the BCP. Remediation will be consistent with the intended future use of the property.

The site at 2 Love Road consists of approximately 4.6 acres of land, and is identified as three separate tax parcels, also shown on <u>Figure 2</u>:

Street Numbers	Tax I.D.
83-85 Dutchess Turnpike	14-6261-01-173893-00
87-91 Dutchess Turnpike	14-6261-01-188903-00 (2 Love Road)
97-99 Dutchess Turnpike	14-6261-01-205886-00

Access to the site is along Love Road, which intersects with Burnett Boulevard Extension. Love Road curves through the site and provides access to both the lower and upper portions of the property.

Site elevation varies from approximately 196 feet above sea level at the far southeastern end of the property to approximately 152 feet above mean sea level at the far northwestern end of the property (Figures 1 & 4). Considering site topography, it is likely that much of the southern portion of the property is fill material brought in during the construction and elevation of Route 44.

2.0 SITE DESCRIPTION

2.1 Site History

The parcel located at 83-85 Dutchess Tumpike (Tax I.D. 14-6261-01-173893-00) was formerly owned by Dutchess County. The parcel was taken in lieu of taxes owed by the prior owner. This parcel is located on the west side of the proposed development. See <u>Figure 2</u> for the tax parcel boundaries.

The central parcel (Tax I.D. 14-6261-01-188903-00) was formerly owned and operated by E.A. Aldrich through the late 1950s as a gas station, until the NYSDOT widened and elevated Route 44. By eminent domain, the expansion of the roadway required 10-15 feet of the property. This land loss required the gas station to close, at which point Love/Effron Oil purchased the property to operate a petroleum bulk oil storage facility.

The PBS facility closed in the late 1980s but during operation utilized a 2,500,000-gallon fuel oil tank, two 25,000-gallon tanks and three 20,000-gallon tanks. The 25,000 and 20,000-gallon tanks stored fuel oil. The 2,500,000-gallon tank was located in a diked storage area to the north of the existing foundation, which likely was used as a garage and/or loading facility. The 25,000-gallon tanks and one of the 20,000-gallon tanks were located on a concrete pad along the fence in the



central portion of the property, near what is believed to be the former truck loading facility. The other 20,000-gallon tanks were located on cradles between the former garage and fenced area. The NYSDEC Petroleum Bulk Storage (PBS) Unit reported the tanks were cleaned and abandoned in the early 1990s by the former owner/operator. Both a NYSDEC PBS registration certificate and a letter from Luzon Environmental Services have been obtained stating the tanks have been closed and removed. The PBS certificate indicates an active 550-gallon gasoline tank remains on site, which is discussed further in Section 3.4 of this report.

2.2 Adjacent Land Use

Adjoining parcels are primarily commercial real estate. The property is abutted immediately to the south by NYS Route 44, commonly known as the Dutchess Turnpike and to the east by an abandoned railroad bed. The rails and most ties have been removed. Further northeast of the site along Route 44 are several small commercial establishments; however, further east and north of the property is a residential development. Commercial establishments occupy the southern side of Route 44 directly across from the site.

The property is surrounded to the north and west by a commercial plaza commonly referred to as either the Dutchess Center Plaza or Route 44 Plaza. This plaza was constructed on lands that previously contained the Poughkeepsie Municipal Landfill. This parcel was historically subject to numerous investigations and subsequently removed from the NYSDEC's list of potential inactive hazardous waste sites. The landfill mass was moved and consolidated into a mound that currently exists on the northern boundary of the shopping plaza.

2.3 Current Conditions

The existing site conditions are shown on <u>Figure 3</u>. The property consists of parcels on both sides of Love Road. The southern and eastern sides of the property are elevated, and the topography slopes down, often sharply, toward the northwest. The open area in the central part of the property is generally flat (<u>Figure 4</u>).

The foundation of a demolished building exists on the southern side of the site. An approximate 0.1-acre pond lies in the center of the property, north of the existing foundation.

The property is serviced with gas lines that run along Love road toward Route 44. Municipal water and sewer lines run along Route 44 at the southern edge of the property. There is an existing fire hydrant at the end of Love Road.

2.4 Site Geology

Depth to bedrock at this site is highly variable. In some locations bedrock was encountered at depths greater than 18 feet below ground surface (bgs); in other locations the rock was outcropped and visible at the ground surface. The property is highly variable in its topography and is formed mostly by the steep slope of the rock surface in this area, as well as placement of fill material associated with the former and current locations of the Route 44 roadway, the railroad bed east of the site, and the dike-containment structure built to accommodate the 2.5-million gallon fuel tank.

The land surface at the site generally slopes toward the northwest, and the property itself is terraced on two levels by the step-shaped structure of the bedrock ridge. From the base of the slope at the



rear of the existing shopping plaza building, Love Road proceeds eastward up the moderate slope, and curves toward the south along a somewhat broad ridge and forms the upper terrace at the east and southeast sections of the site. At the southeast corner of the site are stockpiles left from the demolition of a 2-3 story masonry building. East of the property boundary lies an abandoned railroad bed that was built upon another rise in the slope.

Outcropped rock is visible at the base of Love Road toward the south, and along the northern side of the road. The lower terrace is formed within the curve of Love Road, where there is the open area of the former PBS facility. This is where the former 2,500,000-gallon fuel tank was located. Test pits and soil probes advanced throughout this area revealed that there is a somewhat circular depression on the terrace of the rock where glacial deposits have accumulated. These deposits consist of a very dense/stiff, dark gray to dark blue clay and silt. This material is known locally as "blue clay". Construction fill material then overlies this clay, to varying depths, to level out this section of the property. Observations of test pits in this area indicated that petroleum impacts were generally confined to the coarser grained sand and gravel construction fill on this site. The dense gray-blue clay and silt, where present, appeared to act as a confining layer for petroleum.

The remains of the site buildings on the west side of Love Road are situated such that the bottom floors are level with the lower, central terrace of the site, which would have been the base of the large tank, and the top floors were level with the upper terrace at the southeastern end of the road. It was at this upper level where the fuel pumps were located for the former gasoline station. At the northeast corner of the site, the grade has been flattened to form a parking or staging area.

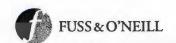
Geoprobe soil borings indicate that bedrock may be deeper in the southern portion of the site. Bedrock elevation data were used to create a bedrock contour map, <u>Figure 4</u>. Surficial terrain prevented access or test pits in some areas of the subject site. Therefore, some points on the bedrock contour map have been interpolated between known bedrock elevations. Surface contours are also shown on the figure.

2.5 Site Hydrogeology

A small detention pond is present in the lower, central area of the site. This pond may have been part of a former storm water management system. Historical aerial photographs indicate that the retention pond was in place at the same time as the 2,500,000-gallon fuel tank.

The central terrace area, and the retention pond, appeared to form a localized collection area for shallow groundwater and surface water runoff. Observations indicate that shallow groundwater may be flowing off the steep grade of the rock slope, accumulating temporarily within the depressional area on the central terrace, and continuing down the next rock slope toward the low-lying area near the existing shopping plaza.

During the site investigation, test pits revealed that groundwater flow is generally from the southeast to the northwest in the area, following the formation of the rock slope. Groundwater encountered in test pits at the east/southeast section of the site was very shallow (sometimes less than 4.0 ft. bgs) and appeared to be flowing rapidly toward the north and northwest. Bedrock was also very shallow in these areas and it appeared that shallow groundwater flowed along the surface of the rock, following the slope of the rock topography.



Previous investigations at the shopping plaza property indicate that this area was historically a flat, low-lying wetland. The wetlands likely were the localized collection area for shallow groundwater discharging off the steep grade of the surrounding rock and glacial deposits in the area.

There is a manmade drainage course that runs under and along Burnett Boulevard Extension that was inundated with water during the shopping plaza investigation. This swale or drainage course may be conveying shallow groundwater away from the site. The discharge point of the swale is not known.

Groundwater is not used as a potable resource in the area according to available information; therefore, risks associated with impacts to groundwater are expected to be minimal. One production well is known to exist on the property which has not been used since the installation of public water supply. The well lies within a portion of the existing building foundations that have been filled with sand and gravel.

Based on the measured water depth in two temporary monitoring wells on site, shallow groundwater ranges from 4 to 8 feet below ground surface in the area of the central terrace. The native material found beneath the fill is a very dense silt-clay mixture. In test pits, water observed within this material seeped out very slowly, if at all.

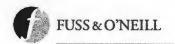
2.6 Previous Investigations

No previous investigations have been completed for the subject site prior to the remedial investigation. In 2004 the current owner of the property (the Volunteer) encountered petroleum-impacted soil in the vicinity of the existing building foundations during preliminary geotechnical work prior to construction. Test pits excavated on the northwestern side of the foundations near the former bulk oil storage facility were excavated to about three feet below ground surface. Petroleum staining and odor was detected in these test pits, indicated that the soils were impacted with petroleum, however no samples were taken at that time to confirm the nature and extent of impacts. The soils encountered in the initial test pits were described as primarily silty fine sand with some fine to medium gravel. No water was encountered during excavation, and the test pits were left open to facilitate later inspection. Upon returning to the site during the BCP Pre-Application Inspection with the NYSDEC representatives, the test pits were filled with water. It had rained significantly prior to the inspection however these test pits were located in a relatively flat, open area that did not receive significant amounts of surface runoff. The presence of standing water in the test pits is interpreted as being a function of shallow groundwater discharging from the steep rock slope to the east and accumulating in the lower central area of the site.

3.0 REVIEW OF FIELD WORK

The Remedial Investigation was performed to determine to what extent the site has been impacted by the historic use of the property and determine if the applicable soil cleanup guidance values and groundwater standards have been exceeded.

The following field work was accomplished in compliance with available technical guidance including:



- The requirements outlined in the NYSDEC TAGM 4007- Phase II Investigation Generic Work Plan,
- DER-10, Technical Guidance for Site Remediation, December 2002, and
- The USEPA Guidance for conducting RI/FS investigations under CERCLA.

The sampling and analytical protocols used during this project were in conformance with the specific guidelines established in the BCP guidance document and DER-10.

The soils encountered were logged in the field by a Fuss & O'Neill field engineer. Evidence of soil staining, odor, changes in lithology, moisture content, etc. were recorded. Test pit logs were generated to aid in the creation of a conceptual site model and are included in Appendix A.

All tasks in the Remedial Investigation Work Plan were completed with the exception of sediment sampling in the small on-site pond. The samples, to be used as part of a Fish and Wildlife Resource Impact Analysis (FWRIA), will be collected during the next mobilization to the site.

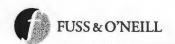
3.1 Test Pits

The first phase of the Remedial Investigation took place June 16-21, 2005 and consisted of digging test pits throughout the subject property. Test pits were placed throughout the site where accessible by an excavator, as shown in <u>Figure 5</u>. The test pits were generally excavated until native soils were encountered or to refusal. Broken pieces of brick were often seen in test pits throughout the site, verifying that much of the site is fill material.

The first test pits were dug in the area of the former 2,500,000-gallon fuel storage tank, in the area north of the existing foundation. Test pit TP-01, located adjacent to the pond, immediately filled with water at an approximate depth of 3 feet. Test pit TP-02, located approximately 20 feet to the southeast, was dug to a depth of 18 feet (the limits of the excavator) and water seeped in slowly after being open for about 30 minutes. Dense dark gray-blue silt and clay was observed from 7.5 to at least 18 feet below ground surface. Groundwater appeared to seep from moderately dense silt at approximately 5.5 feet below ground surface. Test pit TP-07 on the west side of the central terrace was dug to a depth of 13 feet and no blue clay was observed. The heaviest visual and olfactory impacts were observed in test pit TP-03 adjacent to the existing foundation. A sheen was noted on the shallow groundwater. Relatively thin layers of stained silt were observed over the central portions of the site in test pits TP-04, TP-05, and TP-06.

Test pits TP-08 and TP-09 were dug on either side of the concrete pads located at the northern entrance of the property. This is the location of the former fuel unloading facility. Bedrock was encountered at a depth of 3.5 feet in TP-08 and no adverse impacts were observed. However, test pit TP-09 was dug approximately 20 feet south of test pit TP-08, and an oily sludge was observed on the bedrock 4.5 feet below ground surface. The impacted soil was approximately 2 feet thick. The bedrock in test pit TP-09 was sloped toward Love Road. No groundwater was observed in this particular part of the shallow overburden.

Along the western border of the property and part of the southern border, seven test pits were installed to begin delineation of the suspected impacts seen around the existing foundation. The test pits were dug to bedrock. No obvious impacts were seen along the western border (test pits TP-10 through TP-14); however, moderate petroleum odors were observed in test pit TP-16.



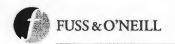
From this line of test pits along the property boundary, another line of test pits was started approximately 100 feet to the east, along the tree line in the center of the lot. Test pits TP-18 through TP-21 had no apparent odor, but had a layer of slightly stained dense silt. Test pit TP-22, located approximately 25 feet north of test pit TP-21, had a very strong petroleum odor and the same gross contamination seen in TP-09 was observed. Impacts vertically ranged from approximately 5 feet below ground surface to bedrock at 9 feet below ground surface. Historically, the area surrounding test pit TP-22 was apparently used as a dumping area. Construction debris and some household garbage were dug up. Also, a steel perforated corrugated pipe ran approximately 3 feet below ground surface into an apparent brick drywell or septic. The age of the drywell and debris is unknown; however, most the bricks were broken and the well was mostly demolished. Test pit TP-23 was dug adjacent to test pit TP-22 to determine the reach of the steel perforated corrugated pipe. The pipe ran approximately 10 feet from the apparent well. Much of the same debris and impacts were seen in test pit TP-23. Test pits TP-24 and TP-25 were dug to delineate the impacts west of the dumping area. Test pit TP-25 had a slight petroleum odor at the bottom of the pit (6.5 feet), and test pit TP-24 had no observed impacts.

The next line of test pits was started near Route 44 alongside the existing foundation. Test pits TP-17, TP-27, and TP-28 all had a strong petroleum odor and obvious soil impacts. Soil from test pit TP-17 had a distinct gasoline odor, rather than fuel oil. These pits were dug to 9.5-10.5 feet below ground surface, and bedrock was not encountered.

Test pit TP-29 had no apparent odor and possible slight staining, while TP-30 had slight petroleum odors. Test pit TP-31 had a moderate petroleum odor and obvious soil staining. Test pits TP-32 and TP-33, located along the berm near the pond, had no evident odors, and possible light soil staining. Lack of impacts observed at these four locations suggest that there were two separate sources of contamination – near the former fuel unloading area and near the existing foundations. The contamination originating near the former fuel unloading area is possibly confined by the dense blue silt and clay underneath. The same situation may apply to the impacts seen near the foundations. Some test pits surrounding that area had a thin layer of blue clay noted, which may aid in keeping impacts confined.

The next group of test pits was located across Love Road north of the main lot. Historic use of this small triangular-shaped parcel is unknown. Six test pits were installed over the parcel, test pits TP-34 through TP-39. Impacts seen in this area had a distinct petroleum-based odor, possibly weathered fuel oil or creosote. The most heavily impacted soil was found along Love Road. As the test pits progressed back toward the northern corner of the parcel toward test pit TP-34 the soil became less impacted, and were noted to be undisturbed along the property line. Railroad ties were dug up in test pits TP-35 and TP-36. Large angular gravel observed over a thickness of 2 feet in test pit TP-39 was similar to gravel seen in the old railroad bed adjacent to the parcel.

The final group of test pits was installed at the end of Love Road along Route 44, on the upper terrace of the subject property. Native material was encountered between 1 and 6 feet below ground surface in test pits TP-40, TP-41, and TP-42, and no obvious impacts were seen in the immediate area. Test pits placed on top of the existing foundations generally revealed fill in the top 6-8 feet of material, including brick, asphalt pavement, gravel, silt and clay. Moderate to strong petroleum odors were observed in test pits TP-43, TP-46, and TP-47 at varying depths of 5-12 feet below ground surface.



At a depth of 3 feet in test pit TP-45, fill and vent pipes for a small underground storage tank (UST) were encountered. See Section 3.4 below for additional information on the tank.

3.2 Soil Probing

To more accurately define the bedrock surface underlying the subject property, 29 soil probes were advanced on August 1, 2005. Fuss and O'Neill had temporary monitoring wells installed in two of the probe locations.

The soil probes were completed by advancing a steel rod through the overburden material to assess the depth to bedrock. Because a soil coring method was not used, no soil descriptions were recorded and no samples were collected. The probes were spread over the entire site where accessible, and placed specifically to determine where contamination at the bedrock level might migrate. Locations are shown in <u>Figure 5</u>.

Soil probe logs were generated to aid in the creation of a site bedrock contour map and conceptual site model and are included in <u>Appendix A</u>.

3.3 <u>Temporary Monitoring Wells</u>

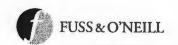
Two of the soil probes were converted to small diameter shallow monitoring wells by installing a 1-inch diameter PVC using the direct push method (GEOPROBE). Once the probe was complete, a well-string was inserted, which consisted of a slot well screen (0.010" slots) and riser. The annular space was filled with #1 sand to approximately two feet above the top of the screen, and a bentonite seal was placed above the sand pack. The well screen was set to intersect the water table. The monitoring wells were sealed with a non-locking cap. The monitoring well locations are provided on Figure 5, and monitoring well completion forms are provided in Appendix A.

The intent was to select well locations which would address the most significantly impacted areas and enable adequate characterization of groundwater flow in the unconsolidated formation. Wells were placed in SB-14 (adjacent to TP-28) and SB-25 (on central terrace north of the existing foundation).

At the time of installation, the wells were used to measure the depth to water only. The shallow wells were sampled later on September 9, 2005 to characterize groundwater quality. The depth of the water table was measured using an electronic interface probe. Water depth had decreased likely due to dry weather conditions. Monitoring well MW-01 was sampled and dried up after approximately 2 liters of water were extracted. Monitoring well MW-02 was exhausted almost immediately. The wells did not recover within the 3-hour site visit.

3.4 Tank Removal Interim Remedial Measure (IRM)

As part of the site investigation, NYSDEC reviewed existing petroleum tank registrations for this site. It was found that all tanks at the site had been closed and removed with the exception of one 550-gallon UST. The location of the tank is unknown. During field work, a 1,000-gallon tank was found that did not appear on the registration certificate. This tank was discovered in test pit TP-45. It is believed that this may be the tank shown on the registration certificates, indicating an incorrect size. Removal of the tank became the subject of an Interim Remedial Measure (IRM), approved by the NYSDEC in October 2005. If another tank is discovered during future work, the Volunteer



agrees to properly clean and dispose of the tank in the event it is encountered during the site remediation or development activities.

The tank was removed on November 8, 2005. The approximate location of the tank is depicted on Figure 6. The equipment and operator was supplied by the property owner and BCP Volunteer. Ira D. Conklin & Sons, Inc. of Newburgh, New York cleaned and removed the tank on December 1, 2005.

The tank appeared to be surrounded with the same dense blue-gray silt and clay as observed in other areas of the site. Staining and strong odors were observed under and on the sides of the tank pit. Soil from beneath the tank was not stockpiled because data gathered from test pits in the surrounding area show that soil is impacted over a large area encompassing the tank location. It is unknown whether impacts are due to the removed tank. Impacted soil will be addressed in the Remedial Action Work Plan (RAWP).

4.0 SITE INVESTIGATION SAMPLING AND ANALYTICAL RESULTS

Representative soil samples were taken from the test pits according to the procedures identified in the Standard Operating Procedures (SOPs) for test pit excavation sampling provided in the QAPP. In some cases, multiple samples were obtained from a test pit for laboratory analysis; in other cases no samples were taken from the test pit, especially when it was noted that the material encountered in one location was identical or composed of the same material as an adjacent test pit.

4.1 Sampling

Samples were analyzed to assess the horizontal and vertical extent of the impacted areas. The bulk of the soil samples focused on the edges of the suspected impacted areas. Fewer soil samples were collected from the areas where obvious contamination was encountered; however, some samples were obtained from the significantly contaminated areas to determine whether these areas represent a significant threat to the environment.

Select soil samples were screened in the field for the presence of volatile organic compounds using headspace analysis with a photoionization detector (PID); however, in areas where contamination was obvious, samples were not screened. Sampling locations may be seen on Figure 5. In total, 68 soil samples were submitted to the lab, and were screened for the Target Compound List (TCL) and for the Spill Technology and Remediation Series (STARS) list of volatile organic compounds (VOCs) using USEPA method 8260B. Samples were also screened for semi-volatile organic compounds (SVOCs) using USEPA method 8270C, and for the Target Analyte List (TAL) of metals. Soil analytical results are summarized in Tables 1, 2 and 3.

One groundwater sample from each of the temporary monitoring wells was collected and submitted the laboratory for analysis along with a field blank. The sample from MW-01 was analyzed for VOCs (Method 8260B TCL), and SVOCs (Method 8270C). The sample from MW-02 was screened for SVOCs, only. Preliminary results were available at the time this report was written as the data have not been checked by the quality assurance officer. Preliminary groundwater results are summarized in <u>Tables 4a and 4b</u>.

Five soil samples were collected at the time of the removal of the 1,000-gallon fuel oil tank located above the existing foundation. The samples were representative of the impacts along each side of the tank grave, and the bottom. The samples were analyzed for volatile organic compounds (VOCs) plus MTBE using USEPA method 8021 and for semi-volatile organic compounds (SVOCs) using USEPA method 8270, base/neutrals only. Analytical results for these samples are summarized in Tables 5a and 5b.

All samples were analyzed using ASP Level B analytical protocols by Columbia Analytical Services (Columbia) of Rochester, New York, an ELAP certified laboratory. Proper packaging was used during shipment to ensure a controlled temperature and safe transport.

4.2 Analytical Results

The analytical results presented in $\underline{\text{Tables } 1-5}$ are not believed to accurately represent current conditions at the subject site. Many compounds associated with petroleum contamination in soil, which is clearly present in the soils observed during the RI, were not detected through laboratory analysis. This may be due to the weathered nature of the product, the age of the release, or laboratory interferences, among other factors.

The analytical results exceed the Recommended Soil Cleanup Objectives outlined in TAGM 4046 in only a few instances for semi-volatile organics, and in no instances for VOCs. This is unusual, given that in more than one test pit free product was observed. The analytical results were also compared to Soil Cleanup Guidance Values outlined in STARS Memo #1, which is generally consulted specifically for petroleum spills and cleanup. This resulted in additional exceedances, yet still fewer than might be expected. For actual field conditions, the test pit logs and soil descriptions noted during the RI will be relied upon in conjunction with the analytical results.

4.2.1 Metals

The Target Analyte List of metals were analyzed in each sample collected, and many metals were found at levels that exceed the NYSDEC's TAGM 4046 soil cleanup guidance objectives. Soil results exceeding the TAGM 4046 soil cleanup guidance values are shown in bold and shaded on Table 1. Exceedances include arsenic, beryllium, chromium, copper, iron, nickel, zinc, and to a lesser extent cadmium, mercury, and selenium. No previous sampling results are available for comparison of these results; however, a high level of confidence is associated with the results since the samples were collected and analyzed using ASP Level B protocols, and the Data Usability Summary Report (DUSR) indicates that the data can be relied upon.

Beryllium was detected in samples taken from test pits TP-08-01 (0.67 ppm), TP-12-01 (0.66 ppm), TP-21-01 (0.59 ppm), TP-31-01 (0.75 ppm), TP-32-01 (0.72 ppm), and TP-36-01 (0.76 ppm) at levels exceeding the soil cleanup guidance objective of 0.16 ppm. Mercury was detected in samples taken from test pits TP-09-02 (0.14 ppm) and TP-35-02 (1.4 ppm), at levels exceeding the soil cleanup guidance objective of 0.1 ppm.

Cadmium was encountered in samples taken from test pit TP-39-01 (1.2 ppm), at levels exceeding the soil cleanup guidance objective of 1.0 ppm. Selenium was detected in samples taken from test pits TP-13-01 (2.2 ppm), TP-19-02 (2.1 ppm), TP-21-02 (2.6 ppm), TP-24-01 (2.1 ppm), TP-38-01 (2.5 ppm) at levels exceeding the soil cleanup guidance objective of 2.0 ppm. Because these



concentrations only slightly exceed the TAGM 4046 cleanup guidance for both cadmium and selenium and are consistent, they likely represent site background in this urban setting.

Arsenic, chromium, copper, iron, nickel, zinc were encountered at numerous locations throughout the site at elevated levels. Because copper and nickel concentrations significantly (100-200%) and consistently exceed the respective TAGM 4046 cleanup guidance, the results likely represent site background.

4.2.2 Volatile Organic Compounds

No VOCs were detected at levels that exceed the NYSDEC's TAGM 4046 soil cleanup objectives; however, multiple hits exceed STARS Memo #1 guidance values. The compounds exceeding the soil cleanup guidance values in one or more locations include acetone, benzene, sec-butylbenzene, n-butylbenzene, ethylbenzene, isopropyl benzene, p-isopropyltoluene, naphthalene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and m,p-xylenes. No previous sampling results are available for comparison of these results; however, a high level of confidence is associated with the results because the samples were collected and analyzed using ASP Level B protocols and the DUSR indicates that the data can be relied upon.

Out of 48 test pits, samples from four test pits contained the VOC compounds listed above. The sample from test pit TP-16A at a depth of 4 to 6 feet had five compounds slightly exceed guidance values. Samples from two depths (3 to 5 feet and 7 to 10 feet) in test pit TP-17 also had multiple exceedances. The shallow depth had significant exceedances, including ethylbenzene (840 ppb), naphthalene (1,200 ppb), 1,3,5-trimethylbenzene (1,300 ppb), 1,2,4-trimethylbenzene (2,700 ppb), and mixed xylenes (730 ppb), among others. Test pit TP-28 had three exceedances at 9.5 ft below ground surface, one of which was benzene (38 ppb). A sample from TP-46 at 10 feet had four VOC exceedances, notably naphthalene at 750 ppb.

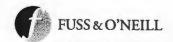
The majority of the exceedances were measured from depths of greater than 6 feet below ground surface. All four test pits with VOCs exceeding guidance values are located in the second area of concern; the area surrounding the existing foundation. The areas of concern are identified in Section 5.3 below.

Multiple VOCs were detected in the groundwater sample collected from monitoring well MW-01, including benzene, 1,2-dichloropropane, ethylbenzene, toluene, and mixed xylenes. Within these detected compounds, three hits exceeded TOGS 1.1.1 groundwater quality guidance values, including 1,2-dichloroethene (3.7 ppb), ethylbenzene (450 ppb), and mixed xylenes (22 ppb). The field blank had no compounds detected with the exception of acetone, which is a common laboratory contaminant.

Soil samples collected during the removal of the 1,000-gallon tank each exhibited concentrations of multiple VOCs exceeding TAGM 4046 soil cleanup guidance objectives. The compounds include sec-butylbenzene, n-butylbenzene, ethylbenzene, isopropyl benzene, naphthalene, n-propylbenzene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and mixed xylenes.

4.2.3 Semi-Volatile Organic Compounds

A number of SVOCs were detected at levels that exceed the NYSDEC's TAGM 4046 soil cleanup objectives; however, additional exceedances are noted when the data is compared to STARS Memo



#1 guidance values. The compounds exceeding the soil cleanup guidance values in one or more locations include acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluorene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene. No previous sampling results are available for comparison of these results; however, a high level of confidence is associated with the results because the samples were collected and analyzed using ASP Level B protocols and the DUSR indicates that the data can be relied upon.

Fourteen samples collected from eleven test pits contained one or more SVOC compounds exceeding guidance values. The most notable exceedances occurred in test pits TP-14, TP-16A, TP-35, TP-36, TP-37, TP-38, and TP-44. Test pit TP-16A was the most heavily impacted in reference to SVOCs; including acenaphthene (2,500 ppb), anthracene (1,200 ppb), dibenzofuran (2,100 ppb), fluorene (5,300 ppb), 2-methylnaphthalene (50,000 ppb), naphthalene (8,700 ppb), phenanthrene (9,200 ppb), and pyrene(1,300 ppb). Test pits TP-14, TP-35, TP-36, TP-37, TP-38, and TP-44 each had similar exceedances including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and chrysene all less than 300 ppb.

Although the SVOC exceedances were measured at depths ranging from the surface to 10 feet, the majority were concentrated in the upper 6 feet of soil. The test pits with elevated levels of SVOCs are located in each of the three areas of concern, which are identified in Section 5.3 below.

Groundwater from monitoring well MW-01 was found to be impacted with limited SVOC compounds, including di-n-butylphthalate, 2-methylnaphthalene, and naphthalene. The concentrations detected do not exceed TOGS 1.1.1 ambient groundwater quality guidance values. Due to insufficient well production, no groundwater from MW-02 was analyzed for SVOCs.

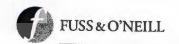
Soil samples collected during the removal of the 1,000-gallon tank each exhibited concentrations of SVOCs exceeding STARS Memo # 1 guidance values. The sample from the southern wall of the tank pit had two compounds (2-methylnaphthalene and naphthalene) exceed cleanup objectives in TAGM 4046, while all five samples exhibited compounds exceeding STARS Memo # 1 guidance values.

4.3 <u>Data Reliability</u>

The soil data have been reviewed by Fuss & O'Neill's quality assurance officer following the protocols outlined in Draft DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2A and 2B. Issues relevant to the recent sampling results are indicated on the laboratory data sheets attached in <u>Appendix B</u>.

Laboratory analytical results were generated using ASP level B protocols. A data usability summary report (DUSR) has been performed in accordance with the protocols outlined in draft document DER-10.

The results generally can be relied upon and are technically relevant. For ten out of the total number of samples submitted for SVOC analysis, extractions were completed eight days after sample receipt at the laboratory. This exceeds the specified holding time of seven days by one day. The detected compounds in these ten samples were compared to samples extracted within the



specified holding time limits. No apparent difference in results has been noted, and therefore the results have been considered as part of the site characterization.

Extra volume was provided for two samples which were designated to be analyzed as matrix spike/matrix spike duplicates (MS/MSDs) and results are provided with the QA/QC results. All QA/QC samples were analyzed within method-specified holding times. No target compounds were reported in the equipment blank. Results of primary and duplicate samples were generally similar.

5.0 NATURE AND EXTENT OF CONTAMINATION

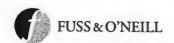
5.1 Nature of Contamination

Based on historical information from the site owner, the NYSDEC, and observations of the existing foundation, the central portion of the site along Route 44 was the former location of a gasoline station and offices of a petroleum bulk storage company. Multiple large-volume above and underground fuel oil storage tanks were located in the central portion of the site, but have since been removed. The two concrete pads near the northern entrance of the property were apparently used as a fuel unloading station at one time. A small area between the existing foundation and northern entrance was apparently used as a dumping area, as observed during field activities. Materials removed from test pits in the area along the tree line include portions of an apparent drywell, corrugated perforated piping, and various construction debris items, suggesting that this particular area was used as a dumb at one time. Historical use of the small lot located across Love Road from the main parcel was likely for storage of rail equipment and railroad ties, then for parking by the owners of the PBS facility. Recently, the parcel was rented to a business to temporarily store automobiles.

The exact locations of the former aboveground and underground fuel oil storage tanks are unknown; however the expired PBS registration certificate indicates that volumes of registered tanks range from 3,000 to 25,000 gallons in size. During field activities, abandoned fuel transmission lines were uncovered adjacent to the existing foundations. Therefore, it is likely that the piping was used to bring fuel from the large tanks in the central terrace to a pumping station adjacent to Route 44.

VOC and SVOC compounds are likely to have originated from the past industrial and commercial practices at the site. Gasoline stations are generally associated with multiple low volume fuel spills. Also, practices associated with fuel oil bulk storage facilities may have resulted in both small- and large-scale releases.

When Route 44 was constructed at an elevated level, a large amount of fill material was placed at the site. This fill material was observed and documented in the soil logs for test pits in this area. It is unknown how the timing of this construction corresponds to impacts seen at the site during the remedial investigation. It is possible that at certain locations, petroleum impacts were present at the site before the layer of fill material was brought in. This situation may explain why VOC and SVOC impacts are seen at depths up to 10 feet below ground surface. However, it is also possible that the compounds have migrated to these depths over time.



Shallow groundwater samples were collected and preliminary analytical results indicate that groundwater in the overburden material is slightly impacted with compounds associated with petroleum product releases.

5.2 Extent of Contamination

Multiple metals were detected at levels exceeding TAGM 4046 guidance values across the entire site. As previously noted for cadmium, selenium, copper and nickel the measured concentrations exceed guidance values but are relatively consistent. Therefore, it is likely that the concentrations represent site background for this urban, heavily populated area adjacent to a highway.

Volatile organics were detected over much of the site; however, exceedances of STARS Memo # 1 and TAGM 4046 guidance values occurred primarily around the existing building foundations. Test pits with no detected VOCs generally include those near the westernmost border of the property, along the tree line.

Semi-volatile organics were also detected over large areas of the site. Exceedances of guidance values occurred primarily in the parcel north of Love Road, adjacent to the former fuel unloading area near the northern entrance, and around the existing foundations along Route 44. Areas that did not have any SVOCs detected include the eastern side of Love Road on the upper tier, on the central terrace by the pond (with the exception of TP-03), and along the westernmost border of the property along the tree line.

Visual and olfactory observations made during remedial investigation efforts and analytical results indicate that impacts are generally confined to three areas of concern (AOCs): (1) surrounding the former fuel unloading area at the northern entrance, AOC-01, (2) the area surrounding the existing foundation along Route 44, AOC-02, and (3) in the lot across Love Road adjacent to the abandoned railroad bed, AOC-03.

The areas of concern are depicted on Figure 7. These generalized areas were derived by evaluating VOC and SVOC exceedances of guidance values, and on field observations. As previously discussed, petroleum product released is now weathered, producing matrix interference results during laboratory analysis. The observed petroleum impacts appeared to extend into areas where multiple compounds were detected, even though concentrations do not necessarily exceed guidance values. These observations do not represent exact field conditions, but may be useful as guidance for general site conditions and future remedial action.

5.3 Contaminant Fate and Transport

Most observations indicate that petroleum impacts are confined to the coarse-grained sand and gravel fill material. Some evidence of impacts was seen at the uppermost areas of the dense clay and silt material; however, these impacts appeared to sharply decrease with depth. This indicates that the clay/silt, in areas where it is present, acts as a confining layer.

Transport of contaminants via leaching has, and may continue to occur at a very slow rate due to the dense nature of the soil. It is possible that contaminants are migrating into groundwater at the site in at least one location. Groundwater observed in test pit TP-03 exhibited a moderate petroleum-type sheen; however, it is possible that clean groundwater came into contact with contaminated soil above the water table when disturbed.



As previously discussed, the contour of the bedrock under the property seems to have aided in containing the majority of impacts to the three areas of concern.

6.0 HUMAN HEALTH EXPOSURE ASSESSMENT

The potential impacts to future users of the property, based on the intended future use of the property, will be evaluated in the context of the potential exposure pathways to the contaminants of concern. The Human Health Exposure Assessment (HHEA) will evaluate the potential exposure to contaminants of concern during current uses and reasonably anticipated future uses.

In order to evaluate the potential exposure pathways associated with the heavy metals, VOCs, and SVOCs in subsurface soil, it is necessary to understand what exposure pathways are reasonably expected under anticipated future property uses. An exposure pathway consists of five elements: a source of contamination, transport through an environmental medium, a point of exposure, a route of human exposure, and an exposed population. An exposure pathway occurs when the five elements of an exposure pathway described above link the contaminant source to a receptor population, resulting in exposure. Several pathways will be evaluated in an exposure assessment. A potential exposure pathway exists when one or more of the exposure pathway elements are missing or incomplete. If one or more of the pathway elements is missing, the exposure pathway is considered to be incomplete and therefore, this pathway is eliminated, as exposure/potential exposure to contaminants is not considered to be present.

The remedial alternatives to be presented in the Alternatives Analysis will address human exposure, as an exposure assessment will be discussed in more detail.

7.0 FUTURE WORK

An Interim Remedial Measure (IRM) has been submitted to the NYSDEC for a limited soil excavation, and was approved in December 2005. The IRM proposes to excavate the grossly contaminated soil seen atop the shallow bedrock as depicted in Figure 7 as AOC-01. Remedial activity for this particular area of concern is proposed prior to the remainder of the remedial activities for reasons including: (1) the excavation may provide an added environmental protection benefit if completed before the bulk of the remedial activities as it is addressing a source area and (2) the property owner (BCP Volunteer) would take the opportunity to begin the clearing and grading in preparation for future construction. Removal of the grossly contaminated soil may prevent any impacts to the possibly clean aquifer below the site. This IRM is tentatively scheduled for Spring 2006.

Upon the completion of the soil removal IRM, a number of bedrock wells are proposed along the boundary of the site for assessment of off-site groundwater impacts. It is likely that 3-4 monitoring wells will be installed initially, while up to two additional wells will be installed once subsurface groundwater flow conditions are better understood.

Sediment in the on-site retention pond will be sampled as part of a Fish and Wildlife Resource Impact Analysis (FWIRA). Samples will be analyzed in accordance with Section 3.10 of DER-10 Technical Guidance Document for Site Investigation and Remediation.



Due to the subsurface contamination observed at several locations across the site, and the future plans to consolidate and cap the contaminated material, soil vapor will be characterized in areas where future structures are proposed. Specifically, soils within AOC-02 to be capped with the proposed self-storage building will be characterized. In addition, a soil vapor extraction system will be proposed beneath the foundation of the proposed building.

Following agency review of this report, a Remedial Alternatives Analysis (AA) and Remedial Action Work Plan (RAWP) will be prepared and submitted to the NYSDEC. Upon approval of the RAWP, site remediation can begin, which will be closely integrated with planned site development activities.

8.0 SUMMARY AND CONCLUSIONS

The site was formerly occupied by a petroleum bulk storage (PBS) facility, a lumber/building supply yard, a gasoline service station, and a brick factory. The central parcel was formerly owned and operated by Love/Effron Oil through the 1970s. Prior to Love/Effron's ownership, the property contained a gas station that was in operation until the widening and elevation of Route 44 circa the late 1950s.

The most recent use for the central parcel was as petroleum bulk storage (PBS) facility, but was closed in the late 1980s. The existing foundation seen at the site was likely used as a garage, offices, and a loading facility.

As a result of the two phases of investigation, three general areas of concern were identified, including the former fuel unloading area by the northern entrance to the property (AOC-01), the area surrounding and including the existing foundation (AOC-02), and the parcel north of Love Road adjacent to the railroad bed (AOC-03). The areas were identified based on visual and olfactory field observations and exceedances of regulatory guidance values for a number of VOCs and SVOCs associated with petroleum product releases.

AOC-01 contains petroleum impacted soil; specifically, semi-volatile organic compounds detected above the respective STARS Memo #1 criteria. Metals were also detected at levels exceeding TAGM 4046 soil cleanup objectives in this area.

Impacted soil as determined through field observations and analytical testing is located at depths of approximately 0 (surface) to 7 feet (bedrock) on average. AOC-01 is estimated to have an area of 4,400 square feet, which results in an approximate impacted volume of 1,140 cubic yards of soil.

AOC-01 is the subject of a proposed IRM to excavate grossly contaminated soil that lies atop the shallow bedrock. If completed prior to the remainder of the remedial activities, the soil excavation is likely to provide environmental protection benefits, as a suspected source area will be removed. In addition, the activities of the IRM will allow the Volunteer to begin site preparations for the proposed construction of a self storage facility. This work is tentatively scheduled for the Spring of 2006.

AOC-02 also contains petroleum impacted soil; specifically, volatile and semi-volatile organic compounds detected above the respective regulatory guidance levels. Metals were also detected at



levels exceeding TAGM 4046 soil guidance values in this area. This area of concern was split into three pieces (AOC-02A, B, and C) based on the analytical results and current site conditions.

AOC-02A is likely confined to the area within the existing foundation. The most heavily impacted soil is estimated to cover an area of 6,000 square feet, at an average thickness of 5 feet. This results in an approximated impacted volume of 1,100 cubic yards. AOC-02B is located adjacent to the foundation to the west, along Route 44. This impacted area is considerably larger, estimated to have an area of 14,500 square feet, and an average thickness of 8 feet. This results in an approximated impacted volume of 4,300 cubic yards of soil. AOC-02C is a small portion of soil located further west of the existing foundation. The area is approximately 2,150 square feet, 3 feet thick, or 240 cubic yards.

A 1,000-gallon UST was removed from the upper tier of the property on the southeast edge of the existing foundation through an approved IRM in November 2005. A small hole was noted in the bottom of the tank, and impacts were observed underneath; however, the bulk of the contamination seen in the area is not likely due solely to this tank, based on historical use. The tank was surrounded by the same dense blue-gray silt and clay as seen in other areas of the site, which may have worked to contain any leaking from the tank.

AOC-03 was determined through field observations and analytical testing to be heavily impacted by SVOCs, and to a lesser extent, VOCs. A number of SVOCs exceed STARS Memo #1 soil guidance values. Metals were also detected at levels exceeding TAGM 4046 soil guidance values in this area. Subsurface soil appears to exhibit fewer impacts closer to the northern property line. Bedrock under this parcel appears to form a shallow troth leading off the northern boundary. The most heavily impacted soil in AOC-03 extends over an approximate area of 8,900 square feet, at a thickness of 5 feet, resulting in an estimated impacted volume of 1,650 cubic yards of soil.

Following the review of this report by the NYSDECBCP Site Manager, Fuss & O'Neill is prepared to submit a remedial Alternatives Analysis for the site. Following the alternatives analysis, a remedial action work plan (RAWP) will be submitted to the NYSDEC for approval, which will outline the required remedial activities to clean the site to acceptable levels for the proposed site development of a self storage facility.

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Element	TP-01-01	TP-02-01	TP-02-02	TP-03-01	TP-04-01	TP-05-01	TP-06-01	TP-07-01	TP-07-02	TP-08-01	TAGM 4046 Recommended Soil Cleanup Guidance Value
(depth)	0-3	0-1	1-3'	0-3'	1-3'	0-4'	2-4'	0-4'	4-6'	0-2'	(ppm)
Aluminum	15800	12200	14100	15500	17200	17100	1700	1500	16800	20300	SB
Antimony											SB
Arsenic	8,1	5.3	6.0	8.6	7.0	7.9	13.0	5.3	7.7	9.2	7.5
Barium	89.3	38.1	43	77	91.7	109	67	79.6	102	81.1	300
Beryllium										0.67	0.16
Cadmium											1
Calcium	3760	27200	11100	1870	15550	2420	1060	1650	1860	1600	SB
Chromium	20.2	15.4	16.3	18.5	20.9	21,4	20.7	17_3	21.5	26,3	10
Cobalt	13.2	12.1	12.6	13.4	13.4	14.8	18.6	12.8	14.3	17.6	30
Copper	36.3	29.6	28.5	30.1	30.5	34.3	25.4	23.6	32.7	31.6	25
Iron	34200	27900	35000	31100	34000	35400	41000	26400	34300	34400	2000
Lead	39.5	12.4	17	13.5	14.7	16.5	18.8	15	17.3	25.8	200-500*
Magnesium	7710	9400	8310	5900	6980	6450	5030	5580	7330	8780	SB
Manganese	983	619	1010	496	775	638	1010	642	727	1010	SB
Mercury										0.05	0.1
Nickel	28.9	25	28.2	28.7	29.4	31.5	25.3	24.4	32,5	37,5	13
Potassium	1380	1310	1050	1780	1690	1770	1160	1230	1610	1330	SB
Selenium	1.5	0.81	1.3	1.2	1.6	1.1	1.5	1.2	1	0.9	2
Silver											SB
Sodium	150	74.6	63.4	91.9	89.2	156	67.9	66.9	83.4		SB
Thallium											SB
Vanadium	21.4	14.2	15.7	18.9	22.4	23.4	25.2	19.5	22.2	25.1	150
Zinc	89.4	67.7	84.7	80.9	81.4	87,8	61.9	71	91,4	78.6	20

^{*} Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

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	TP-09-01	TP-09-02	TP-10-01	TP-12-01	TP-13-01	TP-14-01	TP-15-01	TP-16A-01	TP-16A-02	TP-16B-01	TAGM 4046 Recommended Soil Cleanup Guidance Value
(depth)	4-5'	0-1'	3-5'	1-3'	2-4'	4-5'	3-5'	1-4'	4-6'	5-10'	(ppm)
Aluminum	17800	16500	16800	21200	15100	16000	21300	16100	17400	16300	SB
Antimony											SB
Arsenic	12.3	10.0	5.6	11.2	6.0	7.1	8.3	5.4	7.5	8.7	7.5
Barium	76.7	87.7	80.1	86.4	81.2	63.5	113	71.6	91.2	102	300
Beryllium				0.66							0.16
Cadmium		0.77									1
Calcium	1440	11000	2190	1840	1510	10300	2020	3320	2200	2500	SB
Chromium	21.5	26.1	19.3	29.5	17,9	17,2	25.6	18.8	20.9	20	10
Cobalt	17.9	13.6	12.4	25.5	14.5	11.8	16.5	13.4	17.8	14.3	30
Copper	29.2	34.2	27.7	73.1	25.6	30.5	36.8	26.6	32.6	33.4	25
Iron	27000	31100	19700	41500	30700	29100	38300	30100	34800	33700	2000
Lead	21.6	79.5	52.1	24.5	17.6	40.2	17	40.1	16.8	18.1	200-500*
Magnesium	6050	8670	6280	17000	7090	11600	6810	6920	6230	5990	SB
Manganese	443	983	831	2100	989	1050	764	925	889	691	SB
Mercury	0.07	0.14	0.09	0.04		0.04	0.05				0.1
Nickel	29.6	28.6	26.7	43.5	25.7	25.7	35,9	26.9	34.8	29.7	13
Potassium	1250	1310	1070	1510	1060	993	1540	1140	1020	910	SB
Selenium	1.1	1.3	1.5	1.9	2.2	1	1.5	0.73	1.4	1.5	2
Silver											SB
Sodium	93.4	77.5			70.5	120	169	97.7	174	126	SB
Thallium							-07			120	SB
Vanadium	23	23	21.4	25.6	19.6	20.6	25.7	23.1	20.1	19.2	150
Zinc	98.7	133	140	104	72.8	103	86.1	86	88.1	83	20

^{*} Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

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Element	TP-17-01	TP-17-02	TP-18-01	TP-19-01	TP-19-02 DUPLICATE	TP-20-01	TP-21-01	TP-21-02	TP-22-01	TP-24-01	TAGM 4046 Recommended Soil Cleanup Guidance Value
(depth)	7-10'	3-5'	4-5'	0-21	0-2	3-5'	6-7'	3-4'	8-9'	8-9'	(ppm)
Aluminum	17100	21400	16400	17900	17100	17100	20800	23200	12500	20500	SB
Antimony											SB
Arsenic	8.4	9.9	7.7	7.5	7.7	8.3	9.9	7.2	7.0	9.3	7.5
Barium	119	116	66.5	68.6	73.7	70.4	140	134	61.2	107	300
Beryllium							0.59		01.2	107	0.16
Cadmium											1
Calcium	8300	1250	5330	47100	10400	935	3440	2800	1920	1570	SB
Chromium	21.4	24.7	20.5	20	18.9	19.4	22.8	24.5	15.9	15/0	
Cobalt	15.3	17.1	14.5	12.9	11.6	13.8	16.5	14.9	11.8	17.3	10 30
Copper	30.9	32.4	29.3	32.7	30,3	29.2	26.1	21.3	32.9	30.4	25
Iron	33800	35600	32100	29400	20100	31500	33400	29900	25800	34600	2000
Lead	19.5	20.3	12.1	27.1	30.3	15.8	27.2	17.2	14.5	17	
Magnesium	7020	6800	6770	8840	11000	5550	6250	5710	5880	5680	200-500* SB
Manganese	1020	892	1010	1480	4500	758	717	1200	791	855	
Mercury		0.06	0.04	0.05	0.05	750	0.04	0.05	791	0.06	SB
Nickel	32.9	34.1	28.3	27,6	26.3	23.7	28.8	27.7	25.6	30.8	0.1
Potassium	1400	2020	1640	1380	1380	1410	1680	1760			13
Selenium	1.8	1.7	0.98	1.5	2.1	1.3	1.7	2.6	1380	1480	SB
Silver			0.70	1.5	644	1.3	1.7	4.0	1	2.1	2
Sodium	79.8	83.5	141	58.5	69.5	61.1	126	105	22.7	70.	SB
Thallium	1210	00.0	272	30.3		01.1	120	125	55.6	70.4	SB
Vanadium	21.6	27.8	22.5	25.3	25.0	22.4	20.5	20.4	4.6		SB
Zinc	86.2	85.9	76.2	93.7	94.7		28.5	30.4	16.8	23.8	150
Background les						65	96.7	74	95	75.4	20

^{*} Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

Note: Bold and shaded values are in exceedance of TAGM 4046 recommended soil cleanup guidance values.

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Element	TP-25-01	TP-28-01	TP-28-02	TP-29-01	TP-29-02	TP-30-01	TP-30-02	TP-31-01	TP-32-01	TP-32-02	TAGM 4046 Recommended Soil Cleanup Guidance Value
(depth)	5.5-6.51	1-4'	9.5'	9'	0-1'	9.51	3-4'	4-7'	3-5'	11'	(ppm)
Aluminum	17200	20100	11100	11400	17900	20200	16900	24400	23000	12700	SB
Antimony											SB
Arsenic	7.5	11.6	5.6	18.8	5.9	10.9	6.3	7.3	10.3	9.8	7.5
Barium	76	127	45.4	127	93.2	113	88.1	172	162	83	300
Beryllium								0.75	0.72		0.16
Cadmium											1
Calcium	1460	2580	13300	6840	1140	7430	1090	23800	3470	197	SB
Chromium	19.7	23.4	13.5	13.9	20	25,1	21	30.6	28.5	15.7	10
Cobalt	14	19.8	10.2	13.4	13.4	17	15.3	15.9	17.3	12.3	30
Copper	36.9	38.5	28.2	34.3	18.8	37.5	27,5	36.9	42.1	33.9	25
Iron	30000	41800	25900	28000	27300	37600	28000	39500	41100	27500	2000
Lead	14.8	19.4	10.2	13.3	18.9	16.9	15.2	14.7	18.3	13.4	200-500*
Magnesium	6830	6890	5870	5780	4630	8570	6170	9100	8730	7350	SB
Manganese	1080	1480	730	2410	1590	733	536	1100	798	935	SB
Mercury	0.04	0.05							1,70	755	0.1
Nickel	29.9	37.1	22.9	28.4	22.6	36.4	29.2	37.4	38.7	25.6	13
Potassium	1740	2020	1240	1300	1250	2750	1690	2740	2920	1710	SB
Selenium	1.5	1.6	1.1	1.1	1.6	0.94	1.2	1.5	1.3	1.2	2
Silver									2.0	1.2	SB
Sodium		119	204	119	73.5	106	120	166	128	71.6	SB
Thallium							120	100	120	71.0	SB
Vanadium	21.4	26.4	13.2	14.5	24.8	25.1	21.3	31.3	31.8	15.7	150
Zinc	88.4	93.4	71.1	78.9	76.2	96.2	77.1	91.5	98.4	79.1	20

^{*} Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

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Element	TP-33-01	TP-33-02	TP-35-01	TP-35-02	TP-36-01	TP-37-01	TP-38-01	TP-39-01	TP-41-01	TP-42-01	TAGM 4046 Recommended Soil Cleanup Guidance Value
(depth)	0-1'	8'	0-1'	4-7'	5-7'	4-5'	4-7'	6-7.51	3-6'	4-6'	(ppm)
Aluminum	17000	11100	12900	14000	21100	17400	12900	21800	14100	18800	SB
Antimony											SB
Arsenic	6.9	7.2	8.4	6.1	8.8	9,9	9.0	9.4	7,9	7.4	7.5
Barium	96.4	51.6	75.7	50.7	128	52.2	72.5	88	83	76.1	300
Beryllium					0.76						0.16
Cadmium			0.94			0.71	0.82	1.2			1
Calcium	2360	2780	35000	8120	2640	2020	3130	5140	30600	1170	SB
Chromium	18.1	13.6	16	22.7	22.6	21.1	17	29.8	18.8	23.4	10
Cobalt	13.4	14.1	11.1	12.4	11.6	18.5	12	18.1	13	11.8	30
Copper	21.5	32,7	32.4	33.7	31.4	49.3	37.9	49.9	34.7	30.3	25
Iron	26400	25800	26300	27500	32400	37200	41000	38700	29600	33200	2000
Lead	26	12.8	32	54.9	15.3	64.5	46.5	118	12.8	15.3	200-500*
Magnesium	4590	4990	24200	9820	5220	9150	5280	13700	7620	6390	SB
Manganese	910	744	1460	318	795	720	1810	724	825	378	SB
Mercury	0.05			1.4	0.08	0.05	0.04	0.1	0.20	0,0	0.1
Nickel	21.9	24.8	23.5	27.8	26,9	37	27.7	40.8	27.7	27.3	13
Potassium	893	813	1460	1410	1560	1360	1550	1350	2010	1870	SB
Selenium	1.3	1	0.75		1.6	1.5	2.5	1.3	1.3	1.8	2
Silver								2.0	2.0	2.0	SB
Sodium	76.4		300	90	123	77.2	134	111	115	120	SB
Thallium									110	120	SB
Vanadium	22.1	12.8	17.9	17.6	26.6	21.1	20.4	34.9	19.8	27.5	150
Zinc	81.4	79.6	87,6	92.6	88.8	120	93.6	182	82.1	76.8	20

^{*} Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

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Element	TP-44-01	TP-44-02	TP-46-01	TP-47-02	TP-47-03 DUPLICATE	TP-48-01	TAGM 4046 Recommended Soil Cleanup Guidance Value
(depth)	10.51	0-21	10'	8-9'	9209	6-7'	(ppm)
Aluminum	16800	10500	15500	16300	15400	15600	SB
Antimony							SB
Arsenic	6.2	9,5	6.3	7.3	7.4	8.4	7.5
Barium	74.2	64.6	98.9	79.5	79.1	81.4	300
Beryllium							0.16
Cadmium		0.59				0.58	1
Calcium	1330	8140	12100	2590	2450	12500	SB
Chromium	19.8	13.7	19.7	20.5	10.5	20	10
Cobalt	13.3	9.5	13.9	14.4	34.4	16	30
Copper	37.1	29.3	32.3	37.8	38,2	39.7	25
Iron	31400	27500	31000	32800	32200	32100	2000
Lead	15.1	60.9	14	16.4	187	15	200-500*
Magnesium	6960	6610	6380	7270	6720	7030	SB
Manganese	693	631	550	876	844	909	SB
Mercury	0.04	0.07				0.04	0.1
Nickel	28.6	23.2	28.6	32.6	3191	33.9	13
Potassium	1990	1060	1890	1840	tako	1920	SB
Selenium	1.3	1.1	0.94	1.2	4 4 13	1.4	2
Silver							SB
Sodium		142	80.8	109	111	75.1	SB
Thallium							SB
Vanadium	21.8	17.6	20.2	22.2	21.1	21.2	150
Zinc	85.4	143	90	94.4	89.8	94.6	20

^{*} Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

TABLES

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Compound (µg/kg)	TP-01-01	TP-02-01	TP-02-02	TP-03-01	TP-04-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)	
(depth, ft. bgs)	0-3'	0-1'	1-31	0-3'	1-3'	(µg/kg)	49. 6/	
Acetone	ND	2.9	ND	ND	21	200	200	
Benzene	ND	ND	ND	ND	ND	60	14	
Bromodichloromethane	ND	ND	ND	ND	ND	10000		
Bromophorm	ND	ND	ND	ND	ND	10000		
Bromomethane	ND	ND	ND	ND	ND	10000		
2-butanone (MEK)	ND	ND	ND	ND	ND	300		
sec-butylbenzene	ND	ND	ND	3.5	ND	10000	100	
n-butylbenzene	ND	ND	ND	ND	ND	10000	100	
tert-butylbenzene	ND	ND	ND	ND	ND	10000	100	
Carbon disulfide	ND	ND	ND	ND	ND	2700		
Carbon tetrachloride	ND	ND	ND	ND	ND	600		
Chlorobenzene	ND	ND	ND	ND	ND	1700		
Chloroethane	ND	ND	ND	ND	ND	1900		
Chloroform	ND	ND	ND	ND	ND	300		
Chloromethane	ND	ND	ND	ND	ND	10000		
Dibromochloromethane	ND	ND	ND	ND	ND	10000		
1,1-dichloroethane	ND	ND	ND	ND	ND	200		
1,2-dichloroethane	ND	ND	ND	ND	ND	100		
1,1-dichloroethene	ND	ND	ND	ND	ND	400		
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000		
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300		
1,2-dichloropropane	ND	ND	ND	ND	ND	10000		
cis-1,3-dichloropropene	ND	ND	ND	ND	ND ND	10000		
trans-1,3-dichloropropene	ND	ND	ND	ND				
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	400	
Ethylbenzene	ND				ND	10000	100	
2-hexanone	ND	ND	ND ND	ND	ND	5500	100	
		ND		ND	ND	10000	400	
Isopropyl Benzene	ND	ND	ND	ND	ND	10000	100	
p-isopropyltoluene	ND	ND	ND	5.3	ND	10000	100	
Methylene chloride	ND	ND	ND	ND	ND	100		
Naphthalene	ND	ND	ND	ND	ND	10000	200	
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000		
n-propylbenzene	ND	ND	ND	ND	ND	10000	100	
Styrene	ND	ND	ND	ND	ND	10000		
1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600		
Tetrachloroethene	ND	ND	ND	ND	ND	1400	4.2.2	
Toluene	ND	ND	ND	ND	ND	1500	100	
1,1,1-trichloroethane	ND	ND	ND	ND	ND	800		
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000		
Trichloroethene	ND	ND	ND	ND	ND	700		
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	10000	100	
1,2,4-trimethylbenzene	ND	ND	ND	ND	ND	10000	100	
Vinyl Chloride	ND	ND	ND	ND	ND	200		
o-xylene	ND	ND	ND	ND	ND	1200	100	
m-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100	

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-05-01	TP-06-01	TP-07-01	TP-07-02	TP-08-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	0-4'	2-4'	0-4'	4-6'	0-2'	(µg/kg)	
Acetone	ND	48	4.8	2.1	ND	200	200
Benzene	ND	ND	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	6.5	ND	ND	ND	300	
sec-butylbenzene	ND	ND	ND	ND	ND	10000	100
n-butylbenzene	ND	ND	ND	ND	ND	10000	100
tert-butylbenzene	ND	ND	ND	ND	ND	10000	100
Carbon disulfide	ND	ND	ND	ND	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	ND	ND	ND	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	ND	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1,1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	ND	ND	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	
Isopropyl Benzene	ND	ND	ND	ND	ND	10000	100
p-isopropyltoluene	ND	ND	ND	ND	ND	10000	100
Methylene chloride	ND	ND	ND	ND	ND	100	100
Naphthalene	ND	ND	11	ND	ND	10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	1
n-propylbenzene	ND	ND	ND	ND	ND	10000	100
Styrene	ND	ND	ND	ND	ND	10000	100
1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600	
Tetrachloroethene	ND	ND	ND	ND	ND	1400	
Toluene	ND	ND	0.43	ND	ND	1500	100
1,1,1-trichloroethane	ND	ND	ND	ND	ND	800	
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
Trichloroethene	ND	ND	ND	ND	ND	700	
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
1,2,4-trimethylbenzene	ND	ND	0.79	ND	ND	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	
o-xylene	ND	ND	ND	ND	ND	1200	100
m-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-09-01	TP-09-02	TP-10-01	TP-12-01	TP-13-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	4-5'	0-1'	3-5'	1-31	2-4'	(µg/kg)	V5/-8/
Acetone	3.1	ND	ND	ND	ND	200	200
Benzene	ND	ND	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	ND	ND	ND	ND	300	
sec-butylbenzene	15	ND	ND	ND	ND	10000	100
n-butylbenzene	13	ND	ND	ND	ND	10000	100
tert-butylbenzene	2.5	ND	ND	ND	ND	10000	100
Carbon disulfide	ND	ND	ND	ND	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	ND	ND	ND	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	ND	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1.1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	ND	ND	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	0.91	ND	ND	ND	ND	10000	100
p-isopropyltoluene	ND	ND	ND	ND	ND	10000	100
Methylene chloride	ND	ND	ND	ND	ND	1000	100
Naphthalene	ND	ND	ND	ND	ND	10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
n-propylbenzene	2.7	ND	ND	ND	ND	10000	100
n-propytoenzene Styrene	ND	ND	ND	ND	ND	10000	100
Styrene 1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND ND	600	1
ent a s							
Tetrachloroethene Toluene	0.49	ND ND	ND ND	ND ND	ND ND	1400 1500	100
1,1,1-trichloroethane	ND	ND	ND	ND	ND	800	100
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
Trichloroethene	0.38	ND	ND	ND	ND	700	
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
1,2,4-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	100
o-xylene	ND	ND	ND	ND	ND	1200	100
m-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-14-01	TP-15-01	TP-16A-01	TP-16A-02	TP-16B-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	4-5'	3-51	1-4'	4-6'	5-10'	(µg/kg)	V-5/5/
Acetone	ND	42	7.1	90	66	200	200
Benzene	ND	ND	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	7.6	ND	ND	8.5	300	
sec-butylbenzene	ND	ND	15	530	58	10000	100
n-butylbenzene	ND	ND	13	540	19	10000	100
tert-butylbenzene	ND	ND	0.85	ND	3.3	10000	100
Carbon disulfide	ND	ND	ND	ND	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	ND	ND	ND	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	ND	ND	ND	ND	200	
1.2-dichloroethane	ND	ND	ND	ND	ND	100	
1.1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	0.7	4.2	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	ND	ND	6.1	160	2.8	10000	100
p-isopropyltoluene	ND	ND	10	110	5.1	10000	100
Methylene chloride	ND	ND	ND	ND	ND	100	100
Naphthalene	ND	ND	52	ND	ND	10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
n-propylbenzene	ND	ND	11	300	2.4	10000	100
Styrene	ND	ND	ND	ND	ND ND	10000	100
1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600	
Tetrachloroethene	ND	ND	ND	ND	ND	1400	
Toluene	ND	ND	ND	ND	0.46	1500	100
1,1,1-trichloroethane	ND	ND	ND	ND	ND	800	200
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
Trichloroethene	ND	ND	ND	ND	ND	700	· · · · · · · · · · · · · · · · · · ·
1,3,5-trimethylbenzene	ND	ND	6.1	ND	ND	10000	100
1,2,4-trimethylbenzene	ND	ND	59	33	1.5	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	200
o-xylene	ND	ND	2.4	ND	ND	1200	100
m-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

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Compound (µg/kg)	TP-17-01	TP-17-02	TP-18-01	TP-19-01	TP19-02 DUPLICATE	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	7-10'	3-5'	4-5'	0-2'	0-21	(µg/kg)	
Acetone	84	350	ND	ND		200	200
Benzene	1.1	ND	ND	ND	E LIMBER IN	60	14
Bromodichloromethane	ND	ND	ND	ND	MD.	10000	
Bromophorm	ND	ND	ND	ND		10000	
Bromomethane	ND	ND	ND	ND	r value	10000	
2-butanone (MEK)	48	ND	ND	ND	, NO	300	
sec-butylbenzene	46	210	ND	ND	Walant Ulby	10000	100
n-butylbenzene	81	510	ND	ND	VID:	10000	100
tert-butylbenzene	15	ND	ND	ND		10000	100
Carbon disulfide	ND	85	ND	ND	73000	2700	
Carbon tetrachloride	ND	ND	ND	ND	y y hija	600	
Chlorobenzene	ND	ND	ND	ND	ar NO	1700	
Chloroethane	ND	ND	ND	ND	AND S	1900	
Chloroform	ND	71	ND	ND	Nio	300	
Chloromethane	ND	ND	ND	ND	ND -	10000	
Dibromochloromethane	ND	ND	ND	ND	VAL)	10000	
1,1-dichloroethane	ND	ND	ND	ND	PAPER NO.	200	
1.2-dichloroethane	ND	ND	ND	ND	1900	100	
1,1-dichloroethene	ND	ND	ND	ND	2 50	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	Stop Will State of	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	or Telés	300	1
1,2-dichloropropane	ND	ND	ND	ND	î No	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	(30)	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND		10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	100	10000	100
Ethylbenzene	38	840	ND	ND	A. VALID	5500	100
2-hexanone	ND	ND	ND	ND	0.10	10000	
Isopropyl Benzene	62	310	ND	ND	- NO 1	10000	100
p-isopropyltoluene	160	150	ND	ND	NEW YORK	10000	100
Methylene chloride	ND	ND	ND	ND		100	
Naphthalene	450	1200	ND	ND		10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	4 a C O	1000	
n-propylbenzene	99	580	ND	ND		10000	100
Styrene	ND	ND	ND	ND	VII	10000	200
1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ar ar other area	600	
Tetrachloroethene	ND	ND	ND	ND	D	1400	
Toluene	0.94	ND	ND	ND		1500	100
1,1,1-trichloroethane	ND	ND	ND	ND	SD. S	800	
1,1,2-trichloroethane	ND	ND	ND	ND	0.15	10000	
Trichloroethene	ND	ND	ND	ND	Call Night	700	
1,3,5-trimethylbenzene	200	1300	ND	ND	ST	10000	100
1,2,4-trimethylbenzene	150	2700	ND	ND		10000	100
Vinyl Chloride	ND	ND	ND	ND	10 TO	200	
o-xylene	26	53	ND	ND	ND	1200	100
m-xylene, p-xylene	150	730	ND	ND	(NOD)	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (பூத/kg)	TP-20-01	TP-21-01	TP-21-02	TP-22-01	TP-24-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	3-5'	6-7'	3-4'	8-9'	8-9'	(µg/kg)	
Acetone	2.2	ND	ND	ND	100	200	200
Benzene	ND	ND	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	ND	ND	ND	14	300	
sec-butylbenzene	ND	ND	ND	16	ND	10000	100
n-butylbenzene	ND	ND	ND	ND	ND	10000	100
tert-butylbenzene	ND	ND	ND	6.5	ND	10000	100
Carbon disulfide	ND	ND	ND	ND	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	ND	ND	ND	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1.1-dichloroethane	ND	ND	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1.1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	ND	ND	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	ND	ND	ND	ND	ND	10000	100
	ND	ND	ND	ND	ND	10000	100
p-isopropyltoluene	ND	ND	ND	ND	0.63	1000	100
Methylene chloride	ND	ND	ND	ND	0.03	10000	200
Naphthalene 4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
	ND	ND	ND	ND	ND	10000	100
n-propylbenzene							100
Styrene 1,1,2,2-tetrachloroehtane	ND ND	ND ND	ND ND	ND ND	ND ND	10000 600	
		ND	ND		ND	1400	
Tetrachloroethene	ND		ND	ND		1500	100
Toluene	ND	ND		ND	ND	800	100
1,1,1-trichloroethane 1,1,2-trichloroethane	ND	ND	ND ND	ND	ND ND	10000	
1,1,2-trichloroethane Trichloroethene	ND	ND		ND		700	
	ND	ND	ND	ND	ND		100
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
1,2,4-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	400
o-xylene	ND	ND	ND	ND	ND	1200	100
m-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-25-01	TP-28-01	TP-28-02	TP-29-01	TP-29-02	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	5.5-6.5'	1-4'	9.5'	9'	0-1'	(µg/kg)	V-5/5/
Acetone	ND	ND	ND	3.1	110	200	200
Benzene	ND	ND	38	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	ND	ND	ND	1	300	
sec-butylbenzene	ND	ND	18	ND	ND	10000	100
n-butylbenzene	ND	ND	27	ND	ND	10000	100
tert-butylbenzene	ND	ND	4.4	ND	ND	10000	100
Carbon disulfide	ND	ND	ND	ND	0.37	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	0.73	ND	ND	0.39	0.43	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	ND	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1,1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	80	ND	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	ND	ND	61	ND	ND	10000	100
p-isopropyltoluene	ND	ND	37	ND	ND	10000	100
Methylene chloride	ND	ND	ND	ND	ND	100	100
Naphthalene	3.4	0.95	110	0.69	0.57	10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
n-propylbenzene	ND	ND	89	ND	ND	10000	100
Styrene	ND	ND	ND	ND	ND	10000	100
1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600	
Tetrachloroethene	ND	ND	ND	ND	ND	1400	
Toluene	ND	ND	6.4	0.4	0.48	1500	100
1,1,1-trichloroethane	ND	ND	ND	ND	ND	800	200
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
Trichloroethene	ND	ND	ND	ND	ND	700	
1,3,5-trimethylbenzene	ND	ND	250	ND	ND	10000	100
1,2,4-trimethylbenzene	ND	ND	100	ND	ND	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	200
o-xylene	ND	ND	6.3	ND	ND	1200	100
m-xylene, p-xylene	ND	ND	160	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-30-01	TP-30-02	TP-31-01	TP-32-01	TP-32-02	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	9.5'	3-4'	4-7'	3-5'	11'	(µg/kg)	(Pg/ =g/
Acetone	5.6	2.1	83	ND	6.4	200	200
Benzene	ND	ND	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	ND	8.7	ND	ND	300	
sec-butylbenzene	ND	ND	ND	ND	ND	10000	100
n-butylbenzene	ND	ND	ND	ND	ND	10000	100
tert-butylbenzene	ND	ND	ND	ND	ND	10000	100
Carbon disulfide	ND	ND	1.4	ND	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	0,47	ND	0.41	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	ND	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1,1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	0.55	ND	10000	100
Ethylbenzene	ND	ND	ND	ND	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	ND	ND	ND	ND	ND	10000	100
p-isopropyltoluene	ND	ND	ND	ND	ND	10000	100
Methylene chloride	ND	ND	0.49	ND	ND	1000	100
Naphthalene	0.58	0.45	ND	ND	ND	10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
n-propylbenzene	ND	ND	ND	ND	ND	10000	100
Styrene	ND	ND	ND	ND	ND	10000	100
,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600	
Tetrachloroethene	ND	ND	ND	ND	ND	1400	
Toluene Toluene	0.52	0.43	0.59	ND	ND	1500	100
,1,1-trichloroethane	ND	ND	ND	ND	ND	800	200
,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
Trichloroethene	ND	ND	ND	ND	ND	700	
,3,5-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
,2,4-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	100
o-xylene	ND	ND	ND	ND	ND	1200	100
n-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-33-01	TP-33-02	TP-35-01	TP-35-02	TP-36-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	0-1'	8'	0-1'	4-7'	5-7'	(µg/kg)	V 8, 8,
Acetone	ND	7.3	ND	51	97	200	200
Benzene	ND	ND	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	ND	ND	ND	10	13	300	
sec-butylbenzene	ND	ND	ND	ND	ND	10000	100
n-butylbenzene	ND	ND	ND	ND	ND	10000	100
tert-butylbenzene	ND	ND	ND	ND	ND	10000	100
Carbon disulfide	ND	ND	ND	2.7	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	ND	ND	ND	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	ND	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1,1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	ND	ND	ND	5500	100
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	ND	ND	ND	ND	ND	10000	100
p-isopropyltoluene	ND	ND	ND	ND	ND	10000	100
Methylene chloride	ND	ND	ND	ND	ND	100	100
Naphthalene	ND	ND	ND	ND	ND	10000	200
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
n-propylbenzene	ND	ND	ND	ND	ND	10000	100
Styrene	ND	ND	ND	ND	ND	10000	100
1,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600	
Tetrachloroethene	ND	ND	ND	ND	ND	1400	
Toluene	ND	ND	ND	ND	ND	1500	100
1,1,1-trichloroethane	ND	ND	ND	ND	ND	800	100
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
Trichloroethene	ND	ND	ND	ND	ND	700	
1,3,5-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
1,2,4-trimethylbenzene	ND	ND	ND	ND	ND	10000	100
Vinyl Chloride	ND	ND	ND	ND	ND	200	100
o-xylene	ND	ND	ND	ND	ND	1200	100
m-xylene, p-xylene	ND	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-37-01	TP-38-01	TP-39-01	TP-41-01	TP-42-02	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	4-5'	4-7'	6-7.5'	3-6'	4-6'	(µg/kg)	(MS/ MS/
Acetone	69	120	7.3	6.6	12	200	200
Benzene	ND	0.71	ND	ND	ND	60	14
Bromodichloromethane	ND	ND	ND	ND	ND	10000	
Bromophorm	ND	ND	ND	ND	ND	10000	
Bromomethane	ND	ND	ND	ND	ND	10000	
2-butanone (MEK)	7.1	12	ND	ND	ND	300	
sec-butylbenzene	1.1	ND	ND	ND	ND	10000	100
n-butylbenzene	ND	ND	ND	ND	ND	10000	100
tert-butylbenzene	ND	ND	ND	ND	ND	10000	100
Carbon disulfide	0.95	5	1.4	ND	ND	2700	
Carbon tetrachloride	ND	ND	ND	ND	ND	600	
Chlorobenzene	ND	ND	ND	ND	ND	1700	
Chloroethane	ND	ND	ND	ND	ND	1900	
Chloroform	ND	ND	ND	ND	ND	300	
Chloromethane	ND	ND	ND	ND	ND	10000	
Dibromochloromethane	ND	ND	ND	ND	ND	10000	
1,1-dichloroethane	ND	0.99	ND	ND	ND	200	
1,2-dichloroethane	ND	ND	ND	ND	ND	100	
1,1-dichloroethene	ND	ND	ND	ND	ND	400	
cis-1,2-dichloroethene	ND	1.9	ND	ND	ND	10000	
trans-1,2-dichloroethene	ND	0.99	ND	ND	ND	300	
1,2-dichloropropane	ND	ND	ND	ND	ND	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	10000	
Methyl-tert-butyl-ether	ND	ND	ND	ND	ND	10000	100
Ethylbenzene	ND	ND	ND	ND	ND	5500	
2-hexanone	ND	ND	ND	ND	ND	10000	100
Isopropyl Benzene	1.1	ND	ND	ND	ND	10000	100
p-isopropyltoluene	ND	ND	ND	ND	ND	10000	100
Methylene chloride	ND	ND	ND	ND	ND	100	100
Vaphthalene	180	ND	8	ND	ND	10000	200
-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	1000	200
n-propylbenzene	ND	ND	ND	ND	ND	1000	100
Styrene	ND	ND	ND	ND	ND	10000	100
,1,2,2-tetrachloroehtane	ND	ND	ND	ND	ND	600	
l'etrachloroethene	ND	ND	ND	ND	ND	1400	
Toluene	0.65	0.89	ND	ND	ND	1500	100
,1,1-trichloroethane	ND	ND	ND	ND	ND	800	100
1,1,2-trichloroethane	ND	ND	ND	ND	ND	10000	
l'richloroethene	ND	0.89	ND	ND	ND	700	
,3,5-trimethylbenzene	3.2	ND	ND	ND	ND	10000	100
,2,4-trimethylbenzene	7.9	ND	1.9	ND	ND	10000	100
Vinyl Chloride	ND	1.4	ND	ND	ND	200	100
o-xylene	1.6	ND	ND	ND	ND	1200	100
n-xylene, p-xylene	1.9	ND	ND	ND	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

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Compound (µg/kg)	TP-44-01	TP-44-02	TP-46-01	TP-47-01		TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Guidance Values (µg/kg)
(depth, ft. bgs)	10.5'	0-2'	10'	8-9'		(µg/kg)	V-5/-5/
Acetone	7.4	66	33	4.8	illitato (1882)	200	200
Benzene	ND	ND	ND	ND		60	14
Bromodichloromethane	ND	ND	ND	ND		10000	
Bromophorm	ND	ND	ND	ND		10000	
Bromomethane	ND	ND	ND	ND		10000	
2-butanone (MEK)	ND	7.8	ND	ND		300	
sec-butylbenzene	ND	ND	110	ND		10000	100
n-butylbenzene	ND	ND	130	ND		10000	100
tert-butylbenzene	ND	ND	ND	ND		10000	100
Carbon disulfide	ND	ND	ND	ND		2700	200
Carbon tetrachloride	ND	ND	ND	ND		600	
Chlorobenzene	ND	ND	ND	ND	<i>I</i> 7	1700	
Chloroethane	ND	ND	ND	ND		1900	
Chloroform	ND	ND	ND	ND		300	
Chloromethane	ND	ND	ND	ND		10000	
Dibromochloromethane	ND	ND	ND	ND		10000	
1,1-dichloroethane	ND	ND	ND	ND		200	
1,2-dichloroethane	ND	ND	ND	ND		100	
1,1-dichloroethene	ND	ND	ND	ND		400	
cis-1,2-dichloroethene	ND	ND	ND	ND		10000	
trans-1,2-dichloroethene	ND	ND	ND	ND	Ti .	300	
1,2-dichloropropane	ND	ND	ND	ND	LVDCT	10000	
cis-1,3-dichloropropene	ND	ND	ND	ND		10000	
trans-1,3-dichloropropene	ND	ND	ND	ND	tti kitta kara kara kara kara kara kara kara k		
Methyl-tert-butyl-ether	ND	ND	ND	ND		10000	100
Ethylbenzene	ND	ND	ND	ND	M. H. Garain Carminage	10000	100
2-hexanone	ND	ND	ND	ND		5500	100
sopropyl Benzene	ND	ND	16	ND	e	10000	100
p-isopropyltoluene	ND	ND	83	ND	2 2 2 pt	10000	100
Methylene chloride	ND	ND	ND	ND		10000	100
Naphthalene	ND	ND	750	ND		100	
-methyl-2-pentanone (MIBK)	ND	ND	ND ND	ND		10000	200
n-propylbenzene	ND	ND	43	ND		1000	100
Styrene	ND	ND	ND ND	ND	T	10000	100
,1,2,2-tetrachloroehtane	ND	ND	ND	ND	. The second second	10000	
Tetrachloroethene	ND	ND	ND	ND			
Toluene	ND	ND	ND			1400 1500	100
,1,1-trichloroethane	ND	ND	ND	ND			100
,1,2-trichloroethane	ND	ND	ND	ND		800 10000	
richloroethene	ND	ND	ND	ND	A Section of the sect	700	
,3,5-trimethylbenzene	ND	ND	23	ND		10000	100
,2,4-trimethylbenzene	ND	ND	250	ND		10000	100
Vinyl Chloride	ND	ND	ND ND			200	100
-xylene	ND	ND	ND	ND			400
n-xylene, p-xylene	ND	ND	ND	ND		1200 1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

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Compound (µg/kg) (depth, ft. bgs)	TP-48-01	TAGM 4046 Recommended Soil Cleanup Objective (µg/kg)	STARS Memo # Guidance Values (µg/kg)
Acetone (deput, it. bgs)	20		
Benzene	ND ND	200	200
Bromodichloromethane	ND	60	14
Bromophorm	ND	10000	
Bromomethane	ND	10000	
2-butanone (MEK)	ND	10000	
sec-butylbenzene	ND	300	
n-butylbenzene	ND	10000	100
tert-butylbenzene	ND	10000	100
Carbon disulfide		10000	100
Carbon distinge	ND ND	2700	
Chlorobenzene		600	
Chloroethane	ND	1700	
	ND	1900	
Chloroform	ND	300	
Chloromethane	ND	10000	
Dibromochloromethane	ND	10000	
1,1-dichloroethane	ND	200	
1,2-dichloroethane	ND	100	
1,1-dichloroethene	ND	400	
cis-1,2-dichloroethene	ND	10000	
trans-1,2-dichloroethene	ND	300	
1,2-dichloropropane	ND	10000	
cis-1,3-dichloropropene	ND	10000	
trans-1,3-dichloropropene	ND	10000	
Methyl-tert-butyl-ether	ND	10000	100
Ethylbenzene	ND	5500	100
2-hexanone	ND	10000	
Isopropyl Benzene	ND	10000	100
p-isopropyltoluene	ND	10000	100
Methylene chloride	ND	100	
Naphthalene	ND	10000	200
4-methyl-2-pentanone (MIBK)	ND	1000	
n-propylbenzene	ND	10000	100
Styrene	ND	10000	
1,1,2,2-tetrachloroehtane	ND	600	
l'etrachloroethene	ND	1400	
Toluene	ND	1500	100
l,1,1-trichloroethane	ND	800	
,1,2-trichloroethane	ND	10000	
Trichloroethene	ND	700	
,3,5-trimethylbenzene	ND	10000	100
,2,4-trimethylbenzene	ND	10000	100
Vinyl Chloride	ND	200	
o-xylene	ND	1200	100
n-xylene, p-xylene	ND	1200	100

^{**} Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

Exceedance of TAGM 4046 Recommended Soil Cleanup Objectives

Exceedance of STARS Memo #1 Guidance Values

JULY 2005

Compound	TP-01-01	TP-02-01	TP-02-02	TP-03-01	TP-04-01	TP-05-01	TP-06-01	TP-07-01	TAGM 4046 Recommended Soil Cleanup Objective	ctive Soil Cleanup Objective	
(depth, ft. bgs)	0-3'	0-1'	1-3'	0-3'	1-3'	0-4'	2-4'	0-4'	(µg/kg)	(µg/kg)	
Acenaphthene	ND	50000	400								
cenaphthylene	ND	41000	41000								
Anthracene	ND	50000	1000								
Benzo(a)anthracene	ND	224 or MDL	0.04								
Benzo(a)pyrene	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND	61 or MDL	0.04	
Benzo(b)fluoranthene Benzo(g,h,i)perylene	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	1100 50000	0.04 0.04	
enzo(k)fluoranthene	ND	1100	0.04								
Benzyl alcohol	ND		0.04								
butyl benzyl phthalate	ND	50000	50000								
Di-n-Butylphthalate	ND	ND	ND	300	ND	ND	ND	ND	8100	8100	
arbazole	ND										
ndeno(1,2,3-cd)pyrene	ND	220 or MDL	0.04								
-chloroaniline	ND		220								
Bis(-2-chloroethoxy)methane	ND										
Bis(2-chloroethyl)ether	ND ND	ND									
chloronaphthalene	ND	ND ND	800	800							
2-chlorophenol 2'-oxybis(1-chloropropane)	ND	400	800								
Chrysene	ND	14 or MDL	0.04								
Dibenzo(a,h)anthracene	ND	6200	14								
Dibenzofuran	ND		620								
3-dichlorobenzene	ND										
2-dichlorobenzene	ND	ig dealer									
,4-dichlorobenzene	ND	an man	LAN AMANA								
3'-dichlorobenzidine	ND	7100									
4-dichlorophenol	ND	400	200								
Diethylphthalate	ND	2000	7100								
Dimethyl phthalate	ND		2000								
4-dimethylphenol	ND ND	200 or MDL	200								
4-dinitrophenol 4-dinitrotoluene	ND	1000	200								
6-dinitrotoluene	ND	50000	1000								
Bis(2-ethylhexyl)phthalate	ND	50000	50000								
uoranthene	ND	50000	1000								
uorene	ND	410	1000								
Hexachlorobenzene	ND		410								
lexachlorobutadiene	ND										
Hexachloro cyclopentadiene	ND		Ag-pipe								
-lexachloroethane	ND	3200									
sophorone	ND	4400	4400								
methylnaphthalene	ND ND	ND	ND	ND	ND	ND	ND ND	ND ND	36400	36400	
6-dinitro-2-methylphenol chloro-3-methylphenol	ND ND	240 or MDL	240								
-methylphenol	ND	100 or MDL	100								
-methylphenol	ND	900	900								
naphthalene	ND	13000	200								
-nitroaniline	ND	430 or MDL	430								
-nitroaniline	ND	500 or MDL	500								
-nitroaniline	ND										
itrobenzene	ND	200 or MDL	200								
2-nitrophenol	ND	330 or MDL	330								
l-nitrophenol	ND	100 or MDL	100								
N-nitrosodimethylamine	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND			
N-nitrosodiphenylamine Di-N-octyl phthalate	ND	50000	50000								
Pentachlorophenol	ND	3000	1000								
Phenanthrene	ND	50000	1000								
Phenol	ND		30								
-bromophenyl-phenylether	ND		Quantiple								
-chlorophenyl-phenylether	ND										
V-nitroso-Di-N-propylamine	ND		No. some								
yrene	ND	ND	ND	61	ND	ND	ND	ND	50000	1000	
,2,4-trichlorobenzene	ND		0.00								
4,6-trichlorophenol	ND		100								
4,5-trichlorophenol	ND	100 or MDL									

TAGM 4046 Recommended Soil Cleanup Objectives STARS Memo #1 Guidance Values

JULY 2005

(depth, R. bg) 4-6 9-2 4-8 9-1 3-5 1-3 2-4 4-5 (depth, Rep)		TAGM 4046 Recommended Soil Cleanup Objective	TP-14-01	TP-13-01	TP-12-01	TP-10-01	TP-09-02	TP-09-01	TP-08-01	TP-07-02	Compound
No. No.	(µg/kg)	(µg/kg)	4-5'	2-4'	1-3'	3-5'	0-1'	4-5'			
No. No.	400	50000	ND	ND	ND	ND	430				
	41000	41000	ND	ND							
	1000	50000									
	0.04										
	0.04										
	0.04										
No. No.	0.04										Benzo(k)fluoranthene
Section No.	0.04									ND	Benzyl alcohol
	50000						ND	ND	ND	ND	outyl benzyl phthalate
	8100			260	ND		ND	ND			
Section Sect			ND								
Self-2-chloresthosylmethane ND ND ND ND ND ND ND N	0.04	220 or MDL									
	220										
Company Comp											
ND ND ND ND ND ND ND ND	vito beliefu.										
22-exylaid -chloropropane ND	800										
https://pubm.net/pu	800										
	0.04										
	14										
	620							ND		ND	
	AN ANNA			ND	ND	ND		ND			,3-dichlorobenzene
3-dichlorophenol ND ND ND ND ND ND ND N											,2-dichlorobenzene
Heichlorophenol ND ND ND ND ND ND ND N											
	gts MARIE										
	200										
	7100										
	2000	****									
**Admitrotoluene	200	200 or MDI									
	200										
ND ND ND ND ND ND ND ND	1000										A
No	50000			-				300	V		
	1000	50000	120	ND	ND	58	57	ND	41	ND	luoranthene
exachlorobutadiene	1000	410	ND	ND	ND	ND	610	180	ND	ND	luorene
ND	410										10-10-1
ND ND ND ND ND ND ND ND											
ND ND ND ND ND ND ND ND											
Mathematics	4400										
ND ND ND ND ND ND ND ND	4400 36400										and the second s
ND ND ND ND ND ND ND ND	30400										6-dinitro-2-methylphenol
ND ND ND ND ND ND ND ND	240	240 or MDL	ND	ND	ND				ND	ND	
Aphthalene ND ND ND ND ND ND ND N	100		ND			ND					
ND ND ND ND ND ND ND ND	900										
ND ND ND ND ND ND ND ND	200										
ND ND ND ND ND ND ND ND	430										
ND ND ND ND ND ND ND ND	500	500 or MDL									
ND ND ND ND ND ND ND ND	200	200 or MDT									
ND ND ND ND ND ND ND ND	330			***************************************							
Initrosodimethylamine	100										
Initrosodiphenylamine				_							
ND ND ND ND ND ND ND ND	At elipsis.										
ND ND ND ND ND ND ND ND	50000	50000								ND	i-N-octyl phthalate
ND	1000		ND	ND		ND					
December December	1000	50000									
ND ND ND ND ND ND ND ND	30										
Initroso-Di-N-propylamine											
Verne ND 43 54 99 54 ND ND 130 50000 2,4-trichlorobenzene ND											
2,4-trichlorobenzene ND ND ND ND ND ND ND ND											
	1000										
4,6-trichlorophenol ND ND ND ND ND ND ND	100										
4,6-trichlorophenol ND ND <td>100</td> <td>100 - 1007</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	100	100 - 1007									

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values Exceedance of both TAGM 4046 and STARS Memo #1 guidance

JULY 2005

Compound	TP-15-01	TP-16A-01	TP-16A-02	TP-16B-01	TP-17-01	TP-17-02	TP-18-01	TP-19-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Recommended Soil Cleanup Objectiv (µg/kg)
(depth, ft. bgs)	3-5'	1-4'	4-6'	5-10'	7-10'	3-5'	4-5'	0-2'	(μg/kg)	(µg/ kg)
Acenaphthene	ND	2500	390	ND	ND	ND	ND	ND	50000	400
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	41000	41000
Anthracene	ND	1200	150	84	ND	ND	ND	ND	50000	1000
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	224 or MDL	0.04
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	61 or MDL	0.04
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	1100	0.04
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	50000	0.04
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	1100	0.04
Benzyl alcohol	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND	50000	50000
outyl benzyl phthalate	ND	ND	ND	290	290	ND	ND	ND	8100	8100
Din-Butylphthalate	ND	ND	ND	96	ND	ND	ND	ND		
ndeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	220 or MDL	0.04
-chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND		220
Bis(-2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND		
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND		
-chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND		
-chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	800	800
,2'-oxybis(1-chloropropane)	ND	ND	ND	ND	ND	ND	ND	ND	400	
Chrysene	ND	ND	50	ND	ND	ND	ND	ND	14 or MDL	0.04
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	6200	14 620
Dibenzofuran	ND	2100	210	94	ND	ND	ND	ND		
,3-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND		
,2-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND		
,4-dichlorobenzene	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	7100	
,3'-dichlorobenzidine	ND	ND	ND	ND ND	ND ND	ND	ND	ND	400	200
,4-dichlorophenol	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND	2000	7100
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND		2000
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND		
2,4-dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	200 or MDL	200
2,4-dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	1000	
2.6-dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	50000	1000
Bis(2-ethylhexyl)phthalate	ND	ND	310	ND	ND	ND	ND	ND	50000	50000
Fluoranthene	ND	950	. 84	ND	ND	ND	ND	ND	50000	1000
Fluorene	ND	5300	570	ND	ND	ND	ND	ND	410	1000
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND		410
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND		
H xachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	2200	
H kachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	3200 4400	4400
horone	ND	ND	ND	ND	ND	ND 1990	ND ND	ND ND	36400	36400
2 ethylnaphthalene	ND	50000	1700 ND	ND ND	950 ND	1800 ND	ND	ND	30400	30100
4,6-dinitro-2-methylphenol 4-chloro-3-methylphenol	ND ND	ND ND	ND	ND	ND	ND	ND	ND	240 or MDL	240
	ND	ND	ND	ND	ND	ND	ND	ND	100 or MDL	100
2-methylphenol 4-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	900	900
naphthalene	ND	8700	ND	ND	740	1300	ND	ND	13000	200
2-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	430 or MDL	430
3-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	500 or MDL	500
4-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND		200
nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	200 or MDL	200
2-nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	330 or MDL	330 100
4-nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	100 or MDL	100
N-nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND	ND		an design
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND ND	ND ND	50000	50000
Di-N-octyl phthalate	ND	ND	ND	ND	ND	ND ND	ND	ND	30000	1000
Pentachlorophenol	ND	ND	ND	ND 320	ND ND	ND	ND	ND	50000	1000
Phenanthrene	ND ND	9200 ND	1200 ND	320 ND	ND	ND	ND	ND	30000	30
Phenol	ND ND	ND	ND	ND	ND	ND	ND	ND		
4-bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND		
4-chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND		
N-nitroso-Di-N-propylamine	ND	1300	180	77	ND	ND	ND	ND	50000	1000
Pyrene 12,4-trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	-gy plant	
2,4,6-trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND		100
		ND	ND	-	ND	ND	ND	ND	100 or MDL	

Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

TAGM 4046 Recommended Soil Cleanup Objectives

STARS Memo #1 Guidance Values

JULY 2005

Compound	TPI9-02 DUPLICAT E	TP-20-01	TP-21-01	TP-21-02	TP-22-01	TP-24-01	TP-25-01	TP-28-01	TAGM 4046 Recommended Soil Cleanup Objective (µg/kg)	STARS Memo #1 Recommended Soil Cleanup Objective (µg/kg)
(depth, ft. bgs)	1.00	3-5'	6-7'	3-4'	8-9'	8-9'	5.5-6.5'	1-4'		400
Cenaphthene	ND.	ND	ND	ND	ND	ND	49	ND	50000	41000
cenaphthylene	COMP.	ND	ND	ND	ND	ND	ND	ND	41000 50000	1000
nthracene	NST.	ND	ND	ND	66	ND	45 NTD	ND ND	224 or MDL	0.04
Benzo(a)anthracene	THE PARTY OF	ND	ND	ND	ND	ND ND	ND ND	ND	61 or MDL	0.04
Benzo(a)pyrene	To May	ND	ND	ND	ND	ND	ND	ND	1100	0.04
Benzo(b)fluoranthene	SID	ND	ND ND	ND ND	ND ND	ND	ND	ND	50000	0.04
Benzo(g,h,i)perylene	VAD:	ND	ND	ND	ND	ND	ND	ND	1100	0.04
Benzo(k)fluoranthene	ND Sign	ND ND	ND	ND	ND	ND	ND	ND		
Benzyl alcohol	- NID 30	ND	ND	ND	ND	ND	ND	ND	50000	50000
but benzyl phthalate	ND :	ND	280	ND	270	ND	ND	ND	8100	8100
Di-n-Butylphthalate Carbazole	SNIS	ND	ND	ND	ND	ND	ND	ND		
Ind no(1,2,3-cd)pyrene	ACCION A	ND	ND	ND	ND	ND	ND	ND	220 or MDL	0.04
+chloroaniline	54 NO.	ND	ND	ND	ND	ND	ND	ND		220
Bis -2-chloroethoxy)methane	ANAMON (A)	ND	ND	ND	ND	ND	ND	ND		***
Bi 2-chloroethyl)ether	· Charles	ND	ND	ND	ND	ND	ND	ND	4.444	
2-choronaphthalene		ND	ND	ND	ND	ND	ND	ND	800	800
2-c orophenol		ND	ND	ND	ND	ND	ND ND	ND ND	400	
2,2 oxybis(1-chloropropane)	200	ND	ND	ND	ND	ND ND	ND	ND	14 or MDL	0.04
Chysene	AND.	ND	ND ND	ND ND	ND ND	ND	ND	ND	6200	14
Dibenzo(a,h)anthracene	N. C.	ND	ND ND	ND	ND	ND	ND	ND		620
Dibenzofuran	(D)(D)	ND ND	ND	ND	ND	ND	ND	ND		
1,3-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND		
1,2-dichlorobenzene	- 300	ND	ND	ND	ND	ND	ND	ND	and another	
3,3'-dichlorobenzidine	. VINI	ND	ND	ND	ND	ND	ND	ND	7100	
2,4-dichlorophenol	*ND	ND	ND	ND	ND	ND	ND	ND	400	200
Diethylphthalate	N NIN +	ND	ND	ND	ND	ND	ND	ND	2000	7100
Dimethyl phthalate	A NIB	ND	ND	ND	ND	ND	ND	ND		2000
2,4-dimethylphenol		ND	ND	ND	ND	ND	ND	ND		200
2,4-dinitrophenol	N. Ningara	ND	ND	ND	ND	ND	ND	ND	200 or MDL	200
2,4-dinitrotoluene	No.	ND	ND	ND	ND	ND	ND	ND	1000 50000	1000
2,6-dinitrotoluene	FND.	ND	ND	ND	ND	ND ND	ND ND	ND ND	50000	50000
Bis(2-ethylhexyl)phthalate	÷ ND	ND	ND	ND	ND ND	ND	ND	ND	50000	1000
Fluoranthene		ND	ND ND	ND ND	150	ND	76	ND	410	1000
Fluorene	ND:	ND ND	ND	ND	ND	ND	ND	ND		410
Hexachlorobenzene Hexachlorobutadiene	A SOLD	ND	ND	ND	ND	ND	ND	ND		-
Hexachlorocyclopentadiene	, VIIO -77	ND	ND	ND	ND	ND	ND	ND		
H achloroethane	ALCOID A	ND	ND	ND	ND	ND	ND	ND	3200	AL MANY
Is horone	Mary	ND	ND	ND	ND	ND	ND	ND	4400	4400
2- ethylnaphthalene	C, ND	ND	ND	ND	ND	ND	58	ND	36400	36400
4,6-dinitro-2-methylphenol	OND L	ND	ND	ND	ND	ND	ND	ND		240
4-chloro-3-methylphenol	C (b)	ND	ND	ND	ND	ND	ND	ND	240 or MDL 100 or MDL	100
2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND ND	900	900
4-methylphenol	-80	ND	ND	ND	ND	ND ND	ND ND	ND	13000	200
naphthalene	(NE)	ND	ND ND	ND ND	ND ND	ND	ND	ND	430 or MDL	430
2-nitroaniline	SAD	ND ND	ND	ND	ND	ND	ND	ND	500 or MDL	500
3-nitroaniline	A VDV	ND	ND	ND	ND	ND	ND	ND		40,400
4-nitroaniline nitrobenzene	A ND 1	ND	ND	ND	ND	ND	ND	ND	200 or MDL	200
2-nitrophenol	87)	ND	ND	ND	ND	ND	ND	ND	330 or MDL	330
4-ritrophenol	5,000	ND	ND	ND	ND	ND	ND	ND	100 or MDL	100
N titrosodimethylamine	0.000	ND	ND	ND	ND	ND	ND	ND		AL STATE
N itrosodiphenylamine	Same and All Districts	ND	ND	ND	ND	ND	ND	ND	5000	50000
Di N-octyl phthalate	5 () () () ()	ND	ND	ND	ND	ND	ND	ND	50000	50000
Patachlorophenol	Model	ND	ND	ND	ND	ND	ND	ND	50000	1000
Phenanthrene	HONDS:	ND	ND	ND	190	ND	54	ND	50000	1000 30
Phenol	MD	ND	ND	ND	ND	ND	ND	ND		30
4-bromophenyl-phenylether	MANANA VA	ND	ND	ND	ND	ND	ND	ND ND		
4-chlorophenyl-phenylether	4 12	ND	ND	ND	ND	ND	ND ND	ND		
N-nitroso-Di-N-propylamine	END'C.	ND	ND	ND ND	ND 46	ND ND	ND	ND	50000	1000
Pyrene	TAND)	ND ND	ND ND	ND	ND	ND	ND	ND	30000	
1,2,4-trichlorobenzene 2, ,6-trichlorophenol	ND -	ND	ND	ND	ND	ND	ND	ND		100
	the females for the	TATA	140	112	1 12			ND	100 or MDL	

TAGM 4046 Recommended Soil Cleanup Objectives
STARS Memo #1 Guidance Values
Exceedance of both TAGM 4046 and STARS Memo #1 guidance

JULY 2005

Compound	TP-28-02	TP-29-01	TP-29-02	TP-30-01	TP-30-02	TP-31-01	TP-32-01	TP-32-02	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Recommended Soil Cleanup Objective
(depth, ft. bgs)	9.5'	9'	0-1'	9.51	3-4'	4-7'	3-5'	11'	(μg/kg)	(µg/kg)
Acenaphthene	ND	50000	400							
Acenaphthylene	ND	41000	41000							
Anthracene	ND	ND	ND	ND	ND	260	ND	ND	50000	1000
Benzo(a)anthracene	ND	224 or MDL	0.04							
Benzo(a)pyrene	ND	61 or MDL	0.04							
Benzo(b)fluoranthene	ND	1100	0.04							
Benzo(g,h,i)perylene	ND	50000	0.04							
Benzo(k)fluoranthene	ND	1100	0.04							
Benzyl alcohol	ND									
butyl benzyl phthalate	ND	50000	50000							
Di-n-Butylphthalate	ND	8100	8100							
Carbazole	ND									
Indeno(1,2,3-cd)pyrene	ND	220 or MDL	0.04							
4-chloroaniline	ND	***	220							
Bis(-2-chloroethoxy)methane	ND	An derive	Amerikansan							
Bis(2-chloroethyl)ether	ND									
2-chloronaphthalene	ND	Manage Control of the								
2-chlorophenol	ND	800	800							
2.2'-oxybis(1-chloropropane)	ND	400								
Chrysene	ND	14 or MDL	0.04							
Dibenzo(a,h)anthracene	ND	6200	14							
Dibenzofuran	ND	ND	ND	ND	ND	230	ND	ND		620
,3-dichlorobenzene	ND									
,2-dichlorobenzene	ND		49 March							
,4-dichlorobenzene	ND									
3,3'-dichlorobenzidine	ND	ND	ND	ND .	ND	ND	ND	ND	7100	
2,4-dichlorophenol	ND	400	200							
Diethylphthalate	ND	2000	7100							
Dimethyl phthalate	ND	and the second s	2000							
2,4-dimethylphenol	ND									
2,4-dinitrophenol	ND	200 or MDL	200							
2,4-dinitrotoluene	ND	1000	Approximate the second							
2,6-dinitrotoluene	ND	50000	1000							
Bis(2-ethylhexyl)phthalate	ND	50000	50000							
Fluoranthene	ND	50000	1000							
Fluorene	ND	410	1000							
Hexachlorobenzene	ND		410							
Herachlorobutadiene	ND									
Hexachlorocyclopentadiene	ND									
Hexachloroethane	ND	3200	+							
sophorone	ND	4400	4400							
-methylnaphthalene 1,6-dinitro-2-methylphenol	ND ND	ND ND	ND	ND	ND	ND	ND	ND	36400	36400
-chloro-3-methylphenol	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	240 MDI	240
-methylphenol	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	240 or MDL 100 or MDL	240
-methylphenol	ND	ND	ND	ND	ND	ND	ND ND	ND ND	900	100
aphthalene	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	13000	900
-nitroaniline	ND	430 or MDL	200 430							
-nitroaniline	ND	500 or MDL	500							
nitroaniline	ND	ND	ND	ND	ND	ND	ND ND	ND	500 or MDL	
itrobenzene	ND	200 or MDL	200							
-nitrophenol	ND	330 or MDL	330							
nitrophenol	ND	ND ND	100 or MDL							
N-nitrosodimethylamine	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	100 or MDL	100
N-nitrosodiphenylamine	ND									
Di-N-octyl phthalate	ND	ND ND	50000	50000						
Pentachlorophenol	ND	30000	50000 1000							
Phenanthrene	ND	50000	1000							
henol	ND	30000	30							
-bromophenyl-phenylether	ND									
-chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND ND	ND		manus.
N-nitroso-Di-N-propylamine	ND	ND	ND	ND	ND	ND ND	ND	ND		
vrene	ND	ND	ND	ND	ND	180	ND	ND	50000	1000
2,4-trichlorobenzene	ND		50000	1000						
	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND		100
,4,6-trichlorophenol		1417	LAIL	TAIL	INIZ	IND	INIJ	INI)		1411

TAGM 4046 Recommended Soil Cleanup Objectives
STARS Memo #1 Guidance Values
Exceedance of both TAGM 4046 and STARS Memo #1 guidance

JULY 2005

Compound	TP-33-01	TP-33-02	TP-35-01	TP-35-02	TP-36-01	TP-37-01	TP-38-01	TP-39-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Recommended Soil Cleanup Objective
(depth, ft. bgs)	0-1'	8'	0-1*	4-7'	5-7'	4-5'	4-7'	6-7.5'	(µg/kg)	(µg/kg)
Acenaphthene	ND	ND	ND	ND	ND	71	52	ND	50000	400
Acenaphthylene	ND	ND	40	92	ND	83	52	ND	41000	41000
Anthracene	ND	ND	ND	84	ND	65	65	ND	.50000	1000
Benzo(a)anthracene	ND	ND	100	230	61	150	200	ND	224 or MDL	0.04
Benzo(a)pyrene	ND ND	ND	120	230	48	190	190	180	61 or MDL	0.04
Benzo(b)fluoranthene Benzo(g,h,i)perylene	ND	ND ND	140 84	170 110	59 ND	200	210 75	ND ND	1100	0.04
Benzo(k)fluoranthene	ND	ND	110	200	60	110 160	170	ND	50000 1100	0.04
Benzyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	1100	0.04
butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	50000	50000
Di-n-Butylphthalate	ND	ND	ND	280	ND	250	280	ND	8100	8100
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	***	
Imeno(1,2,3-cd)pyrene	ND	ND	74	93	ND	90	70	ND	220 or MDL	0.04
4 nloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ан прави	220
Bis(-2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND		
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND		***
2- hloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND		
2-chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	800	800
2,2'-oxybis(1-chloropropane)	ND	ND	ND	ND	ND	ND	ND	ND	400	
Chrysene Dibarra (a b) and an ana	ND ND	ND ND	130 ND	260 ND	75 ND	210	280 NTO	200	14 or MDL	0.04
Dibenzo(a,h)anthracene Dibenzofuran	ND ND	ND ND	ND ND	ND ND	ND ND	39 54	ND 97	ND ND	6200	14 620
1,3-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND		620
12-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND		
1,4-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	Anaphip	
3,3'-dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	7100	
2,4-dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	400	200
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	2000	7100
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	MA NAME	2000
2,4-dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND		
2,4-dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	200 or MDL	200
2,4-dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	1000	
2,6-dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	50000	1000
Bi (2-ethylhexyl)phthalate	ND	ND	ND	320	ND	330	ND	ND	50000	50000
Fluoranthene	ND ND	ND ND	150 ND	520 53	98 ND	320	410	320 ND	50000	1000
Fluorene Hexachlorobenzene	ND	ND	ND	ND	ND	100 ND	53 ND	ND	410	1000 410
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND		410
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND		
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	3200	en delle
I phorone	ND	ND	ND	ND	ND	ND	ND	ND	4400	4400
2- ethylnaphthalene	ND	ND	83	50	ND	190	290	ND	36400	36400
4,6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND		
4-chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	240 or MDL	240
2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	100 or MDL	100
4-methylphenol	ND	ND	ND	ND	ND	ND	78	ND	900	900
naphthalene	ND ND	ND ND	55 ND	49 ND	ND	120	160	ND	13000	200
2-rutroaniline 3-nitroaniline	ND	ND ND	ND	ND	ND ND	ND ND	ND ND	ND ND	430 or MDL 500 or MDL	430 500
4-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	500 or MDL	500
nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	200 or MDL	200
2-nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	330 or MDL	330
4-nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	100 or MDL	100
N-nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND	ND		
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND		
Di-N-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	50000	50000
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND		1000
Phenanthrene	ND	ND	83	320	ND	210	400	180	50000	1000
Phenol	ND	ND	ND	ND	ND	ND	ND	ND		30
4-bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND		
1-chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND		
N-nitroso-Di-N-propylamine	ND	ND	ND 120	ND 480	ND	ND	ND	ND	50000	1000
Pyrene 12,4-trichlorobenzene	ND ND	ND ND	130 ND	480 ND	81 ND	280 ND	300	290 NTD	50000	1000
2,4-trichlorobenzene	ND	ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ally records and statute.	100
2, 5-trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	100 or MDL	
old and shaded values are in exceed						110	112	1112	TOO OI WILL	

latory soil cleanup guidance values:
TAGM 4046 Recommended Soil Cleanup Objectives
STARS Memo #1 Guidance Values
Exceedance of both TAGM 4046 and STARS Memo #1 guidance

JULY 2005

Compound	TP-41-01	TP-42-02	TP-44-01	TP-44-02	TP-46-01	TP-47-01	TP-47-02 DEPLICAT B	TP-48-01	TAGM 4046 Recommended Soil Cleanup Objective	STARS Memo #1 Recommended Soil Cleanup Objective (µg/kg)
(depth, ft. bgs)	3-6'	4-6'	10.5'	0-2'	10'	8-9'	8.92	6-7'	(µg/kg)	(µg/ ng)
Acenaphthene	ND	ND	ND	ND	74	ND	NID	ND	50000	400
Acenaphthylene	ND	ND	ND	44	ND	ND	* NO. "	ND	41000	41000
Anthracene	ND	ND	ND	60	40	ND	in Mare	ND	50000	1000
Benzo(a)anthracene	ND	ND	ND	82	ND	ND	NO.	ND	224 or MDL	0.04
Benzo(a)pyrene	ND	ND	ND	53	ND	ND		ND ND	61 or MDL 1100	0.04 0.04
Benzo(b)fluoranthene	ND	ND ND	ND ND	76	ND ND	ND ND	ND-C	ND	50000	0.04
Benzo(g,h,i)perylene	ND ND	ND	ND	66 59	ND	ND	7.0	ND	1100	0.04
Benzo(k)fluoranthene Benzyl alcohol	ND	ND	ND	ND	ND	ND	NOTE:	ND		0.01
butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	2750	ND	50000	50000
Di-n-Butylphthalate	270	310	280	280	250	ND	19307	ND	8100	8100
Carbazole	ND	ND	ND	ND	ND	ND	"AND	ND		
Indeno(1,2,3-cd)pyrene	ND	ND	ND	37	ND	ND		ND	220 or MDL	0.04
1-chloroaniline	ND	ND	ND	ND	ND	ND	A	ND		220
Bis(-2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND.	ND		
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND	ND	7.480	ND		
2-chloronaphthalene	ND	ND	ND	ND	ND	ND	DID.	ND	900	900
2-chlorophenol	ND	ND	ND	ND	ND	ND	ND.	ND ND	800 400	800
2,2'-oxybis(1-chloropropane)	ND	ND	ND ND	ND	ND ND	ND ND	ND ND	ND	14 or MDL	0.04
Chrysene	ND	ND ND	ND	180 ND	ND	ND ND	-1913	ND	6200	14
Dibenzo(a,h)anthracene	ND ND	ND	ND	110	ND	ND		ND		620
Dibenzofuran 1,3-dichlorobenzene	ND	ND	ND	ND	ND	ND	ND.	ND		
1,3-dichlorobenzene	ND	ND	ND	ND	ND	ND	A NETT	ND		
1,4-dichlorobenzene	ND	ND	ND	ND	ND	ND	NB.	ND		ata atlant
3,3'-dichlorobenzidine	ND	ND	ND	ND	ND	ND	Walled Wall	ND	7100	
2,4-dichlorophenol	ND	ND	ND	ND	ND	ND	STATE OF LESS	ND	400	200
Diethylphthalate	ND	ND	ND	ND	ND	ND	MAND CA	ND	2000	7100
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	NE	ND	-A man	2000
2,4-dimethylphenol	ND	ND	ND	ND	ND	ND	-(A)	ND		
2,4-dinitrophenol	ND	ND	ND	ND	ND	ND	NE)	ND	200 or MDL	200
2,4-dinitrotoluene	ND	ND	ND	ND	ND	ND	ND.	ND ND	1000 50000	1000
2,6-dinitrotoluene	ND	ND	ND	ND	ND ND	ND ND		ND	50000	50000
Bis(2-ethylhexyl)phthalate	ND	ND ND	ND ND	300 110	ND	ND	3510	ND	50000	1000
Fluoranthene	ND ND	ND	ND	ND	150	ND	***ND	ND	410	1000
Fluorene Hexachlorobenzene	ND	ND	ND	ND	ND	ND	AND CONTRACT	ND		410
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	AL NO.	ND		
Hexachloroethane	ND	ND	ND	ND	ND	ND	Mb -	ND	3200	
Isophorone	ND	ND	ND	ND	ND	ND	ZIP, «	ND	4400	4400
2-methylnaphthalene	ND	ND	ND	560	510	ND	" MO	ND	36400	36400
4,6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	M. Julia	ND	040 - 3557	240
4-chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND.	ND	240 or MDL	240 100
2-methylphenol	ND	ND	ND	ND	ND ND	ND ND	C ADAS	ND ND	100 or MDL 900	900
4-methylphenol	ND ND	ND ND	ND ND	ND 280	51	ND	MDL	ND	13000	200
naphthalene 2-nitroaniline	ND ND	ND	ND	ND	ND ND	ND	B. NO.	ND	430 or MDL	430
2-nitroaniline 3-nitroaniline	ND	ND	ND	ND	ND	ND	o ND=	ND	500 or MDL	500
4-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	4.444	
nitrobenzene	ND	ND	ND	ND	ND	ND	NID.	ND	200 or MDL	200
2-nitrophenol	ND	ND	ND	ND	ND	ND	NB	ND	330 or MDL	330
4-nitrophenol	ND	ND	ND	ND	ND	ND	1000	ND	100 or MDL	100
N-nitrosodimethylamine	ND	ND	ND	ND	ND	ND	- 100 V	ND		
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	NID.	ND		
Di-N-octyl phthalate	ND	ND	ND	ND	ND	ND	¥r ND mi	ND	50000	50000
Pentachlorophenol	ND	ND	ND	ND	ND	ND	1010	ND	50000	1000
Phenanthrene	ND	ND	ND	360	260	ND	PSIND)	ND	50000	1000 30
Phenol	ND	ND	ND	ND	ND ND	ND ND		ND ND	***	30
4-bromophenyl-phenylether	ND	ND ND	ND ND	ND ND	ND ND	ND	**************************************	ND	NA SECTION	de series
4-chlorophenyl-phenylether	ND ND	ND	ND	ND	ND	ND	ND: N	ND		
N-nitroso-Di-N-propylamine Pyrene	ND	ND	ND	130	ND	ND	ND	ND	50000	1000
1,2,4-trichlorobenzene	ND	ND	ND	ND	ND	ND	No.	ND		
2,4,6-trichlorophenol	ND	ND	ND	ND	ND	ND	NO.	ND	in part	100
		ND	ND	ND	ND	ND	MDH	ND	100 or MDL	

TAGM 4046 Recommended Soil Cleanup Objectives STARS Memo #1 Guidance Values

TABLE 4a: REDL 2 LOVE ROAD BCP SITE PRELIMINARY GROUNDWATER ANALYTICAL RESULTS: VOCS (ppb)

OCTOBER 2005

Compound (µg/L)	767050916-01	767050916-02	767050916-FB	TOGS 1.1.1 Ambient GW Quality Guidance Values (µg/L)
Acetone	ND < 20	2.8*	1.8*	50
Benzene	74.0	ND < 5	ND < 5	NR
Bromodichloromethane	ND < 5	ND < 5	ND < 5	50
Bromoform	ND < 5	ND < 5	ND < 5	50
Bromomethane	ND < 5	ND < 5	ND < 5	5
2-butanone (MEK)	ND < 10	ND < 10	ND < 10	NR
Carbon disulfide	ND < 10	ND < 10	ND < 10	NR
Carbon tetrachloride	ND < 5	ND < 5	ND < 5	5
Chlorobenzene	ND < 5	ND < 5	ND < 5	5
Chloroethane	ND < 5	ND < 5	ND < 5	5
Chloroform	ND < 5	ND < 5	ND < 5	7
Chloromethane	ND < 5	ND < 5	ND < 5	NR
Dibromochloromethane	ND < 5	ND < 5	ND < 5	5
1,1-dichloroethane	ND < 5	ND < 5	ND < 5	5
1,2-dichloroethane	ND < 5	ND < 5	ND < 5	0.6
1,1-dichloroethene	ND < 5	ND < 5	ND < 5	5
cis-1,2-dichloroethene	ND < 5	ND < 5	ND < 5	5
trans-1,2-dichloroethene	ND < 5	ND < 5	ND < 5	5
1,2-dichloropropane	3.7*	ND < 5	ND < 5	1
cis-1,3-dichloropropene	ND < 5	ND < 5	ND < 5	5
trans-1,3-dichloropropene	ND < 5	ND < 5	ND < 5	5
Ethylbenzene	450.0	ND < 5	ND < 5	5
2-hexanone	ND < 10	ND < 10	ND < 10	50
Methylene chloride	ND < 5	ND < 5	ND < 5	5
4-methyl-2-pentanone (MIBK)	ND < 10	ND < 10	ND < 10	NR
Styrene	ND < 5	ND < 5	ND < 5	5
1,1,2,2-tetrachloroethane	ND < 5	ND < 5	ND < 5	5
Tetrachloroethene	ND < 5	ND < 5	ND < 5	5
Toluene	2.1*	ND < 5	ND < 5	5
1,1,1-trichloroethane	ND < 5	ND < 5	ND < 5	5
1,1,2-trichloroethane	ND < 5	ND < 5	ND < 5	1
Trichloroethene	ND < 5	ND < 5	ND < 5	5
Vinyl Chloride	ND < 5	ND < 5	ND < 5	NR
o-xylene	1.6*	ND < 5	ND < 5	5
m+p-xylene	22.0	ND < 5	ND < 5	5

Notes:

- 1. VOCs analyzed for by EPA Method 8260B TCL.
- 2. Ethylbenzene was detected in sample -01 at 500 μ g/L, but this concentration exceeded the calibration range of the instrument for that specific analysis. The sample was re-run at a dilution of 5.00, and ethylbenzene was then detected at 450 μ g/L.
- 3. Values followed by "*" represent estimated concentrations.
- 4. ND = not detected above reported method detection limit.
- 5. NR = Not Regulated by the Principal Organic Contaminant (POC) Groundwater Standard according to TOGS 1.1.1.
- 6. Bold and shaded values are in exceedance of the TAGM 4046 recommended soil cleanup objective.

TABLE 4b: REDL 2 LOVE ROAD BCP SITE PRELIMINARY GROUNDWATER ANALYTICAL RESULTS - SVOCS (ppb)

OCTOBER 2005

Compound (µg/L)	767050916-01	TOGS 1.1.1 Ambient GW Quality Guidance Values (µg/L)
Acenaphthene	ND < 11	400
Acenaphthylene	ND < 11	41000
Anthracene	ND < 11	1000
Benzo(a)anthracene	ND < 11	0.04
Benzo(a)pyrene	ND < 11	0.04
Benzo(b)fluoranthene	ND < 11	0.04
Benzo(g,h,i)perylene	ND < 11	0.04
Benzo(k)fluoranthene	ND < 11	0.04
Benzyl alcohol	ND < 11	
butyl benzyl phthalate	ND < 11	50000
Di-n-Butylphthalate	1.2*	8100
Carbazole	ND < 11	•••
Indeno(1,2,3-cd)pyrene	ND < 11	0.04
4-chloroaniline	ND < 11	220
Bis(-2-chloroethoxy)methane	ND < 11	-
Bis(2-chloroethyl)ether	ND < 11	
2-chloronaphthalene	ND < 11	•••
2-chlorophenol	ND < 11	800
2,2'-oxybis(1-chloropropane)	ND < 11	***
Chrysene	ND < 11	0.04
Dibenzo(a,h)anthracene	ND < 11	14
Dibenzofuran	ND < 11	620
1,3-dichlorobenzene	ND < 11	
1,2-dichlorobenzene	ND < 11	
1,4-dichlorobenzene	ND < 11	
3,3'-dichlorobenzidine	ND < 11	
2,4-dichlorophenol	ND < 11	200
Diethylphthalate	ND < 11	7100
Dimethyl phthalate	ND < 11	2000
2,4-dimethylphenol	ND < 11	2000
2,4-dinitrophenol	ND < 56	200
2,4-dinitrotoluene	ND < 11	200
2,6-dinitrotoluene	ND < 11	1000
Bis(2-ethylhexyl)phthalate	ND < 11	50000
Fluoranthene	ND < 11	1000
Fluorene	ND < 11	1000
Hexachlorobenzene	ND < 11	410
Hexachlorobutadiene	ND < 11	410
Hexachlorocyclopentadiene	ND < 11	
Hexachloroethane	ND < 11	
Isophorone	ND < 11	4400
2-methylnaphthalene	7.0*	36400
4,6-dinitro-2-methylphenol	ND < 56	240
4-chloro-3-methylphenol	ND < 11	240
2-methylphenol	ND < 11	100
3+4-methylphenol	ND < 11	900
Naphthalene	6.1*	200
2-nitroaniline	ND < 56	430
3-nitroaniline	ND < 56	500
4-nitroaniline	ND < 56	200
nitrobenzene	ND < 11	200
2-nitrophenol	ND < 11	330
4-nitrophenol	ND < 56	100
N-nitrosodimethylamine	ND < 11	
N-nitrosodiphenylamine	ND < 11	50000
Di-n-octyl phthalate	ND < 11	50000
Pentachlorophenol	ND < 56	1000
Phenanthrene	ND < 11	1000
Phenol	ND < 11	30
4-bromophenyl-phenylether	ND < 11	
1-chlorophenyl-phenylether	ND < 11	
N-nitroso-Di-n-propylamine	ND < 11	
Pyrene	ND < 11	1000
1,2,4-trichlorobenzene	ND < 11	
2,4,6-trichlorophenol	ND < 11	100
2,4,5-trichlorophenol	ND < 11	

Notes:

- 1. VOCs analyzed for by EPA Method 8260B TCL.
- 2. Values followed by "*" represent estimated concentrations.
- 3. ND = not detected above reported method detection limit.
- 4. NR = Not Regulated by the Principal Organic Contaminant (POC) Groundwater Standard according to TOGS 1.1.1.
- 5. Bold and shaded values are in exceedance of the TAGM 4046 recommended soil cleanup objective.

TABLE 5a: REDL 2 LOVE ROAD BCP SITE SOIL SAMPLING RESULTS - VOCs (µg/kg) POST TANK EXCAVATION **NOVEMBER 2005**

Compound (µg/kg)	767051108-01	767051108-02	767051108-03	767051108-04	767051108-05		
(location)	Southern Wall of Tank Pit	Northern Wall of Tank Pit	Eastern Wall of Tank Pit	Western Wall of Tank Pit	32200 03	TAGM 4046 Guidance Values	STARS Memo #1 Guidance Values (µg/kg)
benzene	ND > 270	ND > 140	AID > 450			(µg/kg)	
sec-butylbenzene	5300	380	ND > 150	ND > 150	ND > 280	60	
tert-butylbenzene	ND > 270	ND > 140	1100	1100	8200	5000	14
n-butylbenzene	19000		ND > 150	ND > 150	ND > 280	3400	100
methyl-tert-butyl-ether	ND > 270	1400	11000	8700	17000		100
ethylbenzene	20000	ND > 140	ND > 150	ND > 150	ND > 280	3400	100
Isopropyl Benzene	7900	ND > 140	1400	1400	8800	600	datasy
o-isopropyltoluene	480	ND > 140	630	1100	4300	5500	100
naphthalene		ND > 140	420	470	ND > 280	2600	100
1-propylbenzene	28000	510	5300	2800		3900	100
oluene	18000	460	2600	2100	27000	10000	200
,2,4-trimethylbenzene	3400	ND > 140	530	360	13000	2500	100
3,5-trimethylbenzene	2400	260	2200	14000	1100	1500	100
-xylene	1200	160	2300		ND > 280	2400	100
	2300	ND > 290	360	5100	640	2600	100
1-xylene, p-xylene	2300	ATT		1200	910	1200	100
Bold and shaded values are in a	exceedance of regu	latory soil cleans	290	5700	ND > 560	1200	100

Exceedance of TAGM 4046 Recommended Soil Cleanup Objectives

Exceedance of STARS Memo #1 Guidance Values

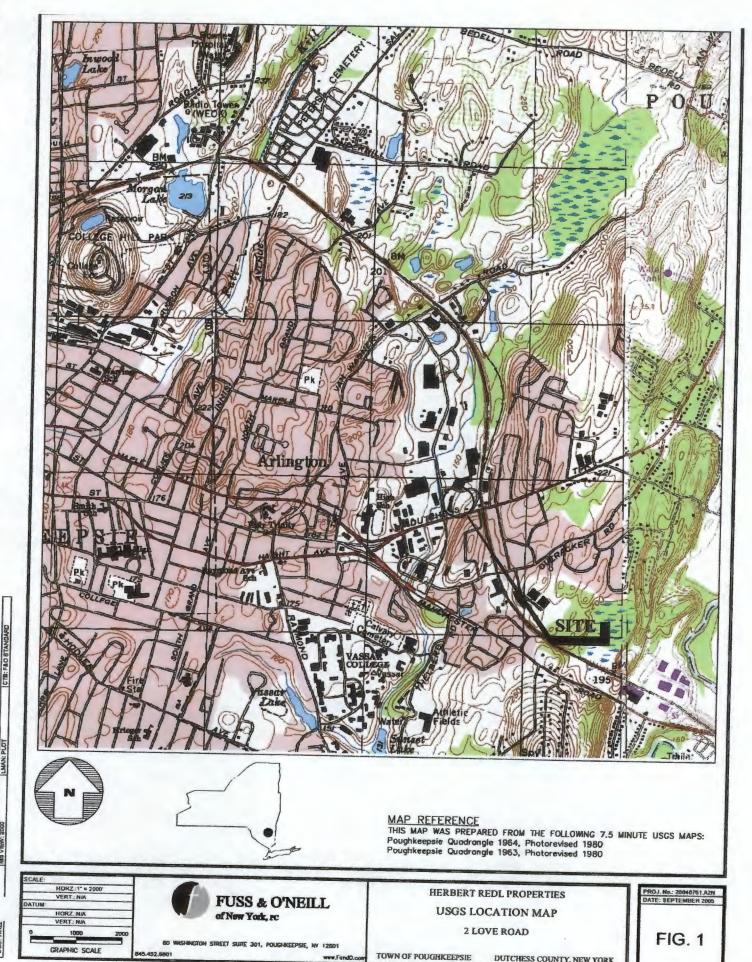
TABLE 5b: REDL 2 LOVE ROAD BCP SITE SOIL SAMPLING RESULTS - SVOCs (mg/kg) POST TANK EXCAVATION **NOVEMBER 2005**

Compound	767051108-01	767051108-02	767051108-03	767051108-04	767051108-05	TAGM 4046	
(location)	Southern Wall of Tank Pit	Northern Wall of Tank Pit	Eastern Wall of Tank Pit	Western Wall of Tank Pit	Bottom of Tank Pit	Recommended Soil Cleanup Guidance Values (mg/kg)	STARS Memo #1 Guidance Values (µg/kg
Acenaphthene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	400
Acenaphthylene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	41000	41000
Anthracene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	1000
Benzo(a)anthracene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	224 or MDL	0.04
Benzo(a)pyrene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	61 or MDL	0.04
Benzo(b)fluoranthene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	1100	0.04
Benzo(g,h,i)perylene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	0.04
Benzo(k)fluoranthene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	1100	0.04
Benzyl alcohol	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
butylbenzylphthalate	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	50000
di-n-butylphthalate	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	8100	8100
Carbazole	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
1-chloroaniline	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	220 or MDL	220
Bis(-2-chloroethoxy)methane	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
Bis(2-chloroethyl)ether	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		-
2-chloronaphthalene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
2,2'-oxybis(1-chloropropane)	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
Chrysene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	400	0.04
Dibenzo(a,h)anthracene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	14 or MDL	14
Dibenzofuran	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	6200	620
1,3-dichlorobenzene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
The state of the s	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
1,2-dichlorobenzene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
1,4-dichlorobenzene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
3,3'-dichlorobenzidine	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	7100	7100
Diethylphthalate			ND > 3900	ND > 380	ND > 3700	2000	2000
Dimethyl phthalate	ND > 7200	ND > 380		ND > 380	ND > 3700		2000
2,4-dinitrotoluene	ND > 7200	ND > 380	ND > 3900	ND > 380 $ND > 380$	ND > 3700	1000	1000
2,6-dinitrotoluene	ND > 7200	ND > 380	ND > 3900			50000	
Bis(2-ethylhexyl)phthalate	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	50000 1000
Fluoranthene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
Fluorene	7400	. 980	4000	ND > 380	7800	50000	1000
Hexachlorobenzene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	410	410
Hexachlorobutadiene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
Hexachlorocyclopentadiene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
Hexachloroethane	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		0.04
Indeno(1,2,3-cd)pyrene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	3200	0.04
Isophorone	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	4400	4400
2-methylnaphthalene	44000	630	22000	1800	30000	36400	36400
naphthalene	14000	ND > 380	6900	1300	11000	13000	200
2-nitroaniline	ND > 37000	ND > 1900	ND > 20000	ND > 2000	ND > 19000	430 or MDL	430
3-nitroaniline	ND > 37000	ND > 1900	ND > 20000	ND > 2000	ND > 19000	500 or MDL	500
4-nitroaniline	ND > 37000	ND > 1900	ND > 20000	ND > 2000	ND > 19000		
nitrobenzene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	200 or MDL	200
N-nitrosodimethylamine	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
N-nitrosodiphenylamine	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
Di-N-octyl phthalate	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	50000
Phenanthrene	13000	1500	6400	ND > 380	13000	50000	1000
4-bromophenyl-phenylether	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
4-chlorophenyl-phenylether	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700		
N-nitroso-Di-N-propylamine	T						
N-nitroso-Di-N-propylamine Pyrene	ND > 7200	ND > 380	ND > 3900	ND > 380	ND > 3700	50000	1000

** Bold and shaded values are in exceedance of regulatory soil cleanup guidance values:

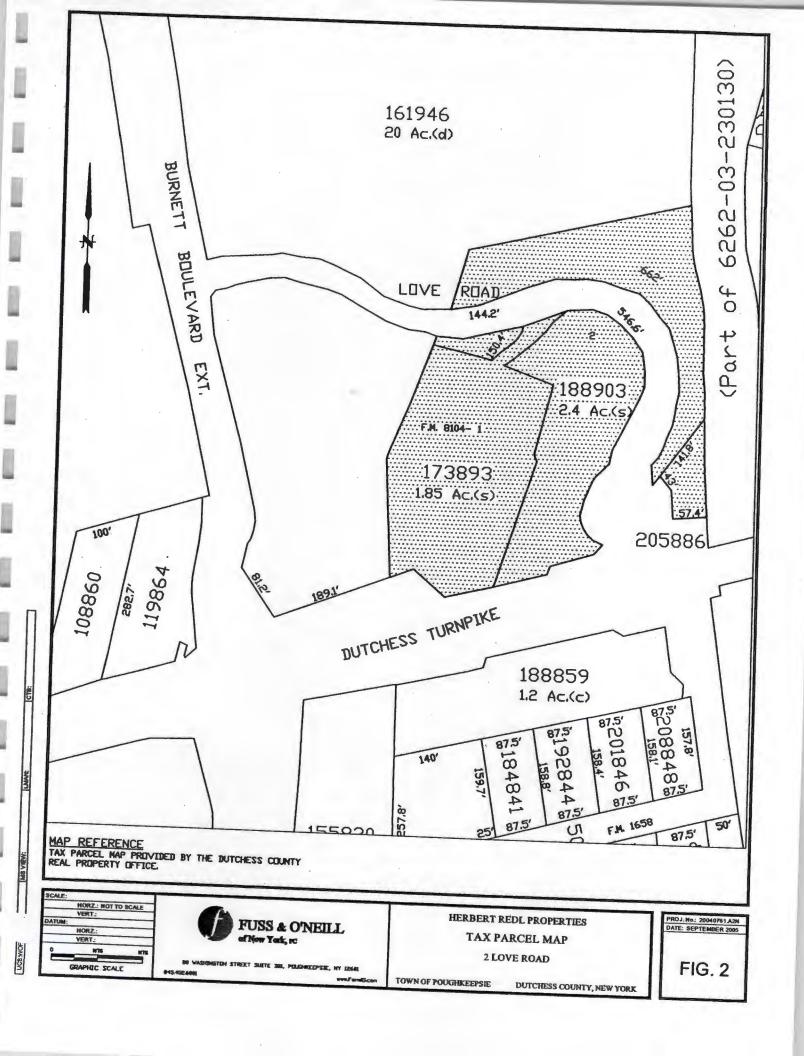
Exceedance of TAGM 4046 Recommended Soil Cleanup Objectives Exceedance of STARS Memo #1 Guidance Values Exceedance of both TAGM 4046 and STARS Memo #1 guidance

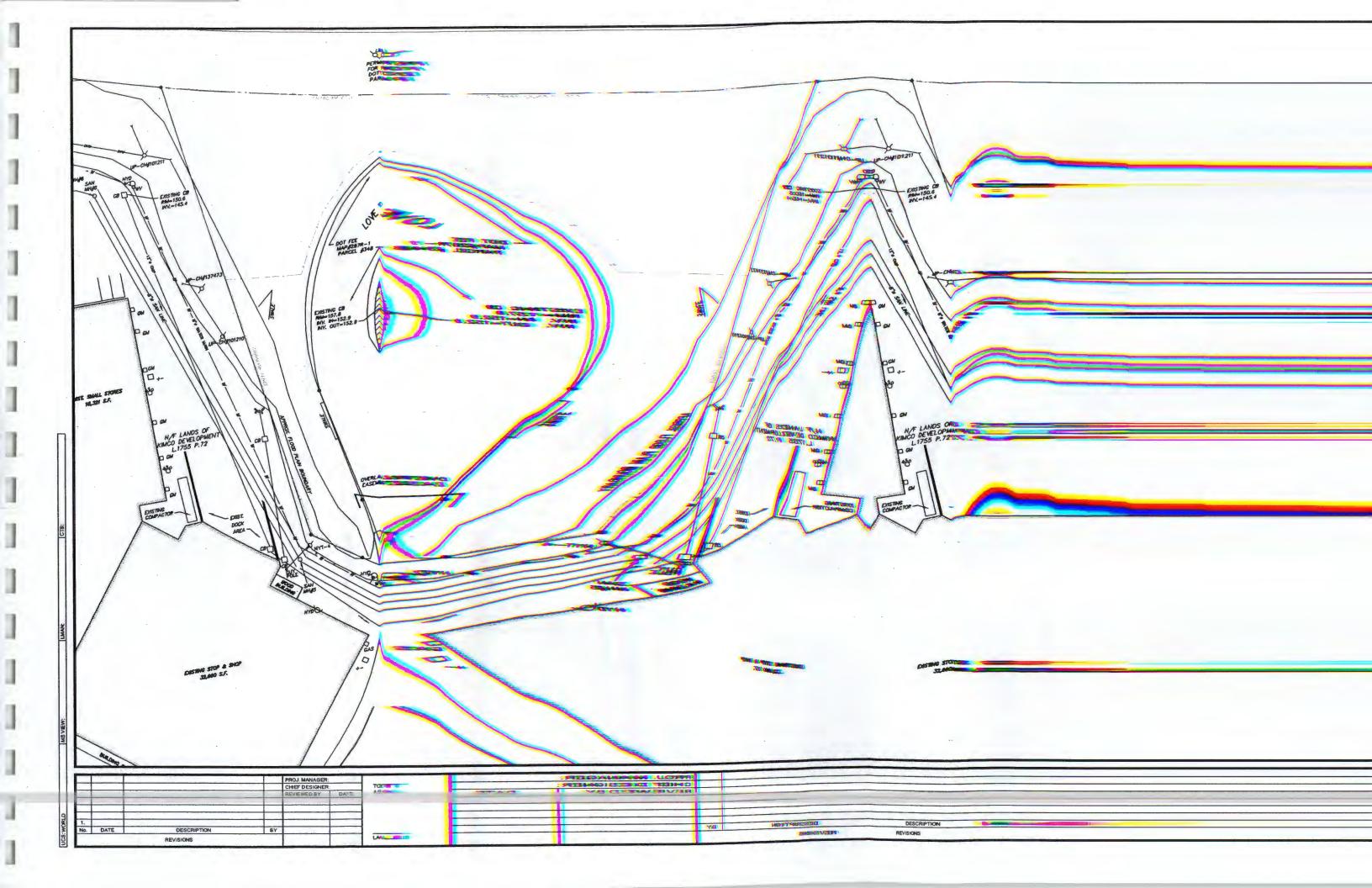
FIGURES

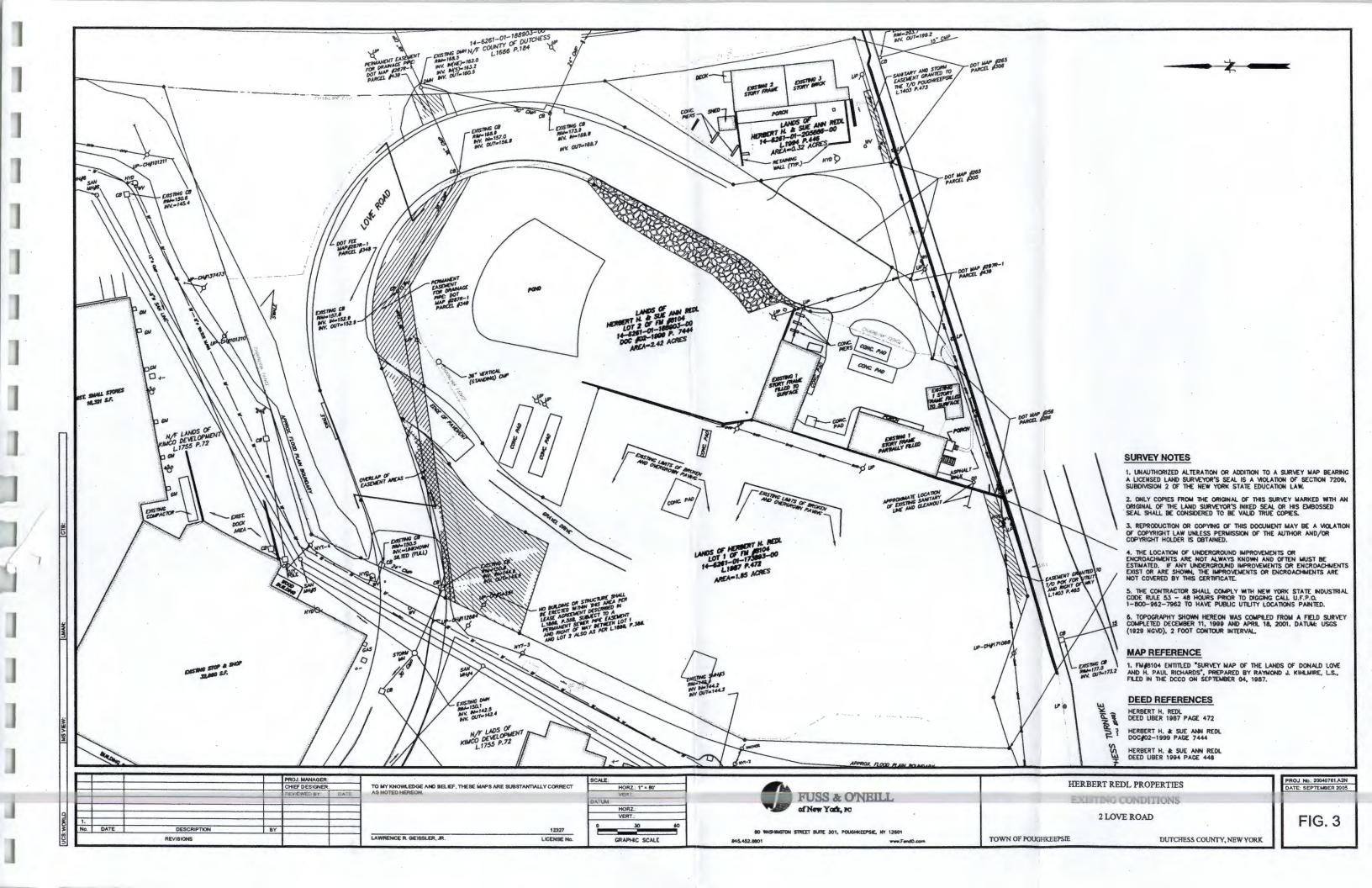


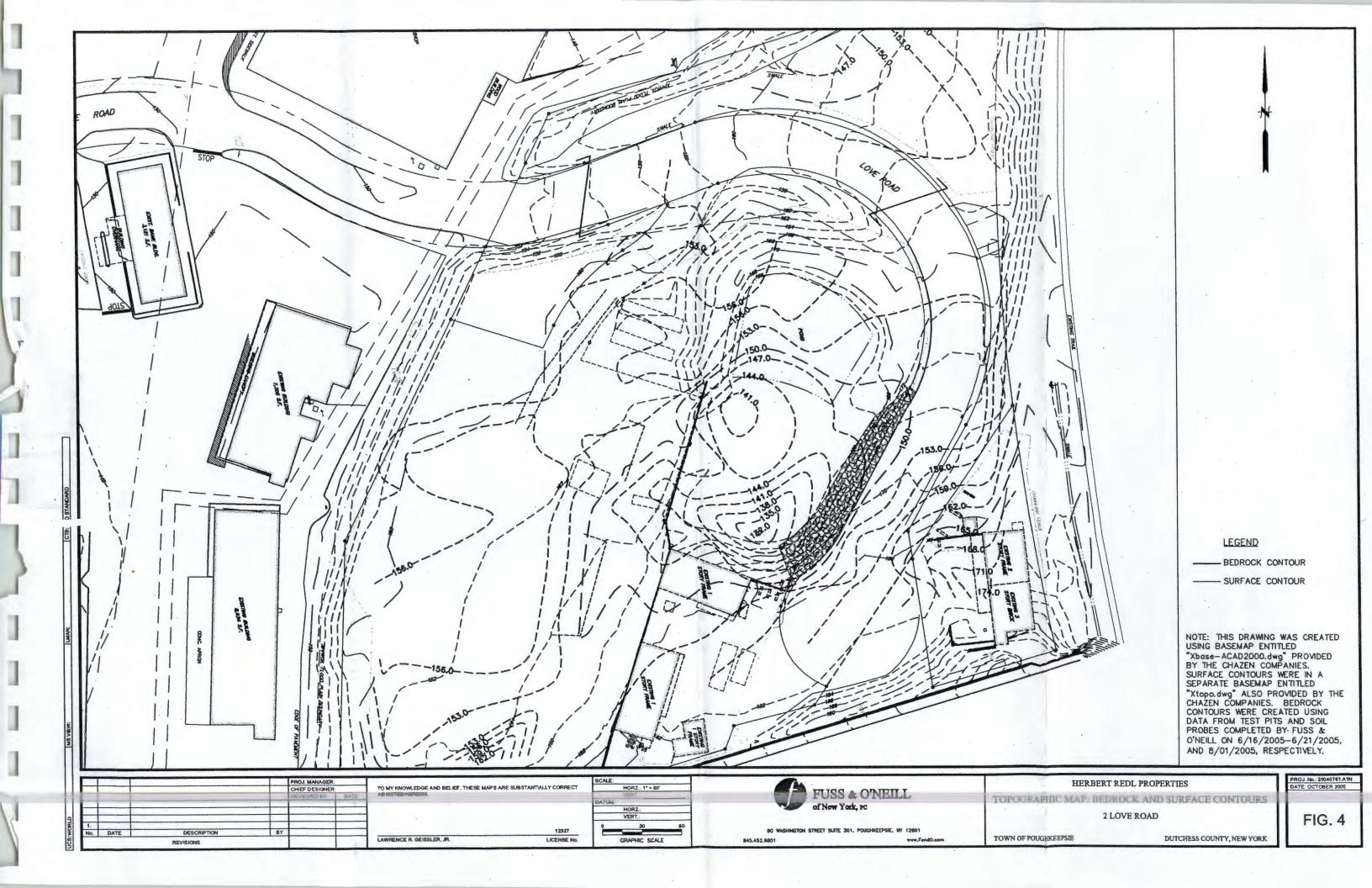
www.FandO.com

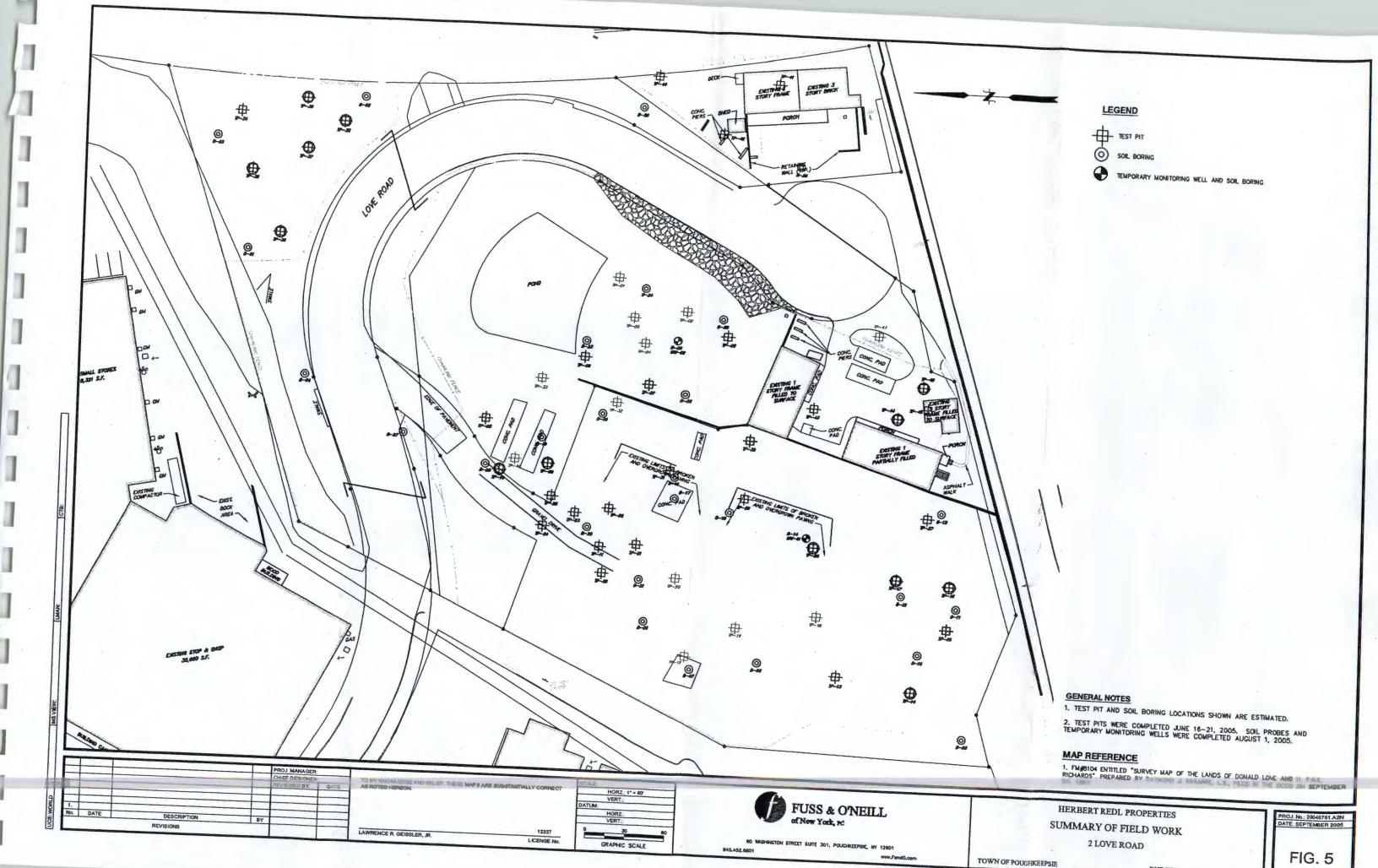
DUTCHESS COUNTY, NEW YORK



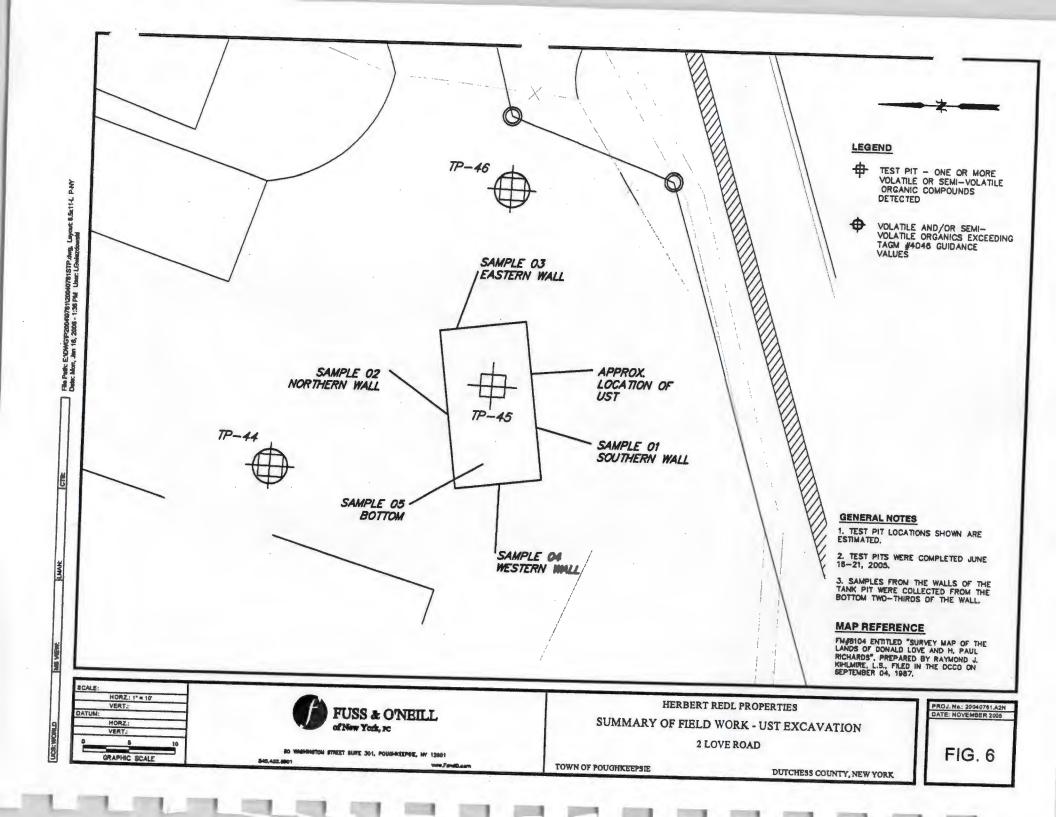


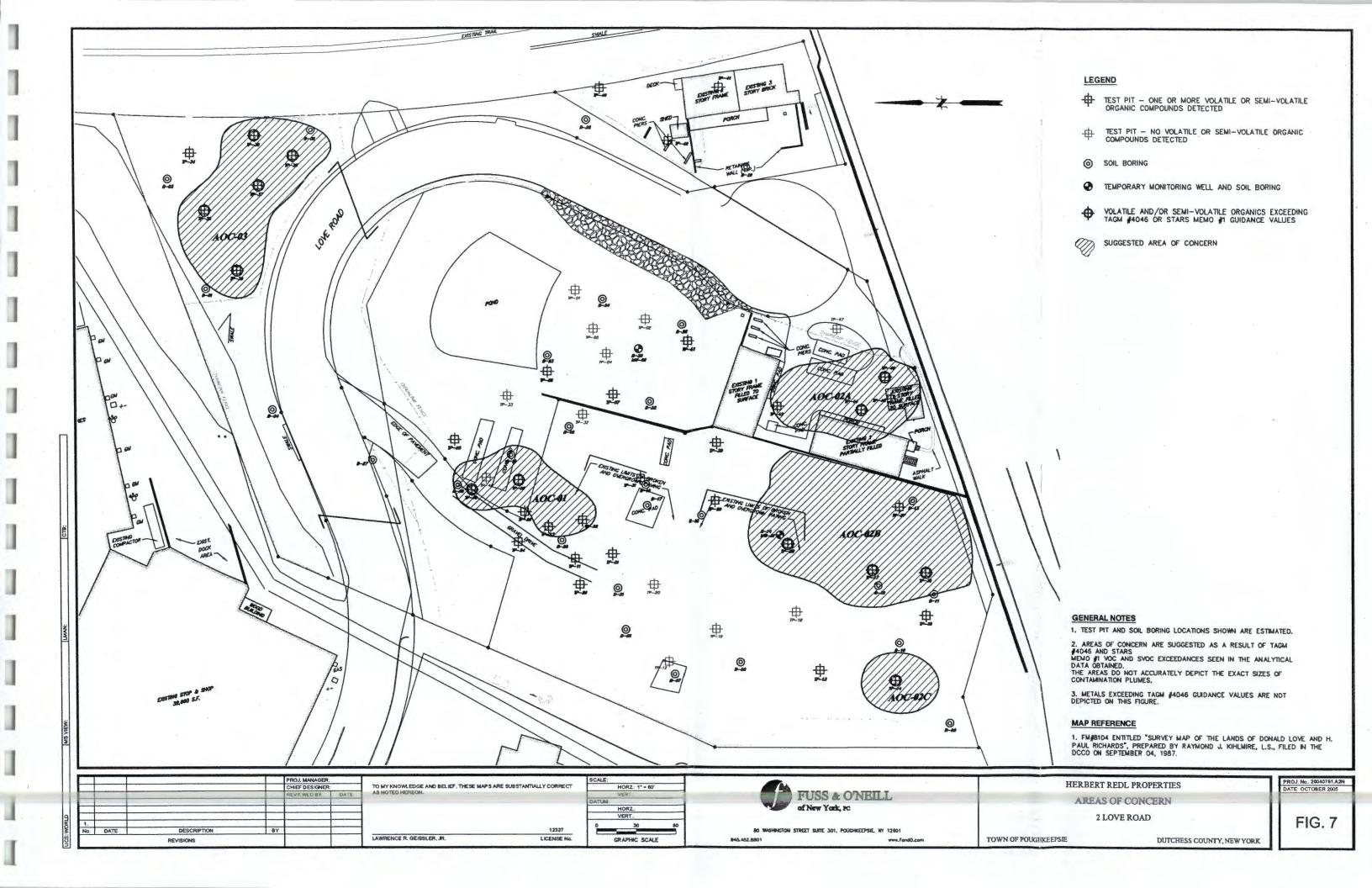






DUTCHESS COUNTY NEWS







APPENDIX A

TEST PIT LOGS SOIL PROBE LOGS MONITORING WELL COMPLETION FORMS

Test Pit # TP- 01.
Location: NE of pond; ~ 15'.

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	6/16/2005
Time:	9:27 AM
Sample Prefix:	TPOI-
Logged By:	LMG

Contractor:	HHR Construction
Operator:	
Backfill: Na	ative Material

Fuss & O'Neill of New York	
Consulting Engineers	
Poughkeepsie, NY 12601	

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
TP01-01	927	12	0-1.5' brown f-m sand and		no
			. sitt, dry, little f-m		
			subarrynd gravel		
		-	trace organics		
		_	1.5'-1.7' gray organic sile, trace		
		-	trace organics 1.5'-1.7' gray organic sill, trace vegetation/matter, dry		
		-	1.7'-3' Same as 0-1.5' plus		
		-	more gravel, little silt.		
			J		
		-			
		_			
		-			

TEST PIT SKETCH:
course and bulle burnerdile
raining - very high humidity
water it ~13 bas no VISIBLE
sheen or odor.

Test Pit # TP-02 Location: <u>further NE of pond</u> - along rock retaining wall

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	6/16/2005
Time:	9:50 AM
Sample Prefix:	TP02-
Logged By:	LMG

Contractor:	HHR Construction
Operator:	
Backfill: Na	ative Material

Fuss & O'Neill of New York	
Consulting Engineers	
Poughkeepsie, NY 12601	

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION COI	 FIELD TESTING
TP02-01	950	1 1	0-8" very fine gravel, f-c sand,	no
TP02-02	965	1'-3'	H. gray little sit, there organics	NO
		-	18"-1" brown fine sand, little silt	
		-	1'-3.5' IL. brown sit, truce of sand,	
		-	trace gravel	
		***	3.5'-7.5' silt, mostly dense, trace	
		444	gravel, moist.	
		***	7.5-18' bluelgray clay, mod. dense.	
		-	moist.	
		-		
		_		
		-		

APPROS. SURFACE ELE.	(FT-MSL) X
DIMENSIONS OF PIT:	4'W X 15'L
TOTAL DEPTH	18'
DEPTH TO BEDROCK	·×
DEPTH TO MOTTLING	X
DEPTH TO ROOTS	X
DEPTH TO WATER	~ 6' bas
WERE PHOTOS TAKEN?	no J
METHOD OF SAMPLE CO	LLECTION (1746)

COMMENTS:	* limit of excavator = 18. No GW to this point.
	* 4-5 bys: Spotty trace organics + hin layer of f-m sand.
NN 100 - 120 TABLE	* GW seeping out @ ~ 5.5-6 bgs and out of clay
	kery slowly.

Test Pit # TP-03
Location: N corner of building, at end of rock retaining wall

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	6/16/2005
Time:	10:40 AM
Sample Prefix:	TP03-
Logged By:	LMG

Contractor:	HHR Construction
Operator:	
Backfill: Na	ative Material

Fuss & O'Neill of New York	
Consulting Engineers	
Poughkeepsie, NY 12601	

SAMPLE NUMBER	TIME	DEPTH from - to	SOIL DESCRIPTION	USCS	FIELD TESTING (PID)
TP03-01	104s	0-1	0-1' organics, brown silt, roofs,		85.5
			f-m sand, trace gravel		
		_	1'-2' silt, fine sand, same as o-1'		
		-	2'-2.5' straned gray, some dark, some light, some of re slik.		
		-	some light, some of re slik.		
			2.5'3' site, It. bown, mod-very		
			dense, moist-net.		
		-			
		-			
		-			
		-			
		-			

APPROS. SURFACE ELE.	(FT-MSL) X
DIMENSIONS OF PIT:	3'N x 7'L
TOTAL DEPTH	4'
DEPTH TO BEDROCK	X
DEPTH TO MOTTLING	X
DEPTH TO ROOTS	X
DEPTH TO WATER	3' 695
WERE PHOTOS TAKEN?	ทอ
METHOD OF SAMPLE CO	LLECTION grab

COMMENTS:	* E. end of pit (by wall) is fill gravel, 2"- 3 or 4'.
	4 MODERATE GOOR 3-4' bas
	* obvious petroleum-straned soil @ 2.5' bgs
	4 obvious It-mad. speen on GW.

Test Pit # TROH-Location: <u>center of fuld</u>, N of bldg

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	6/16
Time:	1000 AM
Sample Prefix:	TPOY-
Logged By:	LMG

	1
DIVIA	. 561
	VIA

Fuss & O'Neill, Inc.		
Consulting Engineers	1	
Manchester, CT 06040	POIC	

SAMPLE NUMBER	TIME	DEPTH from to	WIN SOIL DESCRIPTION	USCS	FIELD TESTING
Loop 101	1100	1-3	0-1 silt, f-m sand, organics		X
1			1-25 vf-f silt, vf-f sind		
contonna	es	-	2.53.5 - gran silt yf-f sand		
on Go	1/20	**	3.5 - brown sile		
	·	-			
		-	·		
		-			
		-			
	ŕ	-			

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT: 27 W	7' 1
TOTAL DEPTH 4.5	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	amo

MMENTS:		

- surface - top 1-3" = org.	
NUMBER TIME from-to SOIL DESCRIPT TPOS-01 1115 0-4 OH organics, brown sill - 1-3½'-fill likely - 3½-b brown s - 3½-b brown s - moist in - surface - surface - surface - surface	
TPOS-01 11'5 0-4 of organics, brown, 51'd - 1-3½'-fill likely - 3½-6 → brown 5 - moist in - surface - surface - top 1-3" = org.	USCS FIELD TON CODE TESTING
- 1-3½-fill likely - 3½-6 → brown s - moist in - surfice - bp 1-3" = org.	t, f-m sand, X
- 31/2-6 → brown s frue Gh - su(fr ce - top 1-3" = org.	brick, wood, take.
- surfice - surfice - top 1-3" = org.	Let but hot
- top 1-3" = org.	1 5 1 6gs
- top 1-3" = org.	
- top 1-3" = org.	
	anics, wolf
- 2"-6" = H quay	f-msand,
- 2"-6" = It gray - time gray - some ro	vellongular-All)
- 70106-40	015
- July WMK -	- 3/2-4 695:
- truce boulders	
APPROS. SURFACE ELE. (FT-MSL) DIMENSIONS OF PIT: 2"2" N × 8" L TOTAL DEPTH ~ 6-6"2"	
DEPTH TO BEDROCK X DEPTH TO MOTTLING X DEPTH TO ROOTS X	
WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION (1)	
COMMENTS:	ved in one spot -no-

Test Pit # TPOCO Location: Southe corner of pond along tree line

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	اله
Time:	1130
Sample Prefix:	TPdo-
Logged By:	LNG

Contractor:	
Operator:	
Backfill: ULS	

Fuss & O'Neill, Inc.		
Consulting Engineers	T. K	
Manchooter, CT 06040	POK	

SAMPLE NUMBER	TIME	DEPTH from - tp	SOIL DESCRIPTION	USCS	FIELD TESTING
1706-61	1140.	2-4	0-6" Grand forganics, vons to ~8-10	dry	X
		/-	6"-(3'221): vf-f sand (brown), Ance		
		-	gavel		
			-4'-412' - Stained gray sift, moist	\Rightarrow	4º Snothin
		-	42-6 - brown sitt, moistfult		
			,		
		_	·		
		-			
		-			
		-			
		-			
		-			

APPROS. SURFACE ELE.	(FT-MSL)
DIMENSIONS OF PIT:	いていてそろし
TOTAL DEPTH	6'
DEPTH TO BEDROCK	X
DEPTH TO MOTTLING	Υ
DEPTH TO ROOTS	+
DEPTH TO WATER	X
WERE PHOTOS TAKEN?	611
METHOD OF SAMPLE CO	

COMN	IENTS:

Test Pit # _ along wall & tree line Location: South of TPOG Project Name: 2 Love Road Contractor: Fuss & O'Neill, Inc. Project Number: 20040761.A1N Operator: Consulting Engineers Date: 10 Backfill: VES Manchester, CT 96040 12:50 Time: 1707 -Sample Prefix: LMG Logged By:

SAMPLE		DEPTH		USCS	FIELD
NUMBER	TIME	from to	SOIL DESCRIPTION	CODE	TESTING
TP07-01	126	0-4	08" organics, very dry It brown/gray		NO
1767-02	. 1215	4-6	5"-22' f-uf sand, save gravel,		
		-	organies dio		
			21/2 - 4 us - frand, little silts		
,		-	4'-5'; wed-gray stained sitt,		
		-	morst)		
		_	5'-13 brown sitt, moist		V
		-	(not wet)		
		-			
		-			
		-			
		-	·		

APPROS. SURFACE ELE	. (FT-MSL)
DIMENSIONS OF PIT:	212 NX 4 L
TOTAL DEPTH	13 8
DEPTH TO BEDROCK	Y
DEPTH TO MOTTLING	K
DEPTH TO ROOTS	X
DEPTH TO WATER	X
WERE PHOTOS TAKEN?	No
METHOD OF SAMPLE CO	DLLECTION GA

* 04	tomot	10	Not	AIA	NO X	MIS	1711
				2000	Mit		110

Test Pit # 08
Location: by entrance

Project Name:	2 Love Road	
Project Number:	20040761.A1N	
Date: 6	116	
Time:	120	
Sample Prefix:		
Logged By:		

Contractor:	
Operator:	
Backfill: \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	

Fuss & O'Neill, Inc.
Consulting Engineers
Manchester, CT 06040

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
10.20 dt	125	0-2	0-8" H Lyoun for sand organs,		No
		-	6'-3' shale, f-m sand, totalt.		4
		-	~3-3.5' - shale layer		
		-	4 0		
		_	rant dig turt w	^	W
		-			
		-			
		-			
		-			
		_			

DIMENSIONS OF PIT:	24 NX8'
TOTAL DEPTH	~ 3,5'
DEPTH TO BEDROCK	3.5 1/she
DEPTH TO MOTTLING	X
DEPTH TO ROOTS	X
DEPTH TO WATER	Not 9
WERE PHOTOS TAKEN?	20
METHOD OF SAMPLE CO	LLECTION 6.4

TEST PIT SKETCH:

COMMENTS:

afron (2) 3.5

Test Pit # 1709
Location: Ad to Co

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	
Time:	
Sample Prefix:	
Logged By:	

Contractor:	
Operator:	
Backfill:	

Fuss & O'Neill, Inc. Consulting Engineers Manchester, CT 06040

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
TP 09-0	145	4-45	64- org as use It brive	-	20
P09-02	90	1/2-1/2	N- E SAND		1
			1-2 N-f sand some		day.
		-	sil shall nece		MATERIAL PROPERTY AND ADMINISTRATION OF THE PROPERTY ADMINISTRATION OF THE PROPERTY AND ADMINISTRATION OF THE PROPERTY AN
		-	2-4/2 shale DIP(0)		and the second
·		-	144 @ EIN SAN	ل	Y
		-			V
		-			
		-			
		-			
		-			
		-			

APPROS. SURFACE ELE. (FT-MSL)	TEST PIT SKETCH:
DIMENSIONS OF PIT:	
TOTAL DEPTH US DEPTH TO BEDROCK Syde; 71/2 >> 4	12 gw running in @ 142
DEPTH TO MOTTLING	wor bed
DEPTH TO ROOTS	Pendur (a) U aland vock
DEPTH TO WATER 472	Trocal I ag 7 mong rock
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION HYND	
COMMENTS:	Strong Smell; oil studgesiting
	MCC STICK - Dearface
F-VPADIADEI DOPSIEI DOPSIDataSheetsVestniiEDS xis	14/16

Test Pit # TP - 10
Location: across accors vd from 68309

Project Name:	2 Love Road	
Project Number:	20040761.A1N	
Date:	6/10	
Time:	200	
Sample Prefix:	TRIP-	
Logged By:	IMG	

Contractor:		
Operator:		
Backfill: 1065		

Fuss & O'Neill, Inc.		
Consulting Engineers	m (
Manchester, CT 06040	Pok.	

SAMPLE NUMBER	TIME	DEPTH from - to	SOIL DESCRIPTION	USCS	FIELD
P18-61	210	14-6	0-8" It brown you An- (sand some	`	
			Some organics (voots		
		-	8"-3'2 brown of frank, some		
		-	sit. Youts down to 3/2'		
		-	3'2-4 Lank brown (= med brown)		
	,	-	Silt layer - possible ships		
			string - moist and		
		-	4-81 - med. byour site		
		-	4-6' - med. byown sitt,		
		-			
		- \	Terusal 3 GW (9 -4		
		-	Somming along	_	

APPROS. SURFACE ELE.	(FT-MSL)
DIMENSIONS OF PIT:	22 WX 8 L
TOTAL DEPTH	8'
DEPTH TO BEDROCK	. 4'
DEPTH TO MOTTLING	X
DEPTH TO ROOTS	X
DEPTH TO WATER	4'
WERE PHOTOS TAKEN?	NO.
METHOD OF SAMPLE CO	DLLECTION AVID

COMMENTS:	* roal - to define extents of confamination @ TPI	0
	+ no apparant odor or visible	
	Profilet	

Test Pit # TP - 12 Location: 5W side of access rd; @ end of dubris lipiles

Project Name: 2 Love Road	Contractor:	Fuss 8	
Project Number: 20040761.A1N	Operator:	Consu	
Date: () ((Backfill:		
Time: 7.2° 11	Y		
Sample Prefix:			
Logged By: LMS			

Fuss & O'Neill, Inc.	
Consulting Enginee	rs 16
Manchester, CT 060	40 POC

SAMPLE		DEPTH	U	scs	FIELD
NUMBER	TIME	from to	SOIL DESCRIPTION	ODE	TESTING
TP11-01	230	4'-5!	0-3, - Atcoarse sand mostly organics roots		
		-	3"-1' M-C sand, smost grayer, dry,		
		-	11-32/4 thing, gravel all Fill		
		-	trace inf-f sand.		
A		-	4'-5' yf-f sand site,		
		-	ago voot, darle		
		_	nnerd		
		_	5181 It brown silt mast		
		-	not wet		,
		-	no an visible 7/3		
		-	refused bedrock @ &		
		-			

APPROS. SURFACE ELE. (FT-MSL)	TEST PIT SKETCH:
DIMENSIONS OF PIT: 12 NX8 L	TEOTITI SICE TOTI.
TOTAL DEPTH 9 7 7	
DEPTH TO BEDROCK 71/2	
DEPTH TO MOTTLING X	
DEPTH TO ROOTS	
DEPTH TO WATER WOLL , Not	Met on the
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION and	/
	in a westorth la mand (a) ~ H (under work)
COMMENTS:	some metalls burned (a) ~ 4 (unon lock

Test Pit # TP - 12 Location: through pavement at South side of property Fuss & O'Neill, Inc. Project Name: 2 Love Road Contractor: Project Number: 20040761.A1N Operator: **Consulting Engineers** Backfill: Manchester, CT 06040 Date: Time: TP12 -Sample Prefix: LMG Logged By: DEPTHU SAMPLE USCS FIELD 0-2" black SOIL DESCRIPTION NUMBER CODE TESTING TIME l bedock APPROS. SURFACE ELE. (FT-MSL) TEST PIT SKETCH: DIMENSIONS OF PIT: 212 WX TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION 9700 dug right through the pavement pad COMMENTS:

Test Pit # TP 3 Location:

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	
Time:	
Sample Prefix:	
Logged By:	

Contractor	•
Operator:	
Backfill:	485

Fuss & O'Neill, Inc.
Consulting Engineers

Manchester, CT 00040

SAMPLE NUMBER	TIME	DEPTH from to		USCS	FIELD TESTING
TP13-51	220	2-4.	0-6" M-C sand organics acts		~ ~ ~
		-	6"-7" blacktop layer		
		-	7" - 2'2' fue sand grave (nound	ed)	. 1
		-	tmu voots		
		-	21/2-3/2: f-m sid, Mostly		
		_	grail(nond) noots.		
	•	-	3/2 & brick layer		
		_	3'2-4 danker strined		
		-	511		
		-	4-5 H brown 3 brown		V
		_	woulded sit.		
		-	t-nt sand.		

APPROS. SURFACE ELE. (FT-MSL)	TEST PIT SKETO
DIMENSIONS OF PIT: , 21/21/8 L	11 . 1
TOTAL DEPTH	black toD lawn
DEPTH TO BEDROCK	000
DEPTH TO MOTTLING Y	
DEPTH TO ROOTS X	41D6 120 ;
DEPTH TO WATER NO.	
WERE PHOTOS TAKEN?	·
METHOD OF SAMPLE COLLECTION	en Min x

COMMENTS: * dank brown black shall (unk is to)

Test Pit# Location: 3 COIN Project Name: 2 Love Road Contractor: HAR Fuss & O'Neill, Inc. Project Number: 20040761.A1N Operator: **Consulting Engineers** Date: Backfill: WAD Marichester, GT-06040 STO AL Time: TP14-Sample Prefix: LMG Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from - to SOIL DESCRIPTION CODE TESTING 840 6-8" 1714-01 APPROS. SURFACE ELE. (FT-MSL) **TEST PIT SKETCH:** WFXI DIMENSIONS OF PIT: TOTAL DEPTH DERTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS q' DEPTH TO WATER WERE PHOTOS TAKEN? no METHOD OF SAMPLE COLLECTION GIVEN COMMENTS:

of 5. PL along Rte 44 Location: CCN+el Project Name: 2 Love Road Contractor: Fuss & O'Neill, Inc. Project Number; 20040761.A1N Operator: Consulting Engineers POK N Date: Backfill: Manchester, CT 06049 Time: TP 15 -Sample Prefix: LMG Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from - to CODE **TESTING** 0110 1715-01 APPROS. SURFACE ELE. (FT-MSL) **TEST PIT SKETCH:** TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION DIVINO

Project Name: 2 Love Roa	od.	Test Pit # 17-16 (a 3 b) to cocation: Seven live (
Project Number: 120040761.		Contractor: Fuss & O'Neill, Inc. Operator: Consulting Enginee		
Date:	9:25	Backfill: yes TP16 a	700	OK NY
Sample Prefix: TP11	0-	not get TPIGA		1
Logged By: LM	6	0		
SAMPLE	DEPTH		uscs	FIELD
NUMBER TIME	from to	SOIL DESCRIPTION	CODE	TESTING
1P16-01 990 4	5-10	0-6" irganics, darly brown gran	\$	no
		11 10		
01 01 2000	300	6-59. 1-m sala, 1410		
1716a-01 > 60th	1-9	Julk, any mad pum		
1716a-02 > 000	4	trace nots little		
	-	gravel		
		-fa	•	
		\$\tag{\sqrt{\chi}}		
	-	4-8- Smeared Kuelaru		
	-	clay land likely		1/
		chay large cheery		¥
		22-3 thick).		
	-	8-10: It brown sit.		
	_	* AN @ 82		
		*0 0 02		
APPROS. SURFACE ELE. (F	T-MSL)	TEST PIT SKETCH:		
DIMENSIONS OF PIT: ' TOTAL DEPTH	LIP, MX10,	achedyl Rte 44 Rte 44 Rte 44 Rte 44 Roll Brownt		
DEPTH TO BEDROCK	10 not 11	acheal		. /
DEPTH TO MOTTLING	×	2019		~ linela
DEPTH TO ROOTS DEPTH TO WATER	Pti-1	How I would	Sur	
WERE PHOTOS TAKEN?	w.	old of allo		
METHOD OF SAMPLE COLL	ECTION GING	dignell and		
COMMENTS: X	parant	odor (2) ~ 3-4 bo	15	ī
* (3)	1 1 - WI	tan apparent plantic serving	Tine	(to
SIX	Ace this	enfully only), ringing perpend	ned an	7/0
17/	44.	THINALED TO MAN ACCOUNT IN	MUL	bl c

Test Pit # TP-17
Location: ~ 30-35' North of 1716

Project Name:	2 Love Road		Contractor:	Fuss & O'Neill, Inc.		
Project Number:	20040761.A1	IN	Operator:	Consulting Engineer	re	
Date:	617		Backfill: IACO . Manchester, CT Bis 940 POL			
Time:		: 10	Decorius.	And the steel to the state of t	40 [01
Sample Prefix:	TP17-		·			
Logged By:	LNG					
SAMPLE NUMBER	TIME	DEPTH from - to	פליע		USCS	FIELD
	, 20	7 19	SOIL DESCRIPTION	& C-44 \	CODE	TESTING
TP17-01	16	D - 4	gard track to	ravel (round)		
TP17-02	1025	23	dry organics into			
*		-	4"-2" f-m sad,	It town go	4.	
		-	some grovel (one	ulan),	<i>J'</i>	
	•	-	some bricks	- FII,		
		-	h .	ly moist.		
		-	2-607 = stained	F-M 500.		
		-	trace gravel,	little		
		-	silk. (dk. b	mun (a rous)	moist	
		-	7'-16'8" - H brow	alt with		
		-		31.0 1.000		
		-				27.7
ADDDOS CUDEA	05515					
APPROS. SURFA DIMENSIONS OF		2/2/IVX	TEST PIT SKET	CH:		
TOTAL DEPTH	10'8	617.102	12 6			
DEPTH TO BEDR		7.				
DEPTH TO MOTT		×				
DEPTH TO ROOT		×				
DEPTH TO WATE		10 (
WERE PHOTOS		yes (3)				
METHOD OF SAM	APLE COLLE	CTION GALLA		*		
COMMENTS:	2) /	1000		4/1	4	
	4 5	NEOIN !	gassline der 2	It bas.		

Designat Manage	01 D1				
Project Name:	2 Love Road		Contractor: Fuss & O'Neill, Inc.		1
	20040761.A1	N .	Operator: Consulting Engineer		k W
Date:	16:58		Backfill: UM Manchester, CT 060-	40 FC	10/
Time:			1		t
Sample Prefix:	T916-				
ogged By:	LMG				
SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
10-819T	1000	4-5	0-1 Pavement 1-4" ognis Jarkhown, sould		n
	Children	-			
		-	4-2-bnd, nots, med brown	3 cm	ished)
		••	12-3 stained f-m cand, unt	nowy	
			cause of stain		
		-	31-10/2 16. 6 nown silt.		
			1		
		-	6W @ 8/2		

		-			1
		-			
	_	-			
APPROS. SURFA	CE ELE. (FT-	MSL)	TEST PIT SKETCH:		
DIMENSIONS OF	P1	MK, T.	L		
OTAL DEPTH	11				
EPTH TO BEDR		Х			
EPTH TO MOTT		<u> </u>			
EPTH TO ROOT	-	X'7-			
EPTH TO WATE		52			
VERE PHOTOS		yes (Over		
ETHOD OF SAM	MPLE COLLEC	HON A WAY	lo .		

Test Pit # TP 19 Location: NW (down accessed) of Ric 446.

Project Name: 2 Love Road Project Number: 20040761.A1 Date: 6		Contractor: Operator: Backfill: W Manchester, GT-66049	POK N
Sample Prefix: TP(9) Logged By: LMC	7		
SAMPLE NUMBER TIME	DEPTH from to	SOIL DESCRIPTION CODE	FIELD TESTING
PP 19-01 1120	0-2	0-8" de violos mac son sond (md)	no
TPA-02 1120	0-2	SOIL DESCRIPTION CODE O-8" dk brown m-c star said (rnd) Signalics roots trice garrell (rnd) Sil - 2 same dk brown med. Trace' bricks, trace roots	(
		trace' bricks, trace nook	
	-	2'-5.5' it brown silt. @5.5': blk shale ("notten")	
	-		
		ro qu seen	
		no an seen	
	-		1
	-		
	-		
	-		
	-		
NPPROS. SURFACE ELE. (FT- DIMENSIONS OF PIT: 21/2) TOTAL DEPTH	MST)	TEST PIT SKETCH:	
DEPTH TO BEDROCK	5.5		
DEPTH TO MOTTLING DEPTH TO ROOTS	×		
	one		
VERE PHOTOS TAKEN?	no	nassible	
METHOD OF SAMPLE COLLEC		Clinkt	
OMMENTS:		no odor, no staining	

Test Pit # TP-20 Location: across rd. from TP13; in pathway through trees.

Project Name:	2 Love Road		Contractor:	Fuss & O'Neill, Inc.	
Project Number: 20040761.A1N Date: LIT Time: NEW S		0			
			Backfill: U.S	Manchester, CT 96040	
		45	8		
Sample Prefix:	TP 20	_			
Logged By:	LM	G			
SAMPLE NUMBER	THME	DEPTH from to	SOIL DESCRI	PTION CODE TESTING are gravel, mostly organics	
1920-01	1150	37-49	truce brick, for	are arabel.	
			Some roots	mostly organics	
		_		·	
		**	1-4'2 Hbx	own silt.	
		-	042' - black	shale.	
		-			
		-			
		-			
		-	refusal@	4.5 - bedwell	
		-			
		-	NO GW N	Sible	
		-			
APPROS. SURFA		-MSL)	TEST P	PIT SKETCH:	
DIMENSIONS OF PIT:		4/2'			
TOTAL DEPTH DEPTH TO BEDR	POCK	41/2			
DEPTH TO MOTI		×			
DEPTH TO ROOT		*			
DEPTH TO WATE		×			
WERE PHOTOS		No			
METHOD OF SAI					
COMMENTS:		1			

Test Pit # 17-21 Location: 5. Side of Concrete pad.

Sample Prefix: TP 21 -	Project Name:	2 Love Road		Contracto	r:	Fuss & O'Neill, Inc.		
Time: 1'.40 Sample Prefix: TP 21 - Logged By: LM6 SAMPLE DEPTH USCS FIELD	Project Number:	20040761.A1	N	Operator:		Consulting Engine	ers	Dale 1
Time: 1,40 Sample Prefix: TP 21 - Logged By: LMB SAMPLE DEPTH USCS FIELD	Date:	6/17		Backfill:	W.C	Manchester, CT 06	040	POR 1
SAMPLE DEPTH USCS FIELD	Time:	1:40			0			
SAMPLE DEPTH USCS FIELD	Sample Prefix:	TP21.						
MIMPED THE USES FIELD	Logged By:	LMB						
		TIME			SOIL DESCRIPTION			
	1651-01	1	6-67	- 9 00	MARIES 10813.	1 11	ny ·	
1921-01 145 6-62 0-4 drive hown, m-c sandy dry		.50				mie amult		

NUMBER TIME from-to SOIL DESCRIPTION CODE TESTING

1921-01 145 6-62 0-4 draw Now Mark Sand My

1921-02 150 3-44-2½ dant brown trace growth

- 2½-3 brick tenshed brown

- 3-4 february for from the growth

- 3-4 february for from trace growth

- 4-b2 brown the growth

- 5-4 february from the growth

- 4-b2 brown silt wet put

- 6w a - 5b2

- 7efusal (a) 62 - bedrock

APPROS. SURFACE ELE. (F	T-MSL)		TEST PIT SK	ETCH:			
DIMENSIONS OF PIT: 7	2W. hU						
TOTAL DEPTH	6.5		15 ~ E1)				
DEPTH TO BEDROCK	6.5 (5)00	ed - s. side	13 9)				
DEPTH TO MOTTLING	Y						
DEPTH TO ROOTS	X						
DEPTH TO WATER	5.5'						
WERE PHOTOS TAKEN?	uco (2)						
METHOD OF SAMPLE COLL					4	1.10	f
COMMENTS:	V	*10	ndor.	~ 1	200 77	NE	87
		Cov	Haminated	ADD	7		
	•		- in the let	-170	1		

Test Pit # TP22 Location: Sof a a ess rd; - 50' N of TP09

Project Name:	2 Love Road
Project Number:	20040761.A1N
Date:	6(17)
Time:	2:10
Sample Prefix:	1927 -
Logged By:	LMG

Contractor:	
Operator:	
Backfill: (1/1)	

Consulting Engineers	
Manchester, CT 06040	AK N

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
17220	215	82-9	U-6" organics rook, m-c sand,	,	MPAR:
		-	Some your		
		-	(all sorts of construction Lebris)		
		-	(all gotts of construction Lebris).		
		-	3-5' dak brown army stained set frace of del	or15.3	
		-	5-9- petroloum soaked soil	bri	Ł .
		_		,	
		-			
			1		
		_	·		V
		-			
		-			

APPROS. SURFACE ELE. (FT-MSL)	TEST PIT SKETCH:	,
DIMENSIONS OF PIT:		tree line
TOTAL DEPTH 9'	()	\ - ~ /
DEPTH TO BEDROCK	* strong oder. * Throws petrol. study	
DEPTH TO MOTTLING	Dishets balas to a	Pipe
DEPTH TO ROOTS	I RPNONS besto significant	1 STPZ
DEPTH TO WATER ~5'		1
WERE PHOTOS TAKEN? YES - Mary		
METHOD OF SAMPLE COLLECTION	and the	Va.
COMMENTS: * 15 MO g when sheet pr	pe ~ 3' bas lined w	bricks dump
men around it.		,
* dug around pipe TP2	3 WILL TO ANA IT Close	1 to love Rd.
*		The Park of Hole

Test Pit # TP 23
Location: 6 between TP 22 3 TP 09

Project Name:	2 Love Road	
Project Number:	20040761.A1N	
Date:	6/11	
Time:	3:15	
Sample Prefix:	TP13-	
Logged By:	1.MG	

Contractor:	
Operator:	
Backfill: 11 LS	10,440

Fuss & O'Neill, Inc.	
Consulting Engineers	1/1/
Manahester, 07-08040 TOK	44

SAMPLE NUMBER	TIME	DEPTH from to	USCS USCS CODE	FIELD TESTING
none.		-	1-4 M-C sand, trace grand,	no
		_	duck brownsts, am,	
		-	4"-3" It brown f-m sand	
		-	3-3,5 buck laver - onshed + whole	
		••	3.5 - 4 med byon fred	
		-	sand, trace roots,	
		_	11the so gravel, lettle	
		-	bouldus	1
		-	4'-6'- petroleum imparted	
		-	soil dive green with	
		-	6:-7 1k. brown s.11	
		-		

APPROS. SURFACE ELE.	(FT-MSL)
DIMENSIONS OF PIT:	21/2 W X 25
TOTAL DEPTH	8 71
DEPTH TO BEDROCK	8 7'
DEPTH TO MOTTLING	x
DEPTH TO ROOTS	X,
DEPTH TO WATER	51
WERE PHOTOS TAKEN?	yes .
METHOD OF SAMPLE CO	LLECTION N A

TEST PIT SKETCH:

to be may have been a short (<10')
Overflow pipe for a dry well or
Septic?

COMMENTS:	* no pipe as seen in TP 27
	* same appearance as TP 22- no sample
	* lovious petroleum impacts 4-6 bas

Test Pit # 17 Location: Project Name: 2 Love Road Contractor: Fuss & O'Neill, Inc. Project Number; 20040761.A1N Operator: **Consulting Engineers** 20 Date: Backfill: Manchester, CT 06040 Time: TP 11 Sample Prefix: Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from - to CODE TESTING bryanics 900 No brown sitt APPROS. SURFACE ELE. (FT-MSL) TEST PIT SKETCH: 25'WX 10 L DIMENSIONS OF PIT: TOTAL DEPTH DEPTH TO BEDROCK

* no apparant odor or stampy

METHOD OF SAMPLE COLLECTION CAN

7/2

20

DEPTH TO MOTTLING DEPTH TO ROOTS

DEPTH TO WATER WERE PHOTOS TAKEN?

COMMENTS:

Test Pit # TP25
Location: dong acress rd between TP 23 3 24 Project Name: 2 Love Road Contractor: Fuss & O'Neill, Inc. Project Number: 20040761.A1N Operator: **Consulting Engineers** Date: Backfill: Manchester, GT-06040 Sample Prefix: Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from -- to CODE TESTING organics, 18013, some gravel q to no APPROS. SURFACE ELE. (FT-MSL) -conc. pals TEST PIT SKETCH: DIMENSIONS OF PIT: 10 6.51 TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING **DEPTH TO ROOTS** DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION AND COMMENTS:

Test Pit # TP 20 Location: 5W side of access rd, ads. to TP 21,22,24.

Project Name: 2 Love Road Project Number: 20040761.A1N		Contractor:	Fuss & O'Neill, Inc.		
		Operator:	Consulting Engineers	DI.	
Date:	6/20		Backfill: N/W	Manchester, CT 06040	. POK 1
Time:	, 9	35	8		1
Sample Prefix:	NA				
Logged By:	LM	9			
SAMPLE		DEPTH		US	SCS FIELD
NUMBER	TIME	from - to	SOIL DESCR		DE TESTING
NIX		-	b-6" pryanics posts	yel, dw	DV H
		-	b-6" pryanics roots truce gra 6"-265' M-F sand,	shalle, trace	//
		-	g rivilis	to the buck	
		-	^		
		-	refusal of	1-3'	
		-	ino BW.		
		_			
		•			
				•	
		-			
		-			
		-			
APPROS. SURFA	PIT: /	_	TEST	HT SKETCH:	
TOTAL DEPTH		plope)			
DEPTH TO BEDF					
DEPTH TO MOT		×			
DEPTH TO ROO			-		
DEPTH TO WAT		none	-		
WERE PHOTOS METHOD OF SAI		CTION N/D	-		
METHOD OF SAI	MIPLE COLLE	CHON 14 IN	, ,		
COMMENTS:			no odor	•	

Test Pit# Location: along will rear Pt 44, between wall 3, 7717 Love Ro Project Name: Contractor: Fuss & O'Neill, Inc. 20040761. AIN Project Number: Operator: **Consulting Engineers** 6/20 Date: Backfill: 9:45 Time: 7-000 Sample Prefix: LMG Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from - to SOIL DESCRIPTION CODE TESTING organics pools, 055 2 000 mod. APPROS. SURFACE ELE. (FT-MSL) **TEST PIT SKETCH:** DIMENSIONS OF PIT: TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING X DEPTH TO ROOTS 912-10 DEPTH TO WATER NO WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION x strong a dol COMMENTS:

Test Pit # 17 28 Location: @ end of thee hear 1717

Project Name: Project Number: Date: Time: Sample Prefix: Logged By:	7004 6 100 10 10 10 LM G	161.4N	Contractor: Operator: Backfill: Manchester.	ngineers De	K, NY
SAMPLE NUMBER	TIME	DEPTH		USCS	FIELD
19141	TIME	from - to	0-8 sgancs/voots, W-c sand med-brown, and trace and	CODE	TESTING
2000		21	med brown dry trace gr	well	No
1728104	920	9.5	81-21 trace organics, mits	a-u)	no
		-			
			2'-95'- It. brown silt mod. worst - wet.		
		-			
		-			
		_			
		_			
		_			
		_			
		_			
APPROS. SURFAI DIMENSIONS OF	PIT: 7/2	MX	TEST PIT SKETCH:		
TOTAL DEPTH DEPTH TO BEDRO		.51			
DEPTH TO MOTT		*			
DEPTH TO ROOT		×			
DEPTH TO WATE		8.5			
WERE PHOTOS T		No,			
METHOD OF SAM	IPLE COLLEC	CTION GRAD	, (
COMMENTS:		J	* strong/moderate ador	0	
		-	bottom Bt pit.		

Test Pit # TP-29 Location: NW of TP28; on other side of wall from the from TP20

	2
Project Name:	2 Love Koad
Project Number:	20040761. AIN
Date:	6/20/05
Time:	1030 AM
Sample Prefix:	tp29-
Logged By:	LMG

Contractor:	
Operator:	
Backfill: U.P.	۵ .

	- 1
POK.	NY
	Pok,

SAMPLE NUMBER	TIME	DEPTH from to	USCS SOIL DESCRIPTION CODE	FIELD TESTING
TP29-01	10	q'	1092" pavement, trace organics, day	No
1729-02	1645	0-1	2"-1' trace organics posts, trace brick. M-f sand Ripist	no
		-	1'-2' some back m-f sand,	
		-	21-7 It, brown silt; mod.	
			morst	
		-	7-9' It. brown silt, wet.	
		••		
		-	* 6W 0~7'	
		-	* 6W 0~7 * no refusal	
		-		
		••		
		_		

APPROS. SURFACE ELE	. (FT-MSL) X
DIMENSIONS OF PIT:	2/2 W x 10 L
TOTAL DEPTH	9'
DEPTH TO BEDROCK	9 79
DEPTH TO MOTTLING	X
DEPTH TO ROOTS	X
DEPTH TO WATER	7'
WERE PHOTOS TAKEN	? No
METHOD OF SAMPLE C	OLLECTION 970 b

TEST PIT SKETCH:

COMMENTS:	* ho apparant odor, ho	
	apparant Staining	_
		-

Test Pit # P30
Location: Corner of bldg wall, adj. fr 7929

Project Name:	2 Lova		Contractor:	Fuss & O'Neill, Inc.		
Project Number:		161. ALN	Operator:	Consulting Engine		1
Date:	6/20/0		Backfill: iAW	Manchester, CT 06	1	OK A
Time:	12:		1			1
Sample Prefix:	TP30	o-		4		
Logged By:	LN	1G				
SAMPLE		DEPTH			10000	
NUMBER	TIME		C-W	Ì	USCS	FIELD
		from - to	0-6" dk brown gray 200	na o Hill	CODE	TESTING
TP30-01	12:55	45	organics posts	Medsied		no
P70-02	. \ 00	3-4	6" - 3' dk brown F	-m sand,		no
		••	truce organics,			
		••	Thre day.			
		_	3-51 some blue clay	lattle staining	Ser .	
		-	51-9.5 . It. brown silt)	
*		-	moist > wet a	9 bottom		
		-				
		-				
		**				
		-				
		-				
APPROS. SURFA	CE ELE. (FT-	MSL) ×	TEST PIT SKET	CH:		
DIMENSIONS OF				-		
TOTAL DEPTH		.5'		f		
DEPTH TO BEDR		1.				
DEPTH TO MOTT						
DEPTH TO ROOT						
DEPTH TO WATE	R 8	.5	*			

- slight oder - not strong

F:\PAD\ADFLDOPS\FLDOPS\DataSheets\testpitFDS.xls

WERE PHOTOS TAKEN?

COMMENTS:

METHOD OF SAMPLE COLLECTION

Test Pit # 27; along wall headed for contamination @ entran Location: N of TP 2 Love Poar Project Name: Contractor: Fuss & O'Neill, Inc. 20040761. ACN Project Number: Operator: **Consulting Engineers** 6 20 05 Date: Backfill: Manchester, CT USUAD POK AM TP31-0X Sample Prefix: LMG Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from - to SOIL DESCRIPTION CODE **TESTING** 1105 0-4" organics 1731-01 10 some stainin born mb/st stamura APPROS. SURFACE ELE. (FT-MSL) TEST PIT SKETCH: DIMENSIONS OF PIT: 10.5 TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING **DEPTH TO ROOTS** 9.5 DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION In Shue day. (~4-51 bgs) COMMENTS:

_	TP-
Test Pit#	32
Location:	

Project Name:	2 Love Road
Project Number:	20040761. AIN
Date:	62005
Time:	1120
Sample Prefix:	1932 -
Logged By:	LMG

Contractor:	
Operator:	
Backfill: UCD	

Fuss & O'Neill, Inc.
Consulting Engineers
Manchester, CT 05040 POK, NY

SAMPLE NUMBER	TIME	DEPTH from – to	SOIL DESCRIPTION ,	USCS	FIELD TESTING
1932-01	1235	3-5	6-8" organics, med-alconum M-c sand, trian		No
TP32-02	1235	14'	8"- 3' little if m sand, some silt	1	NO
		••	3'-6' Little It blown sit, some		
		•••	6'-11 It brown 5,14, mg		
		-	moist > met.		
		**			
		-	* no refusal de bedrock		
		**			
		-			
		4040			
		-	·		
		_			

APPROS. SURFACE ELE. (FT-MSL)	TEST PIT SKETCH:
DIMENSIONS OF PIT: 21/21 W x 12 L	
TOTAL DEPTH	
DEPTH TO BEDROCK * ? >>>\	
DEPTH TO MOTTLING X	
DEPTH TO ROOTS X	4
DEPTH TO WATER ~ \\\'	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION & TUN	
1 1 1 1 1	ine contamination seen in
TP'S '31, 22 1	3.09.
+ No appara	aut odar or staining

Test Pit # TP 33 wirete gads, inbetween them, near wall. Location: N Love Rd Project Name: Contractor: Fuss & O'Neill, Inc. 20040761. AIN Project Number: Operator: **Consulting Engineers** 6/20/05 Backfill: Manchester, CT 06048 Time: Sample Prefix: Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from - to 3 some site (It. brown), trace
brick 3 boulders by Wall i moist CODE TESTING 150 No 1150 no Mod. moist APPROS. SURFACE ELE. (FT-MSL) TEST PIT SKETCH: 10'(DIMENSIONS OF PIT: 24 W X TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS **DEPTH TO WATER** WERE PHOTOS TAKEN? 20 METHOD OF SAMPLE COLLECTION GAR COMMENTS: contamination plume appara

Test Pit # 17 34 Location: pkg lot across love rd - back corner.

2 love	rd.	Contractor:	Fuss & O'Neill, Inc.	
			Consulting Engineers	
6/20.			Manchester, GT 06040	POK N
1:15		Y		
TP 34	-	,		
LMG				
	DEPTH		usce	FIELD
TIME	from to	SOIL DESCRIPTION	ON CODE	
1:20	4-5	5-6" organics, med	de brown	ho
	••	6" - 3.5 med lorown	VA-FERNA,	
	-	april- stight	tly moist	
	_	3.5-8 some sit	mod. 1: It brown.	
	-	Trajin, S		
	-			
	-			
	••			
	-			
	-			
	ISL) X	TEST PIT S	KETCH:	
	×			
	8/			
			1	
),	* looks W	Michael	
	TIME CE ELE. (FT-A PIT: OCK LING SER NOWE	## DEPTH ### From - to	Operator: Backfill: 40 TP 3-4 - LNG DEPTH from to SOIL DESCRIPTION For Med Sand do Governored Sand	Operator: Consulting Engineers

Test Pit # TP 35 e od BE. entranco of lot.

			ocation: E. & 1734, hear cove voc (96.	
Project Name:	7- love	rd.	Contractor: Fuss & O'Neitl, Inc.		
Project Number:	2004	0761. AIN	Operator: Consulting Enginee	re	
Date:	6/20	0 14. 7.			K W
	1:30		Backfill: Manchester, CT 868	40-16	
Time:	TP 35		v		
Sample Prefix:	14 22	^C-			
_ogged By:		W.P.			
SAMPLE		DEPTH		USCS	FIELD
NUMBER	TIME	from to	SOIL DESCRIPTION	CODE	TESTING
1735-01	1:25	0-1	0-8" organics, it brown grow & m-c sand some drave		no
P35-01	1:40	4-7	8"-3' some hour me sand		
			some gravel boulders (angular)		
		_	(we) some		chi
		_	1-6 back brown V+ + sand,		ΔD
			ang gard 3 volous dos.		
		-	6-8.5 Silk Some coarse isand		
		-	most 'pebbles stone) frings	We.	
		949	8.5' - 9.0' k brown silt		
		_	bense.		
		-	•		
		-	GW0 6.5		
			adn't hit bedrock.		
APPROS. SURFA	CE ELE. (FT-		TEST PIT SKETCH:		
DIMENSIONS OF	PIT: VI	WXIOL			
TOTAL DEPTH		9'			
DEPTH TO BEDR		7			
DEPTH TO MOTT		X			
DEPTH TO ROOT		X			
DEPTH TO WATE	R V	2.5			
WERE PHOTOS	TAKEN?	4013	-4)		1
METHOD OF SAM	MPLE COLLEC	CTION TOWN			1
)	* maderale 1 + + + +	1	MONSON
COMMENTS:			Moderate saor of perm	MOSI	THE DOOL
			* one railroad he under white	4~	24.
			* sheen on GN pool.		
			* RR hes frack on other side of	fence	
			1 1111	(
'\PAD\ADELDOPS\EL	DOPS/DataShor	eteltoetnitEDS via	the sult abundance since 70	>.	

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Test Pit # TP 36
Location:____

Project Name: L love rd	Contractor:	Fuss & O'Neill, Inc.		
Project Number; 2004 6761. 91N	Operator:	Consulting Engineers	-	111/
Date: U/20	Backfill: IA & S	Manchester, CT 06040	POK	NY
Time: 200	3			
Sample Prefix: 1736				
Logged By: LVG				

SAMPLE		DEPTH		USCS	FIELD
NUMBER	TIME	from to	SOIL DESCRIPTION	CODE	TESTING
TP26-01	210	5-7	0.8 organis f.m sand, med brown (in strace grave ang.))	No
		-	8" - 3.5' from sand, med brown, stightle	e	
		_	3.5'-5' med brown of m sand, mod.	oots	
		-	5-7 gray day stained slight		
		-	7-8 it bown		
		-			
		-	saturation @ 5.5		
		_	no refusal		
		-			
				٠,	
		-			

APPROS. SURFACE ELE. (FT-MSL)	TEST PIT SKETCH:
DIMENSIONS OF PIT: 71/2 W X 12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TOTAL DEPTH	* E. side has sturing, W. state doesn't.
DEPTH TO BEDROCK	1
DEPTH TO MOTTLING X	* impacted line through pit.
DEPTH TO ROOTS	
DEPTH TO WATER SS	* RK he dug up.
WERE PHOTOS TAKEN? WLS (361)	
METHOD OF SAMPLE COLLECTION 1	* slight creosofeodor.

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COMMENTS:

Test Pit # TP 37
Location: Newton of pkg lot field

Project Name:	2 love rd.
Project Number:	2004 0761, AIN
Date: 7	120
Time:	2:10
Sample Prefix:	1937-
Logged By:	IMG

Contracto	or:	
Operator		
Backfill:	400	

Fuss & O'Neill, Inc.		
Consulting Engineers	to 1	11
Manchester, CT 06040	TOK	NI

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
TP37-01	2:15	4-5	16 brown largy m-c sand lary		no
			1'-3.5' f-m' med brown sand lang.) d	M > sHy	moist
		444	3.51-8 Sit some of brown	1 (
		-	stringed sand in few		
		-	107/2 7 tayl it organics		
		-			
		-			
		-	gw flowing in @ - 62!		
		-			
		-			
		-			

APPROS. SURFACE ELE	. (FT-MSL)
DIMENSIONS OF PIT:	22 NY 15L
TOTAL DEPTH	4'
DEPTH TO BEDROCK	7
DEPTH TO MOTTLING	χ
DEPTH TO ROOTS	Χ.
DEPTH TO WATER	6.5
WERE PHOTOS TAKEN?	UM)
METHOD OF SAMPLE CO	DLLECTION ALW)

TEST PIT SKETCH:

* to determine extent of subsurface contaminates	1
sun in 1835	_
* very strong pet crease adoc	_
_	

	st Pit #	
tiN	Contractor: Operator:	Fuss & O'Neill, Inc. Consulting Engineers

Project Name:	2 love id
Project Number:	20040761. ALN
Date:	6 20
Time:	240
Sample Prefix:	tp 38 —
Logged By:	LMG

Consulting Engineers	70 11	
Manchester, GT 96949	YOK	N
		1/.1/

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
1738-01	245	4-7	0-6 any nics (roots, little ing.		no
			6"-3.5 PSORTE Sapral, little boulders?	NWA	
		-	3.5'-5' med brown moist from sand the	40,	
		_	5'-6 gray clay, most dense		
		_	6-6.5 decorring not tree		
		_	6.5'- 10' He med brown site wet		
		-	trace peddes		
		-	no bodrock to 11		
		_	an flowing a ~ 8 bgs		
		-			
		-			

APPROS. SURFACE ELE.	(FT-MŞL) X
DIMENSIONS OF PIT:	22 WK101
TOTAL DEPTH	10'
DEPTH TO BEDROCK	1.
DEPTH TO MOTTLING	×
DEPTH TO ROOTS	× ,
DEPTH TO WATER	~8'
WERE PHOTOS TAKEN?	na
METHOD OF SAMPLE CO	LLECTION AND

TEST PIT SKETCH:

COMMENTS:	-								
	*	NO	WYDUNG	4	Valse				
						\			
	×	SHII	1 truc	18	OMUL	Thou	host	,	
							,		

Test Pit # Location: 5 entrance of lot of or for in itside. love id. Fuss & O'Neill, Inc. Project Name: Contractor: 20040761. AL Project Number: Operator: **Consulting Engineers** 6/20 Date: Manchester, CT 06040 Backfill: Time: -1P39. Sample Prefix: Logged By: SAMPLE DEPTH USCS **FIELD** NUMBER TIME from -- to CODE TESTING 0-4" organics, life brown gray dry

M-C Sand, mostly any gave

4"-2.5" inthe vf-f sand, lifty Kill (med blown),

1+the and... a rate

2.5'-7.5" clay dk brown gray, mod.

de n. 2. 90 xible staining. 310 TP39-0 bedrock APPROS. SURFACE ELE. (FT-MSL) **TEST PIT SKETCH:** LZWXJOLL DIMENSIONS OF PIT: TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION MY * stones found in first couple feet are large dia looks same as TP35 moderate crossoft

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Test Pit # TP 40 Location: upon lot - empty, downslope side by love rd

Project Name:	2 Love road
Project Number:	20040761.A2N
Date:	6/)\2005
Time:	8:25
Sample Prefix:	1P40, -
Logged By:	IMP

Contractor:	
Operator:	Car
Backfill:	1110

Fuss & O'Neill of New York Consulting Engineers Poughkeepsie, NY 12601

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION / CODE	FIELD
none			natural undisturbed soil rods	مم
		-		
		-	* stopped when we	
			hit the old septic	
		-	system-mostly	
•		-	Alledin by now.	
		-	* other than septic tank,	
		••	no fill material or	
		-	non-natural soils.	
		-		
		-		

APPROS. SURFACE EL	E. (FT-M	SL)	- 1
DIMENSIONS OF PIT:	4W	X	10, r
TOTAL DEPTH	~7'		
DEPTH TO BEDROCK		7	
DEPTH TO MOTTLING		×	
DEPTH TO ROOTS		×	
DEPTH TO WATER		×	
WERE PHOTOS TAKEN	1?	~	.0
METHOD OF SAMPLE	COLLECT	ION	NIX

TEST PIT SKETCH:

COMMENTS:	*	enuch	ed 50	Poser	e :	SCHO			
	*	smelled	like	sewer	-7	but on	line.	hit.	old
		Septic	System	tor	dev	Morished	builde	MS.	
		1	1.			•			

Test Pit # TP-41 Location: NE corner of lot, near Pte 44 (-70' away)

Project Name: 2 Love road	Contractor:	Fuss & C
Project Number: 20040761.A2N	Operator: Call	Consulti
Date: 6/2005	Backfill: UV	Poughke
Time: 8:40	0	
Sample Prefix: TP4 -		
Logged By: LMG		

Fuss & O'Neill of New York Consulting Engineers Poughkeepsie, NY 12601

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
1741-01	850	3-6	0-1.5 M-c sand, to some cushed	ash 30	λ
1741-02	900	0 - \	1-10 med brown f-m sandson	2)1	
		-	* sower pape of 5 bas		
		-	+ refusal @ 100 > bedie	de	
		and a			
		-			
		-			
		-			
		-			
		-			
		-			
		-			

APPROS. SURFACE ELE. (FT-MSL) DIMENSIONS OF PIT: 4'W 15'	TEST PIT SKETCH:	real seen
TOTAL DEPTH	the smaler running from seven pipe	* Soil seen
DEPTH TO BEDROCK 16	ann seven pipe	clean -
DEPTH TO MOTTLING X	Troing Troins	natural be
DEPTH TO ROOTS	we kny viiii	2/
DEPTH TO WATER Not able to be		\sim Z.
WERE PHOTOS TAKEN?	5 b95	
METHOD OF SAMPLE COLLECTION ()VI)VI)		
COMMENTS: 4 hit pipe	11.1	ligaring
below !	t. Sewage van but but a	(Wan)
sample 1	nun take W	
+ pipe s	rapped diamon where a to me	nutes.
The state of the s	he william of	

Test Pit # TP42 Location: adj - to love rol in upper lot, center of lot,

Project Name: 2 Love road	Contractor:	Fuss & O'Neill of New York
Project Number: 20040761.A2N	Operator: Cal	Consulting Engineers
Date: 6/12/2005	Backfill: WD	Poughkeepsie, NY 12601
Time: 9:20	0	
Sample Prefix: TPU2-		
Logged By: LMG		

SAMPLE NUMBER	TIME	DEPTH from to	USCS SOIL DESCRIPTION CODE	FIELD TESTING
1942-d	920	4-6	0-1 and boulders. Trace mot hed brown	16
		-	1-7 Some silt-111	
		-	2-3 trackers win black little ash,	
		-	3-17	
		-	3-6 it brown lower clay with with	
		-	6-12' It brown silt.	
		prime.		
		tioner		
		_		
		-		
		••		

APPROS. SURFACE ELE. (FT-M\$L) 7	A .		TEST PIT	SKETCH:	
DIMENSIONS OF PIT: 5WX	12/1				
TOTAL DEPTH 12.5					
DEPTH TO BEDROCK 12.5	2				
DEPTH TO MOTTLING X					
DEPTH TO ROOTS X					
DEPTH TO WATER					
WERE PHOTOS TAKEN?	(4)				
METHOD OF SAMPLE COLLECTION &	Win				
COMMENTS:		NI	apparant	odor	
		411	15 mostly	brick, BUK	ash

Test Pit # 1743 Location: cornu of hemolished blog, above TPO3

mea 1

Project Name: 2 Love road	Contractor:	Fuss & O'Neill of New York
Project Number: 20040761.A2N	Operator: Car	Consulting Engineers
Date: 6/1/2005	Backfill: NACO	Poughkeepsie, NY 12601
Time: 945	0	
Sample Prefix: TP43-		
Logged By: LMG		

SAMPLE		DEPTH		uscs	FIELD
NUMBER,	TIME	from to	SOIL DESCRIPTION	CODE	TESTING
1P4301	955	11-11.5	0-4"- concrete pud w, velan	0	NO
X		-	4"-3 and trace aug. gra	ec .	
			3'-8 of sandithe). some dar moist.	Lionn	
		-	Molsk.		
		-	8-115 = little sitt, some gruy/o very moist	live	
		***	venp moisE.		
		-	* no refusal		
		••	* no visible GW		
		**	\		
		-			
		-	@ wall of building to get to		
		-	field is ~ 8 (m. sime back	Fill)	

APPROS. SURFACE ELE. (FT-MS	L)		TE	ST PIT SKET	TCH:			•
TOTAL DEPTH	100							
DEPTH TO BEDROCK	X							
DEPTH TO MOTTLING	X							
DEPTH TO ROOTS	X							
DEPTH TO WATER	X							
WERE PHOTOS TAKEN?	yes,							
METHOD OF SAMPLE COLLECTION	olara no							
	1.	, chan	a ant-	1	Ans	a	· C	6.0
COMMENTS:		* SLUDY	d Down	MUD	odor	(0)	~ 8	095.

	Love road 040761.A2N		Contractor: Operator: Contractor: Consulting Engineer	CWIOIK	used to
oate: 6/7	2005		Backfill: (N/) Poughkeepsie, NY		
ime:	10:10				
ample Prefix: 7	744-		, and the second		
ogged By:	MP				
IV,	9	DEPTH		USCS	FIELD
NUMBER CRU()	OF ZO	from - to	o-3" DAVEMENT, UNGREAR.	CODE	TESTING
PUU-02 K	2/35	0-7	3"-1' packed stone shale (Flat		117
(1)	Me	-	1'-1.5 black apprile as coal fill	FOLD	PAVEN
			15-4 Some flat any grave ?) -	
		-	de brown > gran.	,	
-			4 - 10.5 med brown		
			1111 00 1		
		_	1.ATLE VI - Sand, Some		
			5/16.		
		-			
APPROS. SURFACE DIMENSIONS OF P FOTAL DEPTH DEPTH TO BEDROO	IT:	- X NG 3 W X 0 (5)	TEST PIT SKETCH:		
DEPTH TO MOTTLI		X			
EPTH TO ROOTS		X			
EPTH TO WATER	-	ono see			
VERE PHOTOS TA		yes (L	1		
ETHOD OF SAMP	LE COLLEC	HOW STAN			
		2	Wt odor (~ 7-8 bgs		

Test Pit # TP 45
Location: Nony 1. 44, adjacent to tourdation

Project Name: Project Number:	2 Love road 20040761.A2	N	Contractor: Operator:	Fuss & O'Neill of No Consulting Enginee	ers	
Date:	6/2/2005	. 110	Backfill: Www	Poughkeepsie, NY	12601	
Time:	10	: 40	٥			
Sample Prefix:	1745	_				
Logged By:	LM	16				
SAMPLE		DEPTH			uscs	FIELD
NUMBER	TIME	from to	SOIL DESCRIPTION		CODE	TESTING
NA		**	0-41 black top			
			* a pipeline 3 US	st was	,	
			hit @ 3 belo	ou grown	4	
			surface. No	rank		
		-	riphine. Tous	fill popes		
		-	were open (we	covered		\
		-	them to prevent	rain white	ation	.)
		-				
		-	* Sumounding soil	fill had a		
			very strong odo	r. Nors	amp	e
		_		vious cont		,
		-	* duana & stropped	@ 3/ Su		ank.
			TEST PIT SKE			
APPROS. SURFA			TEST PIT SKE	TOH.		
DIMENSIONS OF		JK / C	441	Tockpe 17		
TOTAL DEPTH)		145		
DEPTH TO BEDE		X	48			
DEPTH TO MOT		X	/	T		
DEPTH TO ROOT		X	1			
WERE PHOTOS		411	//			
METHOD OF SAI		1 1 1)(
COMMENTS:			Fonce			
			Lahr			
			180/			
			11	· · · · · · · · · · · · · · · · · · ·	·	

Test Pit # TP46
Location: dayacent to TP45, adj. to Love Rd deady Project Name: 2 Love road Contractor: Fuss & O'Neill of New York Project Number: 20040761.A2N Operator: **Consulting Engineers** 6/2/2005 Date: Backfill: Poughkeepsie, NY 12601 10:50 Time: 1746-Sample Prefix: LNG Logged By: SAMPLE DEPTH USCS FIELD NUMBER TIME from -- to CODE **TESTING** provement, packed stone, 0-1.5 46-01 H brown silt, trace APPROS. SURFACE ELE. (FT,-MSL) X **TEST PIT SKETCH:** ZW, X 101 DIMENSIONS OF PIT: TOTAL DEPTH **DEPTH TO BEDROCK DEPTH TO MOTTLING** DEPTH TO ROOTS **DEPTH TO WATER** WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION **COMMENTS:** + slight oder > not wo strong NO TP UT OF 44

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Location: Outside of Perce Next to upper building are a rest to circle.

Project Name:	2 Love road
Project Number:	20040761.A2N
Date:	6/2 2005
Time:	11-15
Sample Prefix:	TP47-
Logged By:	LMG

Contractor	: ^ 1
Operator:	Con
Backfill:	iles

Fuss & O'Neill of New York
Consulting Engineers
Poughkeepsie, NY 12601

SAMPLE NUMBER	TIME	DEPTH from - to	SOIL DESCRIPTION	USCS	FIELD TESTING
7747-d	11:20	3-5	0-6"- It houngay m-c sand,		No
1P47-02	11:25	8-9	and gravel qual		no
1747-03	11:25	8-9	6'-2' stand, mostly that		no
		_	2'-3' de brown black. f.m sand,		7
		-	3'-9' some it brown sit, som	e j	
			2, 2,		
		-	* no bedrock het.		
		-	* no visible 6N		
		-	* very slight petroleum	Sme	U,
		_	l J		
		-			
		••			

APPROS. SURFACE ELE.	(FT-MSL) X	TEST PIT S	KETCH:	
DIMENSIONS OF PIT:	3'WX12'L			
TOTAL DEPTH	q' -			
DEPTH TO BEDROCK) -			
DEPTH TO MOTTLING	X			
DEPTH TO ROOTS	X			
DEPTH TO WATER	X			
WERE PHOTOS TAKEN?	4051			
METHOD OF SAMPLE COL	LECTION AYAD			
COMMENTS:	* Generally-	- sawe as TP	46,44	but
	USS Stack	ing		
	of very Stabet	odor, much 1	asc than T	P4644.
	1	7-1		

Test Pit # TP 48 Location: Newwood Concrete pads near access rd. Fuss & O'Neill of New York

Project Name:	2 Love road
Project Number:	20040761.A2N
Date:	6/7 2005
Time:	12:45 11:45
Sample Prefix:	7748-
Logged By:	LMG

O
Operator: OV
Backfill: VW

Consulting Engineers Poughkeepsie, NY 12601

SAMPLE NUMBER	TIME	DEPTH from to	SOIL DESCRIPTION	USCS	FIELD TESTING
TP48-101	1200	6-7	0-6 mostly organics little ground	ty	NO
		-	6"-3' some any gravel, little		
		-	dry, It brown grain		
		_	3-5 Hebrown sit; trade)	
		-	bouldes, possible		
		-	slight olor.		
		-	51-7 brown silt 1 the		
		-	ginglolie clay, trace		
		_	slight oder		
		-			
		á-	cefusal @ 7		
		-			

APPROS. SURFACE ELE. (FT-MSL) X	TEST PIT SKETCH:
DIMENSIONS OF PIT: 3 W V 10	L
TOTAL DEPTH 7'	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING X	
DEPTH TO ROOTS X	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION (17N)	1
COMMENTS:	+ hit gray contaminated
	CLAN (0) 5' bas. (51)
	5001 0 3
	J

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road **CONSULTING ENGINEERS PROJECT: BCP Site Investigation** SHEET: of POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road** JTRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS OPERATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD: HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B- 01 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 9:20 AM SAMPLE PREFIX:____ N/A Time and Date of Completion: SAMPLE LITHO-**DEPTH** SAMPLE REC/ **BLOWS STRATA** FIELD **DEPTH** SAMPLE DESCRIPTION **LOGIC** (FT) NO. PEN 6" CHANGE **TESTING** (FT) CODE 16 0

BORING DIAMETER 2"	BORING METHOD Direct Push	DEPTH 16	REMARKS Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site.
PROPORTIONS USED: TRACE 0 to 10% Little 10 50 20%	SOME 20 to 35% AND 35 TO 50%		
			DACKERI

BACKFILL

Native Material none. To See Monitoring Well

Bentonite Grout/Chips none. To Completion Report

Concrete/Asphalt none. To

Other none. To

FUSS & O'NEILL of New York, P.C. CONSULTING ENGINEERS

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road
SHEET: 2 of 29

rough	IKEEPSIE	, NY 12001	L		LOCATION: 2 Love Road PROJECT NO: 20040761.AZN					1.A2N				
UTR OPERA	ACTOR: TOR:	Fuss	& O'Neil	ll Field S	ervices		w	ATER LEV	VEL MEASURE	MENTS				
F&O REDRILLI	EPRESENT. NG METHO ING METH	ATIVE: DD: OD:	Lisa G Direct	wiazdow Push (Go	eoProbe)		DATE	MS. P	T. WATE	R AT	TIME			
BORING	ER WT: G LOCATION ID ELEVATORICATED:_	ON: <u>B- (</u> ΓΙΟΝ:	12			/01/05			-25					
	E PREFIX:					01/05	Time and Date of	Completio	n: 935 F	935 AM				
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS	8	SA	AMPLE DESCRIPTIO	N	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING			
13			0'											
· woodon shirid was and raw to the same														
	erri el la la la como como mando la como de la como como como como como como como com	All the state of t												

BORING	DIAMETER 2"		G METHO	DD	ДЕРТН		strument = None. So			probes to dete	rmine the			
						depth to	bedrock at various lo	ocations acro	oss the site.					
	RTIONS USEI 0 to 10% 10 5o 20%): SOM AND		35% O 50%										
iewe	d by Staff:					Concrete	Material te Grout/Chips te/Asphalt	none. none. none.	To To To	Completio	oring Well n Report			

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road
SHEET: 2 of

PROJECT NO: 20040761.A2N

				1	LOCATI	OIV. Z D	ove Road					
	ACTOR: TOR:				ervices			WAT	ER LEVEL	MEASUREM	IENTS	
	EPRESENT.				eki		DATE		MS. PT.	WATER	АТ	TIME
DRILLI	NG METHO	OD:	Direct	Push (Ge	oProbe)		DATE		MS. II.	WAILK	AI	LIMIE
SAMPL	ING METH	IOD: -	-									
HAMM	ER WT:		HAM	MER FA	LL (IN)_							
	G LOCATIO		03									
	ND ELEVA		DATI	EDUCII	ED: 00	101/05						
	STARTED:_ LE PREFIX:			EFINISH	ED: <u>08</u>	/01/05	Time and Da	te of Co	mpletion: _	9:40	AM	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"			AMPLE DESCR			STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
7'					USE	1 to	verify	dep	th of			
						***************************************	***************************************		Alaka da			
						Million de la companya de la company						
-												
								drett state de contrata de la contrata del la contrata de la contr				
											AAAAAAAAAAAAAAAAA	
			i									
BORING	DIAMETER	BORING	G METHO	op 1	DEPTH							1
	2"		ect Push		7'	REMA	RKS	G '11				
	2	Dire	ect rush		/		strument = Non bedrock at vari				obes to deter	rmine the
	RTIONS USEI 0 to 10% 10 5o 20%	SOM AND		35% O 50%								
						BACK Native N		none	то		See Monito	oring Well
reviewe	d by Staff:					Bentoni	e Grout/Chips	none			Completion	
							Asphalt	none				
						Other		non	е. То			

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road **CONSULTING ENGINEERS** 4 29 **PROJECT: BCP Site Investigation** SHEET: of POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road** Fuss & O'Neill Field Services ITRACTOR:____ WATER LEVEL MEASUREMENTS CLERATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD:__ HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B-**GROUND ELEVATION:** DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 9:45 AM SAMPLE PREFIX: N/A Time and Date of Completion: **SAMPLE** LITHO-**BLOWS** DEPTH SAMPLE REC/ **STRATA** FIELD DEPTH SAMPLE DESCRIPTION LOGIC (FT) NO. PEN CHANGE **TESTING** (FT) CODE 0 5 **BORING DIAMETER BORING METHOD DEPTH** 2" 5 **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50% BACKFILL

Native Material

Concrete/Asphalt

Other ___

Bentonite Grout/Chips

То _____

То _____

То _____

То ___

none.

none.

none.

See Monitoring Well

Completion Report

wiewed by Staff:

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road SHEET: of 29

POUGE	IKEEPSIE,	NY 1260:	1		LOCATION: 2 Love Road PROJEC					OJECT NÓ: 20040761.A2N		
	ACTOR:				Services		W	VATER LE	EVEL MEASUR	EMENTS		
F&O REDRILLI SAMPL HAMM BORING GROUN	TOR: EPRESENTA NG METHO ING METHO ER WT: G LOCATIO ID ELEVATE ETARTED:_	ATIVE: DD: OD: ON:B ION:	Lisa G Direct HAM O S	Wiazdov Push (G MER FA	eoProbe) ALL (IN)_	/01/05	DATE	MS. I		TER AT	TIME	
SAMPL	E PREFIX:_			T			Time and Date of	f Completio		I PERIO	. 1	
DEPTH (FT)	SAMPLE NO.	DEPTH (FT)	REC/ PEN	BLOW 6"	S	S	AMPLE DESCRIPTION	ON	STRAT	A LOCIC		
9.51			-0'									
0												
BORING	DIAMETER 2"		G METHO	DD	ДЕРТН 9.5		IRKS Instrument = None. So To bedrock at various I			k probes to de	termine the	
PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50%							FILL Material te Grout/Chips e/Asphalt	none. none.	To To To	Complet	itoring Well ion Report	

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road/ of 6/29 CONSULTING ENGINEERS **PROJECT: BCP Site Investigation** SHEET: POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road** NTRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS GERATOR:____ Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD:____ Direct Push (GeoProbe) SAMPLING METHOD: HAMMER FALL (IN)_ HAMMER WT: BORING LOCATION: B- 06 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 9:55 AM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-DEPTH SAMPLE REC/ **BLOWS** STRATA FIELD **DEPTH** SAMPLE DESCRIPTION LOGIC PEN (FT) NO. CHANGE **TESTING** (FT) CODE 6.5 0 **BORING DIAMETER BORING METHOD DEPTH** 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50%

То _____ Other ___ То ____ none.

Bentonite Grout/Chips Concrete/Asphalt

none.

none.

none.

To _____ See Monitoring Well

To _____ Completion Report

BACKFILL Native Material

newed by Staff:

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road / of SHEET:____ CONSULTING ENGINEERS **PROJECT: BCP Site Investigation** PROJECT NO: POUGHKEEPSIE, NY 12601 20040761.A2N **LOCATION: 2 Love Road** VTRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS ERATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME Direct Push (GeoProbe) DRILLING METHOD:____ SAMPLING METHOD: HAMMER FALL (IN)_ HAMMER WT:__ BORING LOCATION: B- 07 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 1000 AM Time and Date of Completion: SAMPLE PREFIX: N/A SAMPLE LITHO-SAMPLE **BLOWS** DEPTH REC/ **STRATA FIELD DEPTH** SAMPLE DESCRIPTION LOGIC CHANGE PEN **TESTING** NO. (FT) CODE (FT) 01 behind TP-12 5.5 BORING METHOD **BORING DIAMETER** DEPTH 5.51 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% 10 5o 20% AND 35 TO 50%

> BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt
Other

none.

none.

none.

To _____ See Monitoring Well

To _____ Completion Report

То _____

То _____

iewed by Staff:

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road **CONSULTING ENGINEERS PROJECT: BCP Site Investigation** SHEET: of 20040761.A2N POUGHKEEPSIE, NY 12601 PROJECT NO: **LOCATION: 2 Love Road** NTRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS ERATOR:___ Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. TIME WATER AT Direct Push (GeoProbe) DRILLING METHOD: SAMPLING METHOD:___ HAMMER FALL (IN) HAMMER WT: BORING LOCATION: B- OX GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 1005 AM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-REC/ **BLOWS DEPTH SAMPLE STRATA FIELD DEPTH** SAMPLE DESCRIPTION LOGIC CHANGE PEN 6" TESTING (FT) NO. (FT) CODE 3 Ő **BORING METHOD DEPTH BORING DIAMETER** REMARKS 3 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 50 20% AND 35 TO 50%

BACKFILL

Native Material

Concrete/Asphalt

Other ___

Bentonite Grout/Chips

To _____

To ____

То _____

none.

none.

none.

See Monitoring Well

Completion Report

iewed by Staff:

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road

SHEET: PROJECT NO: 20040761.A2N

TRACTOR: Fuss & O'Neill Field Services RATOR: Daniel Levesque	v	VATER LEVEL N	MEASUREMENTS	
F&O REPRESENTATIVE: Lisa Gwiazdowski DRILLING METHOD: Direct Push (GeoProbe)	DATE	MS. PT.	WATER AT	TIME
SAMPLING METHOD:				
HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B- 0 9				
GROUND ELEVATION:				
DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 SAMPLE PREFIX: N/A	Time and Date o	f Completion:	1012 AM	

DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		SAMPLE DESCRIPTION	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
16			0	~					
						·			
BORING	DIAMETER	BORIN	G METHO	DD DEP	TH	REMARKS			

BORING DIAMETER 2"	BORING METHOD Direct Push	DEPTH	REMARKS Field Instrument = None. Soil borings were actually blank a depth to bedrock at various locations across the site.	probes to determine the
PROPORTIONS USED: TRACE 0 to 10% Little 10 50 20%	SOME 20 to 35% AND 35 TO 50%			
lewed by Staff:			BACKFILL Native Material none. To Bentonite Grout/Chips none. To Concrete/Asphalt none. To	See Monitoring Well Completion Report

none. To

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road

SHEET: 10 of

PROJECT NO: 20040761.A2N

VTR	ACTOR: FOR:	& O'Neil	l Field Se	ervices			WAT	ER LEVEL	MEASUREM	IENTS		
F&O RE	PRESENTANG METHO	ATIVE: DD:	Lisa G Direct	wiazdow	ski		DATE		MS. PT.	WATER	AT	TIME
HAMM	ER WT:		HAM	MER FA	LL (IN)_							
GROUN	G LOCATION DELEVAT	TION:										
	TARTED:_ E PREFIX:_			FINISH	ED: 08/	/01/05	Time and Da	e of Co	mpletion: _	1017	AM	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		SA	AMPLE DESCRI	PTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
13			01					***************************************				
						***************************************		uninininununinini				
SALLE OF SECTION SECTI								della manda e e e e e e e e e e e e e e e e e e e				
									and the state of t	1		
								ortalis de la constantina della constantina dell				
								·			***************************************	
BORING	DIAMETER	BORIN	G METHO	DD D	DEPTH							
	2"	Dir	ect Push		13'		RKS astrument = None bedrock at vari				obes to deter	mine the
												·
	RTIONS USE 0 to 10% 10 50 20%	D: SON ANI		35% O 50%								
liewe	ed by Staff:						Material te Grout/Chips	none	е. То		See Monito	
						1	e/Asphalt	non				

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road ll of **CONSULTING ENGINEERS** PROJECT: BCP Site Investigation SHEET: POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road** TRACTOR:____ Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS C. LRATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME Direct Push (GeoProbe) DRILLING METHOD:____ SAMPLING METHOD: HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B-**GROUND ELEVATION:** DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 1022 AM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-**DEPTH** SAMPLE REC/ **BLOWS** STRATA FIELD DEPTH SAMPLE DESCRIPTION LOGIC PEN NO. 6" (FT) **CHANGE TESTING** (FT) CODE 13 **BORING DIAMETER BORING METHOD DEPTH** REMARKS 13/ 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50%

> BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt

Other ____

То _____

То _____

То _____

То _____

none.

none.

none.

none.

See Monitoring Well

Completion Report

lewed by Staff:

BORING LOG SITE ID: Redl 2 Love Road FUSS & O'NEILL of New York, P.C. SHEET: 17 of 29 **CONSULTING ENGINEERS PROJECT: BCP Site Investigation** PROJECT NO: 20040761.A2N POUGHKEEPSIE, NY 12601 **LOCATION: 2 Love Road** 'TRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS RATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME Direct Push (GeoProbe) DRILLING METHOD:____ SAMPLING METHOD: HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B- 12 GROUND ELEVATION:_ 10 32 DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 AM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-BLOWS STRATA **FIELD** DEPTH SAMPLE REC/ **LOGIC DEPTH** SAMPLE DESCRIPTION CHANGE TESTING PEN 6" (FT) NO. (FT) CODE 12 0 DEPTH **BORING DIAMETER BORING METHOD** REMARKS 121 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% 10 5o 20% 35 TO 50% Little AND BACKFILL

Native Material

Concrete/Asphalt

Other ____

Bentonite Grout/Chips

To _____

То _____

То _____

See Monitoring Well

Completion Report

none.

none.

none.

lewed by Staff:

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road
SHEET: 3 of

SHEET: 3 of 29

POUGE	IKEEPSIE	, NY 1200	1	I	OCATION	2 Love Road	PROJ	ECT NO:	2004076	1.A2N	
		Fuss Dani			rvices	WA	ATER LEVEL	MEASUREN	MENTS		
		ATIVE:			ki	DATE	MS. PT.	WATER	AT	TIME	
		OD: IOD:		Push (Geo	Probe)						
HAMM	ED WT.		HAM	MER FAI	L (IN)						
BORING	G LOCATION	ON: B-	3				***				
	ID ELEVA TARTED:		DATI	E FINISHE	ED: 08/01/0	05					
		N/A				Time and Date of Completion: 10 50 AM					
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH	REC/ PEN	BLOWS 6"		SAMPLE DESCRIPTION	I	STRATA CHANGE	LITHO- LOGIC	FIELD TESTING	
17'	·	(FT)	0		Boring previous bedro	on a pile of P 2' above grad	Soil for		CODE		
0											
									Marie de la		
BORING	DIAMETER 2"		G METHO		フ′ Fi	EMARKS eld Instrument = None. Soil pth to bedrock at various loc	borings were act ations across the	ually blank pro site.	obes to deter	mine the	
PROPOR TRACE Little	TIONS USEI 0 to 10% 10 5o 20%	D: SOM		35% O 50%							
ewec	l by Staff:				Na Be Co	ntonite Grout/Chips no ncrete/Asphalt nc	one. To _		See Monito Completion		

BORING LOG SITE ID: Redl 2 Love Road FUSS & O'NEILL of New York, P.C. **CONSULTING ENGINEERS** 14 PROJECT: BCP Site Investigation SHEET: PROJECT NO: 1 POUGHKEEPSIE, NY 12601 20040761.A2N LOCATION: 2 Love Road ITRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS CRATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME Direct Push (GeoProbe) DRILLING METHOD: SAMPLING METHOD:_ HAMMER FALL (IN) HAMMER WT: BORING LOCATION: B-**GROUND ELEVATION:** DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 1102 AM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-DEPTH SAMPLE REC/ **BLOWS STRATA** FIELD DEPTH SAMPLE DESCRIPTION LOGIC (FT) NO. PEN 6" CHANGE **TESTING** CODE (FT) MW-01 (temp.) installed. 15 thoring to 12', screen from 2-121. Casing rises 3.5' above grade. **BORING DIAMETER BORING METHOD** DEPTH REMARKS 15-1 2" Direct Push Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site.

> BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt

Other ____

То _____

То _____

То _____

none.

none,

none.

none,

See Monitoring Well

Completion Report

PROPORTIONS USED: TRACE 0 to 10%

lewed by Staff:

10 5o 20%

Little

SOME

AND

20 to 35%

35 TO 50%

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road SHEET: 15 of

PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road**

VTR	ACTOR: TOR:	Fuss	& O'Neil	l Field Ser	vices			WATER LEV	EL MEASUREN	MENTS		
F&O REDRILLE	EPRESENTA NG METHO	TIVE: D:	Lisa G Direct	wiazdowsl Push (Geo	Probe)		DATE	MS. PT	. WATER	RAT	TIME	
HAMM! BORING GROUN	ER WT: G LOCATIO D ELEVAT TARTED:_	N: <u>B-</u> ION:_	HAM!			01/05			25			
SAMPL	E PREFIX:_	N/A	\				Time and Date	-112	1125			
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		S.	AMPLE DESCRIPT	ION	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING	
15			0'					шышыны				
							20.00					
BORING	DIAMETER 2"		G METHO	D D	EPTH 15'	REMA	RKS astrument = None.	Sail havings war	a actually blank pr	mhas to data	mina the	
							bedrock at various			oves to deter	mme the	
	RTIONS USED 0 to 10% 10 5o 20%	SOM		35% O 50%								
ewe	ewed by Staff:					Concret		none.	To To To	Completion		

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road
SHEET: // of
PROJECT NO: 20040761 of 29 20040761.A2N

TOUGH	IKEEI SIE	,111 1200	•		LOCATI	ON: 2 L	ove Road	IKOS	ECT NO	20040701	
	ACTOR:_				Services		w	ATER LEVEL	MEASUREM	MENTS	
	TOR:										
	EPRESENT.						DATE	MS. PT.	WATER	AT	TIME
	NG METHO			Push (G	eoProbe)						
HAMM	ER WT:	OD	НАМ	MER E	II (IN)						
BORING	G LOCATION	ON∙ B-	110	IVILIC I'A	TEE (114)_						
	ID ELEVA		· ·								
	TARTED:		DAT	E FINISI	HED: 08/	/01/05			1.2	1) 14 0 1	
SAMPL	E PREFIX:	N/A	1				Time and Date of	Completion: _)12	OAN	1
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOW:	S	S	AMPLE DESCRIPTIO	N	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
201			01	-			TP-31				
					* 1	OBVIN	grade o grade o Actua drock=	d 1.1			
					a	bove	grade o	n spil			
					P	le.	HOTVA	l alpi	71		
					1	by	duel -	(191)			
					1) 14	arouz-				

		PHARE LAWRENCE TO THE									
						****************		***************************************			
BORING	DIAMETER	BORIN	G METHO	OD	DEPTH						
	2"	Dir	ect Push		201	Field In	<u>.RKS</u> strument = None. So	il horings were ac	tually blank or	nhes to deter	mine the
	-	-		-	w		bedrock at various lo			obes to deter	mine die
						-					
						_					
PROPOR	TIONS LIST					1					
	RTIONS USEI 0 to 10%	som	IE 20 to	35%							
Little	10 5o 20%	AND		O 50%							
						-					
						BACK	FILL				
						Native N		none. To		See Monito	oring Well
ewe	d by Staff:					Bentoni				Completion	
						1	1			•	
						Other_					

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road CONSULTING ENGINEERS **PROJECT: BCP Site Investigation** SHEET: of POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road** ITRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS CLERATOR: Daniel Levesque **F&O REPRESENTATIVE:** Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD: HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B-GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-DEPTH SAMPLE REC/ **BLOWS** STRATA **FIELD DEPTH** SAMPLE DESCRIPTION LOGIC (FT) NO. PEN 6" CHANGE **TESTING** (FT) CODE refusal @ bedrock. 0 13,5 BORING DIAMETER **BORING METHOD DEPTH** REMARKS 13.5 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% 35 TO 50% AND BACKFILL

Native Material

Concrete/Asphalt

Other ____

Bentonite Grout/Chips

See Monitoring Well

Completion Report

То _____

То _____

To ___

none.

none.

none.

wiewed by Staff:

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2, Love Road

SHEET: | 6 of 29 PROJECT NO: 20040761.A2N

rougi	IKEEPSIE	E, NY 1260	1]	LOCATION: 2 Love Road PROJECT NO: 20040761.A2N						l.A2N	
TTR	ACTOR:_	Fuss Dani	& O'Nei	ill Field So	ervices			WATER L	EVEL M	IEASUREM	1ENTS	
F&O RI DRILLI SAMPL HAMM	EPRESENT ING METH LING METH IER WT:	TATIVE: TOD: HOD: ON:B-	Lisa G Direct	Gwiazdows t Push (Ge	ski eoProbe)		DATE	MS.	PT.	WATER	AT	TIME
GROUN DATE S	ND ELEVAT		DATI	E FINISH	ED: 08	3/01/05	Time and Date o	of Complet	ion:	245 PM		
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		S	AMPLE DESCRIPTION	ION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
11'			0			at	TP-32					
BORING	DIAMETER 2"		G METHO ect Push	D C	DEPTH	REMA) Field Indepth to	RKS astrument = None. So bedrock at various l	oil borings o	were actuators the s	ally blank proite.	obes to deter	mine the
PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 50 20% AND 35 TO 50%												
lewed by Staff:						Concrete	faterial e Grout/Chips	none. none. none.	To		See Monitor	

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road CONSULTING ENGINEERS **PROJECT: BCP Site Investigation** SHEET: 9 of POUGHKEEPSIE, NY 12601 PROJECT NO: ' 20040761.A2N **LOCATION: 2 Love Road** TRACTOR:____ Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS Daniel Levesque RATOR: F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD: HAMMER WT:_ HAMMER FALL (IN) BORING LOCATION: B- 19 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 1250 PM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE LITHO-**DEPTH** SAMPLE REC/ **BLOWS STRATA** FIELD **DEPTH** SAMPLE DESCRIPTION LOGIC NO. (FT) PEN 6" CHANGE **TESTING** (FT) CODE A TP-33 6 11 **BORING DIAMETER BORING METHOD DEPTH** REMARKS 2" 11 **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the

depth to bedrock at various locations across the site.

none.

none.

See Monitoring Well

Completion Report

То _____

none, To ____

BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt

Other ____

PROPORTIONS USED: TRACE 0 to 10%

ewed by Staff:

10 5o 20%

Little

SOME

AND

20 to 35%

35 TO 50%

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road

SHEET: 20 of

PROJECT NO: 20040761.A2N

	ACTOR: FOR:				rvices		WATER LEVEL	MEASUREM	MENTS	
F&O RE	PRESENTA	ATIVE:	Lisa G	wiazdows		DATE	MS. PT.	WATER	RAT	TIME
	NG METHO ING METH			Pusn (Geo	oProbe)					
HAMMI	ER WT:		HAM	MER FAI	L (IN)					
BORING	3 LOCATIO	N:B	20_							
	D ELEVAT		DATI	EDUCIO	ED: 08/01/0	25				
	E PREFIX:			E LINISHI	ED: <u>08/01/0</u>	Time and Date e	of Completion:	100 PM	1	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		SAMPLE DESCRIPTI	ON	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
31			01	_	Ist	try	,			
6.5	-		5	_	2 ⁿ	d try -)	it bedrock			
		Manager State of the State of t				l .				
		***************************************	- Search Control of the Control of t							

									who make the same that the sam	
BORING	DIAMETER	BORING	G МЕТНО	D D	EPTH D	EM A DVC				
	2"	Dire	ect Push		6.5 Fi	EMARKS eld Instrument = None. S pth to bedrock at various	oil borings were ac locations across the	tually blank pro	obes to deter	mine the
TRACE	TIONS USED 0 to 10% 10 5o 20%	SOM AND		35% O 50%						
ewec	l by Staff:				Na Be Co	ACKFILL ative Material entonite Grout/Chips oncrete/Asphalt	none. To		See Monito	

PROPORTIONS USED:

TRACE 0 to 10%

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road

SHEET:_ of PROJECT NO:_ 20040761.A2N

VII	RACTOR:_	Fuss	& O'Nei	ll Field Ser	vices	V	ATER LEVEL	MEASUREM	MENTS	
₩ RA	TOR:	Dan	el Leves	que			T			
F&U R	EPKESENI	Alive:	Lisa G	wiazdowsk		DATE	MS. PT.	WATER	R AT	TIME
	ING METH		Direct	Push (Geo.	Probe)					
	ING METH		TTANA	ACD DAT	r (DD					
HAMN	ER WT: G LOCATION	ONL D	HAM	MER FAL	L (IN)	-				
GPOIN	ND ELEVA	DIN: B-								
			DAT	ELMICHE	D:08/01/05					
	E PREFIX:			ETIMONE	D: <u>08/01/03</u>	Time and Date of	Commission.	107 7	M	
01 2012		1772				I fille ditte Date Of	- completion: _			
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		SAMPLE DESCRIPTION	ON	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
31			01		Cente	er of voac	1			

0			•							
***************************************			×							

BORING	DIAMETER 2"		G METHO			ARKS				
	Z"	Dire	ect Push	2		Instrument = None. So to bedrock at various le	il borings were acceptations across the	tually blank pro	obes to deter	mine the

Little	10 50 20%	AND	35 TO 50%				
lew	ed by Staff:			BACKFILL Native Material Bentonite Grout/Chips Concrete/Asphalt Other	none, none, none,	_ To To To	See Monitoring Well Completion Report

SOME 20 to 35%

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road **CONSULTING ENGINEERS PROJECT: BCP Site Investigation** SHEET: 22 of 29 POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N **LOCATION: 2 Love Road** VTRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS Daniel Levesque RATOR: F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD: HAMMER FALL (IN) HAMMER WT:____ BORING LOCATION: B- 22 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 112 PM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE DEPTH LITHO-SAMPLE **BLOWS** REC/ **STRATA FIELD DEPTH** SAMPLE DESCRIPTION **LOGIC** (FT) NO. PEN 6" CHANGE **TESTING** (FT) CODE building side of TP-07 13 0 **BORING DIAMETER** BORING METHOD DEPTH REMARKS 231 **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50%

> BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt

То _____

То _____

То _____

See Monitoring Well

Completion Report

none.

none.

none.

none. To

ewed by Staff:

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road **CONSULTING ENGINEERS PROJECT: BCP Site Investigation** SHEET: 25 of 29 PROJECT NO: 20040761.A2N POUGHKEEPSIE, NY 12601 LOCATION: 2 Love Road NTRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS Daniel Levesque ERATOR: F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD: HAMMER WT:__ HAMMER FALL (IN) BORING LOCATION: B- 23 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 20 SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE **DEPTH** LITHO-SAMPLE **BLOWS** REC/ **STRATA** FIELD **DEPTH** SAMPLE DESCRIPTION LOGIC (FT) NO. PEN 6" CHANGE **TESTING** (FT) CODE adjacent to TP-06 26.5 0 BORING DIAMETER **BORING METHOD** DEPTH REMARKS 26.51 **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50%

> BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt

Other _____

none.

none.

none.

See Monitoring Well

To _____ Completion Report

То _____

none. To ____

lewed by Staff:

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road **CONSULTING ENGINEERS** PROJECT: BCP Site Investigation SHEET: 24 of POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N LOCATION: 2 Love Road Fuss & O'Neill Field Services TRACTOR: WATER LEVEL MEASUREMENTS CRATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD: Direct Push (GeoProbe) SAMPLING METHOD: BORING LOCATION: B- 24

GROUND ELEVATION: B- 24 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 132 PM SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE DEPTH LITHO-**SAMPLE** REC/ **BLOWS STRATA** FIELD DEPTH SAMPLE DESCRIPTION LOGIC (FT) NO. PEN 6" CHANGE **TESTING** (FT) CODE adjacent to TP-01 17.5 **BORING DIAMETER BORING METHOD** DEPTH REMARKS 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50%

> BACKFILL Native Material

Bentonite Grout/Chips

Concrete/Asphalt

Other ___

То _____

То _____

То _____

To _____ Completion Report

See Monitoring Well

none.

none.

none.

iewed by Staff:

BORING LOG FUSS & O'NEILL of New York, P.C. SITE ID: Redl 2 Love Road CONSULTING ENGINEERS PROJECT: BCP Site Investigation SHEET: 25 of POUGHKEEPSIE, NY 12601 PROJECT NO: 20040761.A2N LOCATION: 2 Love Road ITRACTOR: Fuss & O'Neill Field Services WATER LEVEL MEASUREMENTS C. ERATOR: Daniel Levesque F&O REPRESENTATIVE: Lisa Gwiazdowski DATE MS. PT. WATER AT TIME DRILLING METHOD:___ Direct Push (GeoProbe) SAMPLING METHOD: HAMMER WT: HAMMER FALL (IN) BORING LOCATION: B- 25 GROUND ELEVATION: DATE STARTED: 08/01/05 DATE FINISHED: 08/01/05 SAMPLE PREFIX: N/A Time and Date of Completion: SAMPLE **DEPTH** SAMPLE REC/ **BLOWS** LITHO-STRATA FIELD DEPTH SAMPLE DESCRIPTION LOGIC (FT) NO. PEN CHANGE **TESTING** (FT) CODE adjacent to TP-03 * MW-02: installed to 12' -2-121 = screen - sealed wy bentonike pellets. **BORING DIAMETER BORING METHOD DEPTH** 2" **Direct Push** Field Instrument = None. Soil borings were actually blank probes to determine the depth to bedrock at various locations across the site. PROPORTIONS USED: TRACE 0 to 10% SOME 20 to 35% Little 10 5o 20% AND 35 TO 50% BACKFILL

Native Material

Concrete/Asphalt

Other ____

Bentonite Grout/Chips

none.

none.

none.

То _____

To

To ___

See Monitoring Well

Completion Report

lewed by Staff:

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road SHEET: 26 of

PROJECT NO: 20040761.A2N

JTR CPERA	ACTOR: TOR:	Fuss	& O'Nei	ll Field Ser	vices			WATER LI	EVEL MI	EASUREM	MENTS	
	EPRESENT.				ri		DATE	MS.	DT	WATER	AT	TD C
	NG METH						DATE	IVIS.	P1.	WATER	AI	TIME
SAMPI	ING METE	IOD:										
HAMM	ER WT:	22. 5. 4	HAM	MER FAL	L (IN)_							
	G LOCATION DELEVA		26									
	TARTED:		DATI	FINISHE	D: 08/	01/05						-
	E PREFIX:				D	01/03	Time and Date	of Completi	on:	240 P	M	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		SA	MPLE DESCRIPT	TION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
21			0	_	·ce	enter	of bowl				CODE	
0												
			***************************************			***************************************		***************************************				

	***************************************										***************************************	

BORING	DIAMETER	BORING	Б МЕТНО	D DE	РТН	-						
	2"		ct Push		21	REMAI						
						depth to	trument = None. S bedrock at various	locations acr	vere actual coss the site	ly blank pro	bes to detern	mine the
PROPOR TRACE Little	TIONS USED 0 to 10% 10 50 20%	SOMI		35%) 50%								
reviewed	by Staff:					Concrete/	nterial Grout/Chips	none. none. none.	To		See Monitor	_

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road

		,]	LOCATI	ION: 2 L	ove Road		I KO.	ECT NO:_	2004076	I.AZN
NTR GR A	RACTOR: TOR:	Fuss	& O'Nei	ll Field Se	ervices			WATER	LEVEL	MEASUREN	MENTS	
F&O RI DRILLI SAMPL HAMM BORING GROUN DATE S	EPRESENT ING METH LING METH ER WT: G LOCATIO ND ELEVA' STARTED: E PREFIX:	ATIVE: OD: HOD: ON:B- TION: 08/01/05	Lisa C Direct	wiazdows Push (Ge	oProbe) LL (IN)_	/01/05	DATE		S. PT.	WATER		TIME
SAMPL	E PREFIX;		A				Time and Da	ite of Compl	etion:		PM	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"		SA	AMPLE DESCR	IPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
3			0'		nor	yh e	the la	re Rono				
									reporter and the Continues of the Contin			
	DIAMETER 2"		G METHO	D D	3 ¹	REMAI Field Ins depth to	RKS trument = None bedrock at varie	e. Soil boring ous locations a	s were actoracross the	ually blank pro site.	bes to deterr	nine the
TRACE	FIONS USED 0 to 10% 10 50 20%	SOMI AND	E 20 to 3									
newed	by Staff:					BACKF Native Ma Bentonite Concrete/ Other	terial Grout/Chips	none. none. none.	_ To _ _ To _		See Monitor Completion	

BORING LOG

PROJECT: BCP Site Investigation

LOCATION: 2 Love Road

SITE ID: Redl 2 Love Road

SHEET: 28 of 29

PROJECT NO:_ 20040761.A2N

					OCATI	UN: Z L	ove Road		_		
VTR ZRA	ACTOR: TOR:	Fuss Dani	& O'Nei	ll Field Segue	rvices		V	VATER LEVEL	MEASUREM	MENTS	
	EPRESENT				ki		DATE	MS. PT.	WATER	AT	TIME
DRILLI	NG METHO	OD:	Direct	Push (Geo	Probe)			1770.11.	WAIL	(A)	THVIC
SAMPL	ING METH	IOD:									
HAMM	ER WT:	OM D	HAM	MER FAL	L (IN)_						
GROIN	G LOCATION DELEVA	DN: B-	18	•							
	TARTED:		DATI	FINISHE	ED: 08/	01/05					
SAMPL	E PREFIX:	N/A			<i>3.</i> 00/	01/03	Time and Date o	f Completion:	300	PM	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"			AMPLE DESCRIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
26			0		Lov	er the	or loft sie	de of	+		
0			inches de la companya de la company								
										10.71	
	and the same of th	-			All the second s						
BORING	DIAMETER	BORING	МЕТНО	D Di	ЕРТН						
	2"	Dire	ct Push	2	26	REMAI Field Ins depth to	RKS strument = None. So bedrock at various le	oil borings were act ocations across the	ually blank pro site.	bes to detern	mine the
PROPOR' TRACE Little	FIONS USED 0 to 10% 10 5o 20%	SOMI AND		35% 0 50%							
newed	by Staff:					Concrete	ateriali Grout/Chipsi /Asphalt	none. To _		See Monitor	

BORING LOG

PROJECT: BCP Site Investigation

SITE ID: Redl 2 Love Road
SHEET: 29 of 29

rougi	IKEEFSIE	, 14 1 1200	ı	1	COCATI	ON: 2 L	ove Road		PROJ	ECT NO:	20040761	I.A2N
TR	ACTOR:	Fuss Dani	& O'Nei	ll Field Se	rvices		·	WATER L	EVEL N	MEASUREM	MENTS	
F&O RI	EPRESENT	ATIVE:	Lisa G	wiazdows	ski		DATE	MS.	PT.	WATER	AT	TIME
		OD:		Push (Ge	oProbe)		*			-		
HAMM	ER WT.	IOD:	HAM	MER FAI	I (INI)							
BORIN	G LOCATION	ON: B-	29	WILKIA	JD (III)							
GROUN	DELEVA	TION:										
		08/01/05 N/A		E FINISH	ED: <u>08/</u>	01/05				317	PM	
SAIVIFL	E FREFIA.	IN/A					Time and Date o	Complet	ion:	5	710	
DEPTH (FT)	SAMPLE NO.	SAMPLE DEPTH (FT)	REC/ PEN	BLOWS 6"			AMPLE DESCRIPTION			STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
101	-		0		UPPE	er tre	- 70 6FT SI	From o	Rt			
***************************************					Lov	e P	1	a bi				
· · · · · · · · · · · · · · · · · · ·								3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		or-9-19-19-19-19-19-19-19-19-19-19-19-19-1	
	***************************************		,									
0			***************************************								,	
***************************************									***************************************			
VIII	:							***************************************	1		And handless developed and the second and the secon	
						***************************************			***************************************			
BORING	DIAMETER	BORING	З МЕТНО	D r	ЕРТН							
	2"	Dire	ect Push		19'	Field In depth to	strument = None. So bedrock at various l	oil borings	were actuross the	ually blank pro site.	obes to deter	mine the
	TIONS USEI 0 to 10% 10 5o 20%	SOM AND		35% O 50%		-						
						BACK	FILL.					
0						Native N	4 4 4	none.	То		See Monito	ring Well
Reviewe	d by Staff:						e Grout/Chips	none.			Completion	
							Asphalt	none.				
						Other		none.	_ То			

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

Pal 2 Lus D. 1				
bject Name: Red 2 Love Road	Si	te ID (Boring/Well ID):	5B-14/MW-0)
Project Location: 2 Love Rd, Paughkeeps	- 1		1076 AZN	
F&O Engineer/Geologist: LMO , RST	,			
Date of Completion: 80105		rmit #:		
- ul end of tr	TE IIIIT.	Top of Steel Casing:	×	
Drilling Contractor: F30 - Dan Leves	7 P-28 EI	Top of PVC Casing:	3.6' above	amund son
Drilling Method: Direct Push Geoph		easuring Point: TPS / PV		
WELL CONSTRUCTION		ell Cover (see codes):	c ground	Surtace
Well Casing/Riser Sump (below scre	een)	Protecti	ive Casing	
Diameter:in. Diameter:	. #	ameter: X		X
Type: PVC Type: P		ck-up:		
Stick-up: 3.6 ft. Length:		al Material:	1 /	tom: X ft
Screen Intervals	n. Se	ai Materiai.	ontee	
Screen Interval: 10 ft	Diameter	in Slat Si-	ze:	
Description: PVC) Other:				ın.
Type: Perforated / Slotted/ Wire-Wrap / Other:				
NNULAR FILL				
NNULAR FILL Surface Seal		e volumes if available)		101
NNULAR FILL Surface Seal Interval:ft.	(Approximat	e volumes if available)	thin col	ier
NNULAR FILL Surface Seal	(Approximat	e volumes if available)		ier,
NNULAR FILL Surface Seal Interval:ft.	(Approximat	e volumes if available) Volume:	thin col	ier
NNULAR FILL Surface Seal Interval:ft. Description: Concrete / Other:ft.	(Approximat	e volumes if available) Volume:	thin col	JEV bags
NNULAR FILL Surface Seal Interval:ft. Description: Concrete / Other:ft. Backfill	(Approximate Tremied: Y (N)	e volumes if available)	thin col	
NNULAR FILL Surface Seal Interval:	(Approximate Tremied: Y (N)	e volumes if available) Volume:	thin col	
NNULAR FILL Surface Seal Interval:	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume:	thin col	bags
NNULAR FILL Surface Seal Interval:	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume:	thin col	bags
Interval: Description: Concrete / Other: Backfill Interval: Description: Fill / Other: Interval: Interva	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume:	thin col	bags
NNULAR FILL Surface Seal Interval:	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume: Volume:	1/2 bay	bags
Interval: Description: Concrete / Other: Backfill Interval: Description: Fill / Other: Interval: Description: Bentonite / Bentonite Pellets / Grout / Other: Filter	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume: Volume:	thin col	bags
Interval: Description: Concrete / Other: Backfill Interval: Description: Contrete / Other: Fill / Other: Description: Bentonite / Bentonite Pellets / Grout / Other: Filter Interval: Interva	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume: Volume:	1/2 bay	bags
Interval: Description: Concrete / Other: Backfill Interval: Description: Concrete / Other: Fill / Other: Lower Seal Interval: Description: Bentonite / Bentonite Pellets / Grout / Other: Interval: Description: Sand Filter (type:	(Approximate Tremied: Y N N N N N N N N N N N N N N N N N N	e volumes if available) Volume: Volume: Volume:	1 buy	bags

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

GENERAL INFORMATION	1		- /	
Joject Name: Red 2 love ro	ad	Site ID (Boring/Well ID):	SB-25/MW-02	
Project Location: 2 Lave Rd, Pough!	keepsie NY	Project No.: 200L	10761.AZN	
F&O Engineer/Geologist: LMG		Ground Surface Elevation:	V	
Date of Completion: 8 01 05		Permit #:		***
Boring Location: Center of bowl area	SB-25	El Top of Steel Casing:	X	
Drilling Contractor: F30 - Day Leve		El Top of PVC Casing:		nd.
Drilling Method: Drect Push for				
WELL CONSTRUCTION		Well Cover (see codes):	c ground surfa	lle
Well Casing/Riser Sump (below	screen)		ve Casing	
	in.		_in. Type:X	
	PVC	Stick up:	ft Depth to Bottom:	×.
4.2	in.		tt Depth to Bottom:	
Screen Intervals				. ,
Screen Interval: 10 ft	Diameter:)" in Slot Size	e:i	in.
Description: (PVC) / Other:				л.
Type: Perforated Slotted / Wire-Wrap / Other:				
NNULAR FILL				
Surface Seal				
Interval: 0'-1' ft.		ximate volumes if available)	001/016	
.		Volume:	IN COVER P	oags
Description: Concrete / Other: Native	e materia			
Backfill				
Interval:ft.	Tremied: Y /	Volume:	b	oags
Description: Bentonite Grout / Fill / Other:				
Lower Seal				
Interval: NT	Tremied: Y / N	Volume:		oags
Description: Bentonite / Bentonite Pellets / Grout	/ Other:			
Filter				
Interval:ft.	Tremied: Y	Volume:	b	ags
Description: Sand Filter (type:	0			
Lower Backfill	-			
Interval: R.	Tremied: Y	Volume:	b	ags