Site Characterization and Remedial Investigation Summary Report Former A.C. Dutton Lumber Facility 2 Hoffman Street Poughkeepsie, New York NYSDEC BCP Site No. C314081

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SECTION

SITE CHARACTERIZATION AND REMEDIAL INVESTIGATION SUMMARY REPORT

FORMER A.C. DUTTON LUMBER FACILITY

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1.0 INTRODUCTION

This report presents a summary of the Remedial Investigation (RI) conducted at the former A.C. Dutton Lumber Facility situated in both the Town and City of Poughkeepsie, Dutchess County, New York (Figure 1). The site is currently owned by The O'Neill Group – Dutton, LLC. The O'Neill Group - Dutton, LLC has entered the BCP Program as a Volunteer. The new owner of the property wishes to remediate the site in accordance with the requirements outlined in the NYSDEC Brownfield Cleanup Program (BCP) and restore the site to restricted residential use.

The physical address of the site is 2 Hoffman Street; however, access to the site is currently via Dutchess Avenue. The site consists of approximately 15.0 acres of land, and is identified as two separate tax parcels, as shown on Figure 2.

Parcel	Tax I.D.
City of Poughkeepsie (11.35 acres)	31-6062-59-766443-00
Town of Poughkeepsie (3.65 acres)	14-6062-02-763508-00

2.0 SITE DESCRIPTION

2.1 <u>Site History</u>

According to a 1987 Phase I Investigation report prepared by EnviroPlan Associates, Inc. of Poughkeepsie, NY, the parcel has been in industrial use since the mid-1800s. The A.C. Dutton Lumber Corporation operated a wholesale lumber company at the site beginning in 1913 and the on-site pressure treatment of lumber using chromated copper arsenate (CCA) reportedly began in 1966. The former owner, A.C. Dutton Corporation, was owned in part or in subsidiary by Miron Building Products Co., Inc.

Prior to 1913, site uses included an iron works and a glass works plant. The former glass works plant was reportedly located at the southern end of the parcel. As part of the glass works, there were several kilns at the site in which glass was fired. Historical and empirical data suggest that solidified kiln ash, periodically cleaned out of the kilns, was used as fill material at the site. Additionally, when the glass works building and loading dock were dismantled, this demolition debris was also utilized as fill.

At the A.C. Dutton facility, raw lumber material was brought into the site by truck, boat, and rail. Lumber was processed in either of the two on-site treatment plants, known as the northern and southern treatment plants. The lumber stock was then temporarily stored in a sheltered drip pad area and allowed to partially drip dry, and then transferred outside to large, open storage yards for additional drying. Much of the site is covered with concrete or asphalt pavement, however it is likely that storage of treated lumber did not always occurred on impervious surfaces.



2.2 Adjacent Land Use

The Hudson River forms the western border of the site and Dutchess Avenue forms the southern border. Across Dutchess Avenue is a former manufactured gas plant (MGP) site now owned by Central Hudson Gas and Electric Corporation (Central Hudson) and operated as a gas regulating station. Vassar College owns the land to the north of the site and the property is occupied by a boat house and associated facilities for the College's crew team. There is a chain-link fence along the northern site property boundary. The site is bounded on the east by North Water Street, which extends along the top of a steep bedrock outcrop ridge along most of the length of the site. The ridge rises toward the south, and in the central and southern areas of the site, the road is approximately 15-20 feet above the site.

2.3 <u>Current Conditions</u>

The existing site conditions are shown on <u>Figure 3</u>. Eight abandoned buildings are located across the property, some of which contain equipment associated with the wood treatment process. The site has been abandoned sine the mid-1990's; the buildings and treatment equipment are in significant states of disrepair.

The majority of the site is covered with a 2-4 inch layer of concrete and/or asphalt pavement. This concrete/asphalt groundcover is in fairly good condition in the eastern portion of the property; however, the condition declines westward as the site approaches the Hudson River. The old railroad spur that crossed the site is significantly degraded, and only the rails and a few wooden ties remain. The fence along the northern border of the site was installed recently during construction of the Vassar College boathouse.

The westernmost portions of the site occasionally floods during high tides, especially when water levels are elevated due to weather events. The river was observed to overflow onto approximately 50-75 feet of the property in some locations at high tide during a site visit prior to the remedial investigation. Due to the flooding, western portions of the property are scattered with debris that floated in from the river.

2.4 <u>Petroleum and Chemical Bulk Storage</u>

The facility has several above-ground and underground fuel storage tanks. The facility's Petroleum Bulk Storage (PBS) registration (#3-175935) expired on June 30, 2002, but was updated and submitted to the NYSDEC in August 2005. The updated PBS Registration, valid 5 years from the issue date, is provided in <u>Appendix A</u>. Information from site investigations performed by Ecosystem Strategies, Inc. (ESI) in 2002 was used to update the registration.

The last known Hazardous Substance Bulk Storage (HSBS) registration (#3-000170) expired on August 9, 2003. The tanks are registered as containing arsenic acid (CAS No. 07778-39-4), which accounts for the largest percentage of hazardous components in the CCA liquid used during the former wood treatment processes.

The HSBS was updated by Fuss & O'Neill as part of the remedial investigation. Registered tanks are identified by their location with acronyms NTP (New Treatment Process) and OTP

(Old Treatment Process). These tanks are indicated on <u>Figure 3</u>. A summary of all known tanks at the site is as follows:

Tank #	Size (gal)	Type/Contents	Location
1	3000	AST - Diesel	Adjacent to northern pressure treatment plant
2	1500	AST - No. 2 fuel oil	Beneath main office building
3	3000	AST - No. 2 fuel oil	Inside concrete enclosure south of main office building
4	2 @ 275 (manifold)	AST - No. 2 fuel oil	Inside brick warehouse building at southern end of parcel
5	275	UST - No. 2 fuel oil	Unknown
NR*	1,000**	UST - Unknown	Beneath western brick building
NR*	20,000**	UST - Unknown	Adjacent to northeastern corner of southern pressure treatment plant
NR*	Unknown	UST - Unknown	Beneath concrete slab west of brick warehouse building
NTP01	25,000	AST - CCA	Southern treatment plant
NTP02	25,000	AST - CCA	Southern treatment plant
NTP03	7000	AST - CCA	Southern treatment plant
OTP01	15,000	AST - CCA	Northern treatment plant
OTP02	12,500	AST - CCA	Northern treatment plant
OTP03	12,500	AST - CCA	Northern treatment plant
OTP04	5,600	AST - CCA	Northern treatment plant

These tanks are not currently registered.

** Identified via ground penetrating radar (GPR) survey performed by ESI.

2.5 <u>Site Geology</u>

Surficial geology consists of unconsolidated deposits in the vicinity of the site as fluvial sand and gravel deposits (adjacent to the Hudson River) and glacial till consisting of sand, silt and gravel and exhibiting variable texture. The Dutchess County Soil Conservation Survey (2002) depicts the soils as being Urban Lands, which typically consist of reworked native material or fill covered extensively by impervious surface. Overall, material encountered during the various site investigations is consistent with the soil survey findings. In those instances when native soils were encountered, the material was described as silty-sand with gravel.

Bedrock in the vicinity of the site consists of the Taconic Melange Formation and the Austin Glen Formation. The Taconic Melange is described as a mix of pebble to block sized Cambrian to Middle Ordivician Age rocks in a pelitic matrix. The Austin Glen formation consists of interbedded layers of greywacke and shale. Outcrops observed on the eastern margin of the site contain siltstone layers interbedded with less competent shale.

The irregularly shaped bedrock outcrop forming the shoreline of the river was likely alternately cut and filled in order to create the straight, flat railroad bed. In addition to rising markedly toward the east, bedrock in the area is gently sloped upward toward the north. The site occupies a relatively narrow margin along the bedrock ridge forming the riverbank. Bedrock

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was noted at very shallow depths along the full length of the eastern side of the property, sometimes immediately below the surface, and dropped off toward the river.

Historically, areas of the site received fill that was placed along western portions of the property to level and extend the shoreline of the Hudson River westward. Subsurface material encountered at the site consisted of kiln slag from the glass works which was sometimes combined with sand and gravel, demolition debris including bricks and cinder block fragments, large fragments of anthracite coal, ash, sand, silt and large gravel. Native material, consisting of light brown silty sand, was rarely encountered in the eastern and central portions of the site, but near the river was encountered at approximately 5 feet below the surface.

2.6 <u>Site Hydrogeology</u>

Groundwater was typically encountered at depths of four to six feet below the ground surface across the site. Given regional topography and the proximity to surface water bodies, it is assumed that shallow groundwater flows from east to west across the site and discharges to the Hudson River. Because the Hudson River adjacent to the site is tidally influenced, it is likely that groundwater flow at the site is, in part, influenced by tides.

The westernmost portions of the site occasionally floods during high tide, especially when water levels are elevated due to weather events. At times, the river has overflowed onto approximately 50-75 feet of the property in some locations during high tide. Due to the flooding, western portions of the property are scattered with debris that floated in from the river.

3.0 PREVIOUS INVESTIGATIONS

Subsurface investigations were undertaken at the site by ESI in 2002 on behalf of Scenic Hudson Land Trust, Inc. Results of these investigations were summarized in two reports:

- Summary Report of Subsurface Investigation dated October 3, 2002
- Summary Report of Supplemental Subsurface Investigation dated November 25, 2002

An overview of sampling results from the ESI investigations is provided below. Sampling locations from the 2002 ESI investigations are identified on <u>Figure 4</u>. Specific references to the ESI investigation results are included within the text.

3.1 Metals in Soils

ESI investigations documented metals impacts to shallow soil that are consistent with the use of CCA wood preservative at the site. Data indicate that the highest metals concentrations are present in surficial material and shallow soils (e.g., 0-0.5 feet) immediately below pavement and that metal concentrations decrease with depth.

The ESI investigation included collection of samples of surficial dust, sand or silt present immediately at the ground surface or upon floor surfaces within the treatment plant buildings. Some of these samples likely consisted of silt or sand that at one time was completely saturated



with CCA fluid. These samples exhibited the maximum arsenic, chromium and copper impacts identified at the site. Arsenic concentrations in these samples were found as high as 138,000 ppm, in sample SS-1, collected from the secondary containment pit for the CCA tanks in the northern treatment plant. Similar results were observed in samples from sump pits and floor surfaces in both treatment plant buildings.

ESI also obtained soil samples from shallow depth intervals, typically from 0.0 to 0.5 feet below ground surface. While not exhibiting the extremely elevated arsenic and chromium concentrations found in surficial material, these soil samples contained significantly elevated levels of these metals, and many exceeded the action levels defined by ESI and described in Section 4.3 of this report.

Supplemental investigations by ESI as well as the Remedial Investigation included the collection of soil samples from greater depth intervals, extending to approximately 8.0 to 12.0 feet below the surface. Arsenic and chromium concentrations in deeper samples exceeded action levels to a much lesser degree, and were mostly observed in the immediate area surrounding the treatment plant buildings, as well as the central and northwestern sections of the site.

Samples from soil borings 3B-14 and 3HB-4 were collected during the ESI investigation and submitted for analysis by Toxic Characteristic Leaching Procedure (TCLP). One sample, 3B-14 (0-2 feet) indicated an arsenic concentration of 16.5 mg/L, which exceeds the standard of 0.5 mg/L for arsenic. This sample location is inside the northern treatment plant building approximately 6 inches from the easternmost floor drain. The 0-2 foot sample was characterized as green/gray silty soil with shale fragments.

3.2 VOCs and SVOCs in Soils

Petroleum hydrocarbon impacts were identified in four areas at the site. These areas included the area near a 3,000-gallon AST located adjacent to the northern pressure treatment plant (near boring B-6/MW-1); the area in the vicinity of a 1,000-gallon UST located beneath the small brick building west of the northern pressure treatment plant (near boring 3B-9); and in the vicinity of the brick warehouse building and suspected UST at the southern end of the property (near boring B-31/MW-5).

During the initial investigations by ESI, SVOCs were detected at location B-6 and at the southwest corner of the northern treatment plant that exceed action levels. Based on these results, and field observations made at that time, the NYSDEC was informed and Spill No. 0206848 was issued for the site. The spill number is currently open.

3.3 Metals in Groundwater

Groundwater samples from wells MW-01, located adjacent to the northern treatment plant building, and MW-02, located in the northwestern lumber storage yard, each exhibited arsenic concentrations exceeding TOGS 1.1.1 standards. None of the groundwater samples collected contained chromium or copper that exceeded standards.



3.4 VOCs and SVOCs in Groundwater

The ESI investigation included sampling of shallow groundwater at five (5) temporary wells at the site. The ESI monitoring well locations are shown in <u>Figure 4</u>. Temporary well points were constructed from 1.25-inch diameter poly vinyl chloride (PVC) wells placed in Geoprobe[®] boreholes. Groundwater samples were analyzed for volatile and semi volatile organic compounds (VOCs/SVOCs), and for total arsenic, chromium and copper.

Monitoring well MW-01 was located in the vicinity of a 3,000-gallon AST on the south side of the northern treatment plant. The soil samples from the well boring exhibited concentrations of SVOCs exceeding TAGM 4046 levels, constituting a reportable petroleum release. Groundwater samples from this well, although exhibiting significant petroleum odors, contained no VOCs or SVOCs above NYSDEC groundwater quality standards (TOGS 1.1.1).

Monitoring well MW-05 was located within the footprint of the former glass works facility, near an identified UST at the southeast corner of the glass works. Groundwater samples from this well contained visible free petroleum product, however exhibited no VOCs or SVOCs that exceeded groundwater quality standards. Field observation of free product, and high laboratory detection limits suggest that soils and groundwater in this area are impacted with highly weathered waste oil.

Groundwater samples from monitoring wells MW-02, located in the northwestern lumber storage yard; and well MW-04, located near the railroad tracks in the southern section of the site, did not exhibit concentrations of VOCs or SVOCs above minimum detection limits.

Monitoring well MW-03 is located near the northeastern corner of the southern treatment plant. There is a reported 20,000-gallon UST in this immediate area; however, neither the soil boring nor the well did not contain evidence of petroleum impacts.

3.5 Sediment Sampling

Sampling of sediment near the outfall of Kidney Creek and the shoreline of the Hudson River was performed by ESI. Samples were analyzed for metals, total petroleum hydrocarbons (TPH) and for polychlorinated biphenyls (PCBs). Low levels of arsenic, chromium and copper were detected. These levels were below NYSDEC action levels.

3.6 Floor Drains and Sump Pits

The supplemental ESI investigation included sampling within the culverted sections of Kidney Creek and several floor drains and sump pits found in the northern pressure treatment plant. Dye testing was performed by ESI to determine whether the floor drains in the Northern Treatment Plant are connected to Kidney Creek. Dye was introduced to each of the floor drains, where it was noted to have traveled to a metal-lined sump beneath the end of the pressure treatment vessel. These floor drains, and two additional drains in the former timber-drying kiln were noted to enter metal-lined sumps. No trace of dye was observed in Kidney Creek during the test.

No information is available regarding how liquids were managed once they entered the sumps. Toxic Release Inventory (TRI) reporting information for the years 1987-1996 was reviewed for the A.C. Dutton site on EPA's Envirofacts Warehouse website. The database shows that arsenic compounds (TRI ID N020), chromium compounds (TRI ID N090) and copper compounds (TRI ID N100) were each disposed of to a landfill or disposal to surface impoundment. Although it is unknown how the disposed material was generated, it is possible that it originated as a result of cleaning out the on-site sumps.

4.0 REMEDIAL INVESTIGATION

4.1 <u>Conceptual Site Model</u>

The redevelopment of the former A. C. Dutton site is intended for residential, recreational, and commercial use. The history of property usage in the area of the site has been generally commercial and industrial in nature. The adjacent parcel to the north is currently occupied by the Vassar College Boathouse, which is a training and rowing center for crew teams. The properties to the east are either commercial or residential and to the south, beyond Dutchess Avenue, is the Central Hudson Gas Regulating Station, a manufactured gas plant. The Hudson River abuts to the west. Existing residential areas are upgradient from the site and are not likely to be impacted by contaminants at the site based on topography and groundwater flow direction. Additionally, the region surrounding the site is provided with potable water by the Poughkeepsie Water District; therefore, a human exposure pathway has not been identified with respect to groundwater.

Sampling results obtained are consistent with the historic use of CCA wood preservative at the property. In many areas, green staining indicative of oxidized copper is visible on exposed surfaces. Analytical data indicate that shallow soil underlying the former pressure treatment plants (northern and southern) as well as soil located beneath paved surfaces throughout property has been impacted by metals, particularly copper, chromium, and arsenic. Mercury and silver were detected infrequently in samples obtained by ESI; however, metals impacts are dominated by the three CCA constituents. Vertically, soil analytical results indicate that the metals impacts decrease with depth, supporting the model of surficial release of CCA wood preservative.

Sampling results and field observations indicate that surfaces across the site (e.g., concrete and paved surfaces) have been impacted by metals released through the use of CCA preservative inside the pressure treatment plants and in exterior areas where treated wood was managed and staged pending transport off site. In places, it is apparent that CCA preservative has penetrated highly weathered areas on the floor of the pressure treatment buildings and in exterior paved areas. Aerial photographs indicate that storage and handling of wood occurred across the site (See Figure 2).

Petroleum impacted soil also has been identified in four areas on the site. Sources of petroleum releases at the site are attributed to underground or above-ground petroleum storage tanks. It is possible that petroleum impacts observed at the southwestern section of the site may in part be attributed to the existing MGP site south of Dutchess Avenue.



Areas of observed petroleum impacts have been designated as Areas of Concern (AOCs). Releases of petroleum have been identified in the following areas:

- AOC-1: The south side of the northern treatment plant building in the vicinity of a 3,000-gallon AST,
- AOC-2: Vicinity of a 1,000-gallon UST located beneath the western brick building
- AOC-3: Vicinity of the southern treatment plant building and former masonry office building. There are several UST locations in this area,
- AOC-4: Vicinity of the southwest corner of the former glassworks building and loading dock, near the location of a former 1,000-gallon UST.

There is also a reported 20,000-gallon UST located near sample point P2, near the northeast corner of the southern treatment plant building. The exact location of the UST is not known, however no petroleum impacts were observed in soils in test pits and soil borings advanced in this area. This area was not designated as an AOC.

4.2 Investigation Objectives

The scope of work for the Remedial Investigation Work Plan (RIWP) is consistent with NYSDEC DER-10 Technical Guidance for Remedial Investigation and Remediation. Since the publication of the Draft Remedial Investigation Report, the NYSDEC has added to the regulations in 6 NYCRR Part 375-6. The updated *Remedial Program Soil Cleanup Objectives* have replaced the standards and guidelines outlined in TAGM 4046. As such, data tables and text in this report have been revised to reflect the new soil cleanup objectives for restricted residential use under the Part 375 regulation.

The Remedial Investigation field work was accomplished in compliance with additional existing regulatory rules, technical guidance and historical reports including in the following:

- The USEPA Guidance for conducting RI/FS investigations under CERCLA.
- Remedial Investigation Work Plan, Fuss & O'Neill of N. Y., October 2005
- Summary Report of Subsurface Investigation, Ecosystems Strategies, Inc., October 2002
- Summary Report of Supplemental Subsurface Investigation, Ecosystems Strategies, Inc., November 2002
- Site-Specific Quality Assurance Project Plan (QAPP)
- Site-Specific Health and Safety Plan (HASP)

All samples were analyzed in accordance with ASP Level B analytical protocols by an ELAP certified laboratory. The soil data have been reviewed by Fuss & O'Neill's quality assurance officer following the protocols outlined in Draft DER-10. A data usability summary report (DUSR) has been completed in accordance with the protocols outlined in draft document DER-10. The DUSR is attached as <u>Appendix D</u>. Field and laboratory data collected during the investigation was entered into the GIS/Key[™] environmental data management system. Output from GIS/Key[™] will be used to refine the remedial approach for the site. This information may be obtained in tabular form and presented on maps and cross-sections.



Throughout this report, reference is made to the results of previous investigations performed at the site by ESI. It must be noted that although the ESI investigation results are considered highly dependable, data collected during that work has not undergone full laboratory QA/QC reporting protocols.

4.3 Action Levels and Background Samples

Action levels are concentrations of a particular contaminant above which remedial actions are considered more likely to occur. Action levels for many metals and organic compounds in soils have been based on the values presented in 6 NYCRR Part 375-6 *Remedial Program Soil Cleanup Objectives* (Part 375-6). In that document, the action level for arsenic has been set at 16 mg/kg, and for chromium (Cr VI) at 110 mg/kg.

In the previous investigations at this site, action levels for soils were determined based on TAGM 4046, as modified by subsequent and relevant NYSDEC Records of Decision (ROD) for sites with comparative re-use scenarios. ESI presented as an example a ROD for the BB&S Treated Lumber Corporation Site (NYSDEC Site No. 1-52-123), wherein action levels of 30 mg/kg for arsenic and 50 mg/kg for chromium were established. These action levels will not be considered in this report because the intended use of the property is restricted residential, while the BB&S site was an active lumberyard.

Action levels for the determination of groundwater quality are based on the NYSDEC Technical and Operation Guidance Series Memorandum 1.1.1 (TOGS 1.1.1). The document provides standards for groundwater, and guidance values if no standards are specified.

Sediment analytical results are compared to guidance values presented in the NYSDEC's Technical Guidance for Screening Contaminated Sediments (1993, rev. 1999). Screening criteria for metals in sediments are broken into two categories — Lowest Effect Level (LEL) and Severe Effect Level (SEL). The LEL indicates a level of sediment contamination that is tolerated by the majority of benthic organisms, but still may cause toxicity to a few species. The SEL indicates a concentration at which pronounced disturbance of the sediment community can be expected. Results for the analysis of SVOCs are compared to all four screening criteria presented in the guidance document.

Soil samples were collected in areas of the subject site that were considered to be background areas. The background soil sample locations are shown in <u>Figure 4</u>, and results are summarized in <u>Table 9</u>. The primary sources of contaminant release at this site were the pressure treatment processes and CCA storage tanks, and the temporary storage of freshly-treated lumber in the open spaces across the site (described more fully in Section 6.0). Therefore, background soil samples were collected from the far eastern edge of the property, above the steep bank between the site and North Water Street. Of the five background samples collected, the average concentration of arsenic detected was approximately 32 mg/kg, and chromium was 34 mg/kg.

4.4 Soils Investigation - Test Pits and Soil Borings

In order to provide adequate horizontal sampling coverage of soils at the site, a 100-foot on center regularly spaced grid designated with an alpha-numeric identification system was



established over the site (See <u>Figure 4</u>). Surficial geologic and chemical data was collected at the 100-foot grid node locations by either digging a test pit using a small excavator, or advancing a soil boring using a GeoProbe direct push sampling system. A total of 66 test pits and 44 soil borings were advanced at the site.

At each grid location, soil samples were obtained at the surface or immediately beneath pavement or concrete. Attempts were made to limit the shallow soil sampling interval to the top 1.0 feet of surface soil. In areas where there are concrete slabs, foundations or paved drying areas on the ground surface, the surficial interval was determined immediately beneath the pavement or concrete.

Samples were collected at ranging depths in areas surrounding the impacted areas identified in previous investigations in order to delineate the extent and magnitude of contamination with as much confidence as possible. To characterize vertical conditions, samples were collected at approximately 1-2 foot interval depths down to and including the saturated zone.

Soil cores or test pits were logged in the field and evidence of soil staining, odor, changes in lithology, moisture content, etc. were recorded. If evidence of soil contamination was observed in the saturated zone (e.g. at petroleum impacted areas), the boring was extended to document the vertical extent of impacts through visual, olfactory, and/or field screening methods. Specific notes relating to sampling conditions are noted on the boring logs, provided in <u>Appendix B</u>.

The locations of several sample points were altered slightly due to field conditions or obstructions or to resample locations that were obtained during the ESI investigation. In the event that refusal was encountered at a given sample point, the boring was off-set approximately 1 meter and reasonable attempts to advance a replacement boring were made. The actual locations of test pits and soil borings are shown on Figure 4.

A total of eighty (80) soil samples were obtained and submitted for metals analysis, including thirty one (31) surficial (less than 1.0 foot), twenty five (25) samples from approximately 1.0 to 3.0 feet deep, twenty (20) samples from between approximately 3.0 and 8.0 feet deep and four (4) samples from between 8.0 and 12.0 feet deep.

Upon review of initial analytical metals results, eight (8) samples were selected for analysis using the Toxicity Characteristic Leaching Procedure (TCLP) to determine the relative leachability of the detected metals. A total of six (6) soil samples were submitted for analysis for volatile and semi-volatile organic compounds (VOC/SVOC). A repeat sample was collected at ESI location B8 (4-6 ft) for comparison purposes.

4.5 Groundwater and Monitoring Wells

Following the advancement of soil borings, nine (9) of the bore holes were completed as shallow monitoring wells. Monitoring wells were constructed with 10-foot long well screens set between approximately 2-12 feet below the ground surface, intersecting the groundwater table. The annular space around the well screens were backfilled with size-appropriate filter pack sand to a height of approximately 1 foot above the screen. Bentonite chips were placed

within the remaining annular space to prevent vertical migration of surface water. Monitoring wells were constructed as PVC stick-ups.

The RIWP proposed eight monitoring wells; however based on field conditions, the locations and number of wells were revised during the investigation. The following narrative describes these revisions to the work plan.

- Monitoring well I-5 was placed near the location of ESI's MW-01 (proposed well MW-1R). The well is located on the south side of the northern treatment plant, in the vicinity of a 3,000-gallon AST.
- Proposed monitoring well MW-02R was substituted by two (2) wells, installed at grid locations ACD-A6 and ACD-E8.
- Monitoring well MW-5R was proposed to be installed near the former location of the ESI well MW-05. Multiple attempts were made to establish a well in this area; however, subsurface obstructions including large concrete blocks, significant void spaces and subsurface demolition debris prevented proper construction of a well at this location. A well was installed at grid location AA10 to assess conditions in this area.
- Monitoring wells MW-6, MW-7, MW-8 and MW-10 were proposed to be installed along the eastern edge of the property, adjacent to the bedrock outcrop wall, in order to monitor groundwater quality upgradient of the site. Shallow bedrock prevented the installation of these wells at the proposed locations.
 - Proposed well MW-7 was relocated approximately 150 feet south to grid location ACD-K2;
 - Proposed monitoring well MW-10 was relocated approximately 120 feet northwest to grid location ACD-X7;
 - Proposed monitoring well MW-8 was relocated approximately 250 feet west to grid location ACD-U8 and supplemented with a well at ACD-W8;
 - Conditions near proposed monitoring well MW-6 were assessed based on downgradient wells at grid locations ACD-A6 and ACD-E8.
- Based on field observations, conditions near the proposed MW-9 were assessed by wells at grid locations ACD-U8 and ACD-W8.
- An additional monitoring well was installed at grid location ACD-J9 in response to field observations of petroleum impacts to soils and groundwater observed at this location.

Groundwater samples collected were analyzed using ASP Category B protocols for VOCs by Method 8260B and SVOCs by Method 8270C each modified by the STARS list of contaminants. Well completion logs are included in <u>Appendix B</u>.

4.6 <u>Sediment Sampling</u>

To further assess the off-site migration potential and provide information for a qualitative risk assessment, sediment samples were collected at the locations identified on <u>Figure 4</u>. The sediment samples were obtained from the river bank bottom adjacent to the site from within the upper 1-foot of material.



4.7 Off-Site and Human Health Exposure Assessments

To evaluate the potential contamination of properties adjacent to the subject property, or potential impacts to future users of the property, data collected during the RI was used to evaluate off-site and human health exposure potential. This included collection of soil and sediment samples at the site boundaries, placement of monitoring wells such that off-site migration of groundwater can be assessed, and review of historic and ecological information. Off-site exposures were evaluated through a Fish and Wildlife Resource Impact Analysis (FWRIA) prepared in accordance with Section 3.10.1 of DER-10. The FWRIA report is included as <u>Appendix E</u>.

4.8 <u>Tidal Assessments</u>

The Hudson River at Poughkeepsie is tidally influenced. Therefore, water table elevations and groundwater flow potentials at the site are likely affected by tidal changes. Periodic water level measurements were recorded from the newly installed monitoring wells, and were compared to tide schedules published by the U. S. Coast Guard.

Based on observed depth variations, groundwater at the site appears to be somewhat influenced by tidal fluctuations. Depth to water fluctuated over 0.5-1.0 feet in each well; however, the changes in depth did not correspond exactly with times of high and low tides in the Hudson River. For this reason, it is assumed that while groundwater elevations are affected, the effects are on a time lag from surface water elevation level changes.

5.0 INVESTIGATION RESULTS

5.1 <u>Metals in Soils</u>

A summary of metals results for soil samples are presented in <u>Table 1</u>. Of the eighty (80) soil samples analyzed, fifty-three (53) samples (approximately 66%) exhibited concentrations of arsenic exceeding the action levels based on the restricted residential cleanup objectives in Part 375-6. Only two (2) samples (<1%) exceed the chromium action level. The distribution of elevated levels of arsenic is widespread across the site, but is most significant in the vicinity of the CCA storage tanks and pressure treatment chambers in the treatment plant buildings, and near the rail track along the western and northern sections of the property. Exceedances of action levels at varying depths are shown on <u>Figures 5A, 5B and 5C</u>. These areas are described in the following subsections.

5.1.1 Northern Treatment Plant Building

Arsenic concentrations exceeding action levels were found in surface or near-surface soils. Surface samples from ACD-D4 and ACD-G6, located near the exterior of the building, exhibited arsenic levels of 70 mg/kg and 95.8 mg/kg, respectively. Samples from locations ACD-SS-7R and ACD-B2R collected from within the treatment building exhibited arsenic levels of 212 mg/kg and 77.4 mg/kg, respectively. The 0.5-3 ft sample from ACD-G2 was the most heavily impacted at the site, exhibiting arsenic at 811 ppm. In addition, concentrations of 469 ppm chromium and 876 ppm copper were detected. Each of these concentrations far exceeds their respective cleanup objectives of 16 ppm, 110 ppm, and 270 ppm. This is one of two locations exhibiting chromium exceedances; the other being the repeated sample at ESI's SS-7R (171 ppm, 0-0.2 ft).

Surficial soil impacts continue to appear in the northwestern storage yard, where location ACD-E8 exhibited an arsenic concentration of 37.1 mg/kg at 0-1 feet. Slight arsenic exceedances were found in the eastern section of the property, between the two treatment plant buildings. Samples from locations ACD-K2, ACD-M2 and ACD-L4, all from the 0-1 ft interval, exhibited concentrations of arsenic exceeding the action level.

5.1.2 Southern Treatment Plant Building

In the vicinity of the southern treatment building, location ACD-S2 (1-3 ft) exhibited an arsenic concentration of 40.4 ppm, while a sample from ACD-S4 (2-3 ft) inside the building had no exceedances for any metals. Other slight exceedances for arsenic occurred in this area at sample locations ACD-Q3 (19.1 ppm) and ACD-U6 (21.2 ppm). In general, soils in the vicinity of the southern treatment plant building are generally less contaminated than those in the vicinity of the northern treatment plant building.

5.1.3 Railroad Spur

Elevated arsenic concentrations were observed at locations ACD-L9 (56.8 mg/kg), ACD-O8 (59.3 mg/kg) and ACD-T10 (36.1 mg/kg), which lie near the railroad track along the western side of the property. Also, location ACD-E8, located in the reported storage area for freshly-treated lumber, exhibited elevated levels of arsenic (37.1 mg/kg). All of these samples were collected from the 0-0.5 ft interval.

Exceedances of arsenic continue to appear in the same general pattern at the 1.0-3.0 ft interval. Location ACD SS-7R (0.8-1.4 ft) exhibited 129 mg/kg arsenic. Location ACD-E5, at the western side of the northern treatment building, exhibited an arsenic level of 94.5 mg/kg, although chromium was not detected. Slight to moderate exceedances of arsenic were also observed at the central and southern areas of the site, at locations ACD-N5 (32.1 mg/kg), ACD-Q6 (44.5 mg/kg), ACD-Z9 (65.4 mg/kg) and ACD-Y12 (31.4 mg/kg).

Data obtained from the 3-6 ft depth interval indicates a significant drop off in arsenic and chromium exceedances occurring through this interval. Samples collected from intervals within approximately 3.0-5.0 ft exhibit an average arsenic concentration of 54 mg/kg; however, samples collected from 3.0-6.0 ft, including the full range of depth, only show an average arsenic level of 21 mg/kg. This data suggests that arsenic concentrations are decreasing, to varying degrees, with increasing depths in the 3.0-6.0 ft interval.

Locations ACD-E4 and ACD-B8R exhibited levels of arsenic of 44.2 mg/kg (3.0-6.0 ft) and 105 mg/kg (4.0-4.5 ft) respectively. ACD-M2 exhibited an arsenic level of 148 mg/kg at the 2.0-5.0 ft depth; however, locations ACD-B3, ACD-V9 and ACD-Y7 exhibited arsenic and chromium levels below action levels.



Samples collected from below 6.0 ft bgs exhibit arsenic and chromium concentrations that were mostly below action levels. The nine (9) samples were collected from varying depths between 6.0 and 12.0 feet averaged arsenic concentrations of approximately 12 mg/kg. The highest reading came from location ACD-T7 (24.4 mg/kg) from the 6.0-8.0 ft depth interval.

5.2 <u>TCLP Results</u>

A total of eight (8) soil samples were submitted for the determination of leachable concentrations of arsenic and chromium. A summary of TCLP results is presented in <u>Table 2</u>. TCLP analyses were selected from the most significantly impacted soil samples as determined by laboratory analysis. Samples from locations ACD-G2 (811 mg/kg As; 469 mg/kg Cr), ACD-B-8R (105 mg/kg As) and ACD-M2 (148 mg/kg As) were submitted for TCLP analysis. Only low levels of arsenic (ACD-G2, 1.59 mg/L) and barium were detected in the TCLP samples. These concentrations are below the TCLP threshold for hazardous waste.

5.3 Volatile and Semi-Volatile Organic Compounds in Soils

Soil VOC laboratory results are summarized in <u>Table 3</u> and SVOCs are summarized in <u>Table 4</u>. Visual evidence of petroleum-impacted soils was observed in several areas at the site. Areas of petroleum impacts based on visual observations have been designated as Areas of Concern (AOCs). These observations included moderate to strong petroleum-type odors, visible sheens or visible product within the soil core. The four AOCs are depicted in <u>Figure 6</u>. Samples were submitted from locations where the most significant petroleum impacts were observed based on visual and olfactory evidence.

As discussed in Section 2.4, there are possibly eight (8) above-ground or underground petroleum storage tanks located on this property. Most of these tanks have been located by ground-penetrating radar with the exception of one 275-gallon AST. Although indicated in the PBS registration, this tank has not been located on the site.

A low level of benzene (0.9 ppb) was detected in a sample from location ACD-AA11 (12-13 ft). The sample from ACD-AA10 (12-14 ft) exhibited low concentrations of benzene (36 ppb), toluene (1.8 ppb), fluoranthene (400 ppb) and pyrene (990 ppb). None of these detected concentrations exceeds the applicable standards. Other compounds including acetone, methylene chloride and carbon disulfide were detected in several samples. These compounds typically result from laboratory processing and are not considered indicative of site activities.

A repeated sample at ESI location B8 (4-6 ft) had low levels of phenanthrene (5000 ppb). These results are slightly different than the ESI findings (570 ppb phenanthrene, 390 ppb fluorene, and 520 ppb acenaphthene). Analytical results of location ACD-B-6R, a repeat of the ESI boring near the northern treatment building, exhibited concentrations of organic compounds below action levels; however, field evidence of petroleum-contaminated soils support the conclusion that this area has been impacted by releases associated with the adjacent 3,000 gallon AST.

Visual evidence of petroleum impacts were observed at location 3B-5, near the small brick office building on the west side of the property, and evidence of petroleum impacts were also



observed in the vicinity of the southern treatment building and the main office building, at locations ACD-U5, ACD-V5, ACD-U6, ACD-W6, ACD-X7 and ACD -W8.

Petroleum impacts were also observed at locations ACD-AA10, ACD-AB10 and ACD-AA11, which are generally downgradient from the UST located at the southwestern corner of the brick warehouse building. No impacts were observed at locations ACD-Y10, ACD-Z9 or ACD-Z10. The evidence of petroleum seen near the USTs and the absence of petroleum impacts in surrounding locations indicates that petroleum impacts are generally confined to the areas indicated on <u>Figure 4</u>.

5.4 <u>Metals in Groundwater</u>

Metals data for groundwater is summarized in <u>Table 5</u>. Groundwater from monitoring well MW-15 exhibited an arsenic concentration ($63.8 \mu g/L$) similar to the adjacent MW-1 installed by ESI ($45 \mu g/L$). The TOGS 1.1.1 standard for arsenic is $25 \mu g/L$. This monitoring well is in close proximity to a collection sump described in Section 3.6. Groundwater from monitoring well MW-U8 contained 53.1 $\mu g/L$ of arsenic. Each of the remaining RCRA8 metals were either not detected, or detected at low levels in samples collected from the remaining monitoring wells.

5.5 Volatile and Semi-Volatile Organic Compounds in Groundwater

A summary of VOC and SVOC data for groundwater is presented in <u>Table 6</u>. The only organic compounds detected in groundwater came from monitoring well MW-E8. SVOCs that were observed in this well include benzo(b)fluoranthene (0.69 J μ g/L), benzo(k)fluoranthene (0.75 J μ g/L), and chrysene (0.53 J μ g/L). Each of these concentrations exceeded the TOGS 1.1.1 guidance values. The MW-E8 well location is approximately 200 feet west of observed petroleum impacts at AOC-1, near the northern treatment plant building. Test pits were advanced in the area between AOC-1 and well MW-E8, at locations F6, F7, G6, G8 and H7, however no evidence of petroleum impacts were observed in these test pits. No visual or olfactory evidence of petroleum impacts are noted on the test pit log for location E8, and the fill material in this area appeared similar to other locations at the site, consisting of coal slag, furnace brick, and glass fragments. The source of petroleum impacts in groundwater at monitoring well MW-E8 are not determined.

No other VOC or SVOCs were detected in groundwater samples from any other monitoring well. Field observations in test pits and soil borings indicated that petroleum product present in soils was likely significantly degraded or "weathered". During typical laboratory procedures, the instrument analyzes the sample, and compares the result against a library of known chromatographic patterns. Over time, organic compounds in soil or groundwater become oxidized, combined with other chemicals or exist as break-down products. In these cases, petroleum contaminants are not detectable using standard laboratory instrumentation because the chromatographic patterns no longer exactly match.

5.6 <u>Metals in Sediments</u>

Results of sediment sample metals analysis are summarized in <u>Table 7</u>. Analytical results indicate that all samples exhibited concentrations of arsenic, cadmium, copper and lead slightly

exceeding the lowest effect level screening criteria outlined in the guidance. Four out of the five samples exceed the lowest effect level criteria for chromium and mercury. No results exceeded the severe effect level criteria, or even reach 50% of the severe effect level.

Based on the extent of exceedances of screening criteria for multiple metals, it is possible that background concentrations of these metals in the Hudson River are at elevated levels. The waterfront including and surrounding the site has been used for industrial purposes since its development, which over the long term may have resulted in generally elevated sediment metal concentrations over the length of the Poughkeepsie waterfront.

5.7 <u>Volatile and Semi-Volatile Organic Compounds in Sediments</u>

Results of sediment sample organic data are presented in Table 8.

One or more PAHs were detected at concentrations above screening values in all of the sediment samples. A number of SVOCs were detected in sediment samples, including polycyclic aromatic hydrocarbons (PAHs) that are greater than one or more of the indicated screening criteria. In four out of five samples, the concentration of benzo(a)anthracene is in exceedances of the acute toxicity screening criteria.

Sediment samples were collected at a shallow interval (0-1 ft). It is likely that PAHs observed in these samples are from continuous commercial and recreational boating in the Hudson River. Other possible sources include the existing MGP site adjacent to the A.C. Dutton property.

5.8 Off-Site and Human Health Exposure Assessments

The contaminants of concern at this site are arsenic, copper and chromium (breakdown products from copper chromated arsenate, or CCA). This substance is a formulation of the salts copper arsenate and chromium arsenate. The primary sources of contamination include the CCA storage tanks and pressure treatment vessels located in the northern and southern treatment facility buildings, as well as the former open lumber yard where freshly-treated lumber was reportedly set out to drip dry.

According to EPA's website, 'Information on Toxic Effects of Various Chemical and Chemical Compounds', arsenic is a carcinogen (cancer-causing), teratogenic, and possible mutagen. Aquatic bottom feeders are more susceptible to arsenic, however, birds tolerance to arsenic varies among species. The toxic effects of chromium are primarily found at the lower trophic levels. Chromium may bioaccumulate in algae and other aquatic vegetation, but it does not biomagnify. It is cancer-causing, mutation-causing, and teratogenic.

Human exposure to arsenic present at this site would likely result from direct contact with contaminated media (dermal absorption), ingestion of contaminated media, or inhalation of contaminated dust. The future intended use of the site is as a restricted residential property. Under this redevelopment scenario, contact with site soils is possible by site workers, future residents or visitors/transients.

Notice of site conditions should be provided to any person accessing the site so that any construction activities are conducted in accordance with applicable regulations and site-specific



health and safety plans. Contaminated soils will be addressed prior to implementing the intended use.

6.0 CONCLUSIONS

6.1 <u>Site Model</u>

The conventional understanding of this site is that arsenic, copper and chromium, contained in the CCA fluid, was discharged to ground surface as part of the drying process. The CCA liquid was injected into the untreated lumber under pressure in a vessel containing the CCA liquid. The vessel was evacuated after sufficient time had passed to treat the lumber. The treated lumber was "wet" with the liquid CCA. The excess dripped to the floor and was recycled by means of the floor drain and sump system. It has been reported that the large open lumber yard was used to temporarily store freshly treated lumber during drying. While in the yard, CCA fluid likely dripped off the lumber directly to the concrete or asphalt pavement. Collection systems were not in place. The residual liquid collected on the ground surface and was transported via overland flow to low spots in the site.

The floors in the treatment buildings, and most of the exterior areas of the site, are covered with approximately three inches of concrete and/or asphalt. CCA fluid came into contact with incidental soil and dust on the concrete surfaces, the liquid portion eventually evaporated and residual metals and dust accumulated on the concrete surface. In the treatment buildings, CCA fluid flowed or was swept into floor drains or out onto soil immediately adjacent to the treatment buildings.

Over time, CCA fluids likely absorbed into porous surfaces through cracks or breaks in the asphalt or concrete paving, and have impacted surface and near-surface soils under the concrete. Rainfall, surficial run-off and tide cycles that regularly flood portions of the site, all played roles in the accumulation, transport and leaching of metals from surface and near-surface soils.

Remedial investigations at this site have resulted in a data set that can be relied upon. It can be concluded from the results of the investigations that the most significant concentrations of arsenic and chromium are present in the interiors of the treatment buildings where CCA fluid collected in the sumps and floor drain systems and on the floors; and outside the facilities on exposed soil or near cracks, pavement breeches or depressional areas around the site in areas where the treated lumber was allowed to drip dry. Impacts in these areas may have been transported by surface runoff.

6.2 <u>Trends in Metals Contamination</u>

Investigations have found arsenic and chromium in incidental dust and soil on the concrete surfaces at extraordinarily high concentrations. For example, location SS-1, collected from the northern treatment plant building, consisted of material collected from 0-0.5 inches, and exhibited an arsenic concentration of 138,000 mg/kg. Sample SS-8, consisting of "gray-green sawdust and very fine sand", exhibited an arsenic concentration of 96,700 mg/kg. The results of numerous other samples, collected at less than 1 inch depth from locations within and immediately adjacent to the treatment buildings, exhibit similar concentrations.



Samples were also collected from surficial soils adjacent to the treatment buildings. These samples came from locations where surficial soils were openly exposed to runoff and deposition of CCA fluid or dust, and not covered with asphalt or concrete. These samples generally consisted of material from approximately 0-0.5 feet deep. Samples from these areas also exhibited high levels of arsenic and chromium, but these concentrations were less than what was observed in the dust and surface material from within the buildings. Samples 3SS-14 and 3SS-15, all collected from approximately 6 inches from the edge of the southern treatment building, exhibited arsenic concentrations of 2480 mg/kg, 2350 mg/kg and 2660 mg/kg, respectively.

Soil samples have also been collected from various depths from directly under the concrete or asphalt surface. These samples came from areas that were not openly exposed to the surface, but were covered with significant layers of concrete. In many locations, a 2-6 inch layer of anthracite coal was present under the concrete or asphalt. At these locations, samples were collected from the first available material under the coal layer. Data indicate that arsenic and chromium concentrations are significantly lower overall in these samples than in exposed surface soil areas, and even more so than surficial dust samples.

Soils exhibiting exceedances of arsenic or chromium action levels at greater depths (up to 6 feet) were found in the vicinity of the two main pressure treatment buildings. These findings are illustrated in <u>Figures 5B and 5C</u>. The most significant exceedances of action levels in the deeper samples occur in locations where the highest surficial concentrations were found, indicating that these areas received the most substantial impacts from CCA fluids; however, the range of exceedances at these depths is limited and found within a smaller area than the surficial results.

The site is immediately adjacent to the Hudson River, and is regularly inundated by tide waters extending over approximately 40% of the site along the riverbank at the western edge of the property. The pattern of detections of arsenic and chromium at the site indicates higher concentrations of contaminants on the upper, eastern section of the property than nearer the river, suggesting that the continuous, regular tidal flow has leached metals out of the soils closer to the river.

Analytical results indicate that groundwater resources may be impacted by arsenic from historical uses of the site; however, only two groundwater samples exhibited arsenic concentrations that exceed the applicable action level. Arsenic concentrations exceeding the TOGS 1.1.1 standards were detected in two (2) groundwater monitoring wells, from locations MW-15 and MW-U8. No other metals were detected at concentrations exceeding standards in any other sample. Monitoring well MW-15 is located at the south side of the northern treatment plant building, and soils in this area exhibited elevated concentrations of arsenic. Groundwater samples from well MW-U8, located approximately 100 feet west of the former office building and southern treatment plant building, generally do not correspond with arsenic concentrations found in soils from this area.

Samples from soil borings 3B-14, collected during the ESI investigation and submitted for analysis by Toxic Characteristic Leaching Procedure (TCLP), indicated an arsenic concentration of 16.5 mg/L, which exceeds the TCLP standard of 0.5 mg/L for arsenic. This sample location is inside the northern treatment plant building, approximately 150 feet to the



east of monitoring well MW-15. The 0-2 foot sample was characterized as green/gray silty soil with shale fragments.

Elevated arsenic concentrations in groundwater, and a TCLP exceedance in soils from the southern treatment plant area, indicate that elevated heavy metal concentrations in soil may be affecting groundwater quality in these portions of the site. Anticipated remedial actions at the site, which will be described in the Remedial Alternatives Analysis, will likely include removal of significantly impacted soils. This measure would eliminate or substantially reduce the source of arsenic in soils that is potentially leaching into groundwater.

6.3 <u>Petroleum Impacts</u>

Visual evidence of petroleum-impacted soils was observed in several areas at the site. These areas are identified as Areas of Concern (AOCs) on <u>Figure 6</u>. As described in Section 5.5, the extent of the AOCs are based on visual as well as analytical results. Only one groundwater sample exhibited SVOC concentrations that exceeded the TOGS 1.1.1 standards, however, based on field observations of petroleum product in soils and on the groundwater surface in test pits, it is likely that petroleum is highly degraded and not detectable using laboratory analysis.

Location ACD-B6R, a repeat of an ESI boring near the northern treatment building, exhibited concentrations of organic compounds below action levels, however, field evidence of petroleum-contaminated soils support the conclusion that this area has been impacted by the 3,000 gallon AST in the vicinity.

Evidence of petroleum impacts were observed at location 3B-5, near the small brick office building on the west side of the property. Test pits were advanced at locations ACD-19, ACD-J9, ACD-K8 and ACD-K10, and no further evidence of petroleum was observed in these test pits. It is believed that the petroleum impacts observed by ESI are localized in a relatively small area very near the UST under the building.

Field evidence of petroleum impacts were also observed in the vicinity of the southern treatment building and the main office building. As indicated in <u>Figure 6</u>, field observations of petroleum impacts were seen at locations ACD-U5, ACD-V5, ACD-U6, ACD-W6, ACD-X7 and ACD -W8. Impacts were observed down to a maximum depth of approximately 8.0 feet.

Petroleum impacts were also observed at locations ACD-AA10, ACD-AB-10 and ACD-AA11, which are generally downgradient from the UST located at the southwestern corner of the brick warehouse building. Petroleum impacts were seen down to a depth of approximately 7.0-8.0 feet; however, petroleum impacts were not observed at locations ACD-Y9, ACD-Y10 or ACD-X10. The evidence of petroleum seen near the USTs, and the absence of petroleum impacts in surrounding locations indicates that petroleum impacts are generally confined to the areas indicated on Figure 6.

Groundwater is not currently used to supply water to the site and it is not likely that groundwater will be used for potable purposes as part of future development. Soil removal in areas containing elevated concentrations of metals and petroleum hydrocarbons is likely to reduce groundwater contamination.



6.4 Data Usability

A Data Usability Summary Report (DUSR) is presented in Appendix D. The remedial investigation conducted by Fuss & O'Neill included the collection of quality assurance/quality control (QA/QC) samples in accordance with the NYSDEC DER-10 and the BCP guidance documents. QA/QC samples included field duplicate samples, matrix spike and matrix spike (MS/MSD) samples, trip blanks and equipment blanks. QA/QC samples were collected at appropriate frequency to provide adequate control for all requested analyses.



7.0 REFERENCES

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TABLES

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT



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Part 375 Soil Cleanu	n Objectives	16	∕ ∜° 400	43	110	270	400	0.81	/ 4 ⁸ 180	180
Sample ID	Depth									
ACD-SS-SS7R	0.0-0.2'	212.00	52.70	0.571	171.00	109.00	11.80	ND < 0.0355	ND < 2.67	ND < 1.07
ACD-SS-C2 ACD-SS-K2	0.0-0.5	24.20	199.00	ND < 2.24 ND < 23.7	21.70	37.80	29.00	0.0866	ND < 1.12 64.70	ND < 1.12 ND 11.8
ACD-SS-K6	0.0-0.5'	14.10	15.40	ND < 2.01	7.76	12.80	23.20	ND < 0.0502	ND < 1.00	ND < 1.00
ACD-SS-M2	0.0-0.5'	35.50	93.70	ND < 21.5	12.10	37.80	ND < 53.6	0.1060	115.00	ND < 10.7
ACD-SS-Q2	0.0-0.5'	17.10	57.80	ND < 2.08	18.60	42.00	76.80	0.1520	ND < 1.04	ND < 1.04
ACD-55-06 ACD-55-AA10	0.0-0.5	83.80	8.54	ND < 2.00	23.20	9.24	28.20	ND < 0.0501 0.1360	ND < 1.00	ND < 1.00
ACD-SS-B3	0.0-0.5'	18.20	63.00	ND < 1.12	13.90	20.30	19.60	0.0488	ND < 4.48	ND < 2.24
ACD-SS-Y6	0.0-0.5'	13.70	42.00	1.13	20.90	42.00	54.30	ND < 0.0600	ND < 3.00	2.23
ACD-SS-X9	0.0-0.5	28.40	45.50	ND < 0.543	19.40	24.80	34.70	ND < 0.0543	ND < 2.71	ND < 1.09
ACD-SS-05	0.0-0.5	55.00	94.20 54.10	ND < 2.88	13.80	19.80	ND < 57.5 /2.50	0.1140	ND < 14.4	ND < 5.75 1.58
ACD-SS-A8	0.0-0.5	24.20	123.00	0.811	25.40	46.20	44.20	0.3230	ND < 2.92	1.24
ACD-SS-L4	0.0-0.5'	33.10	88.40	ND < 2.81	17.60	54.20	28.40	ND < 0.0374	ND < 14.0	ND < 5.61
ACD-SS-L9	0.0-0.5'	56.80	255.00	ND < 17.6	ND < 35.5	ND < 70.5	ND < 176	ND < 0.0391	ND < 88.1	ND < 35.3
ACD-SS-G6	0.0-0.5'	95.80	11.70	ND < 0.520	80.70	72.10	21.80	ND < 0.0346	ND < 2.60	ND < 1.04
ACD-SS-E8	0.0-0.5	37.10	70.90	ND < 0.543	40.20	46.00	64.20	0.2610	ND < 2.07	ND < 1.07
ACD-SS-18	0.0-0.5'	8.32	32.40	ND < 0.518	16.70	36.50	23.80	ND < 0.0345	ND < 2.59	ND < 1.04
ACD-SS-C6	0.0-0.5'	23.50	63.40	ND < 0.543	25.80	41.90	19.50	ND < 0.0362	ND < 2.71	ND < 1.09
ACD-SS-3SS13R	0.0-0.7	19.60	54.20	2.000	24.10	108.00	64.20	ND < 0.0556	ND < 2.78	2.09
ACD-SS-3HB8R	0.0-0.7	7,94	63.10	0.646	29.10	34.20	16.80	0.0857 ND < 0.0359	ND < 2.98	1.59
ACD-SS-A6	0.0-1.0'	9.50	47.60	ND < 2.17	15.90	33.40	40.30	ND < 0.0543	ND < 1.09	ND < 1.09
ACD-SS-E6	0.0-1.0'	ND < 10.6	103.00	ND < 21.2	18.00	46.70	ND < 53.0	0.3280	ND < 5.3	ND < 10.6
ACD-SS-M6	0.0-1.0	15.80	275.00	ND < 21.9	17.90	ND < 21.9	1350.00	0.0942	ND < 5.48	ND < 11.0
ACD-SS-U8	0.0-1.0	23.20	57.90	2.69	18.70	42.50	72.50	1.6600 ND < 0.0520	ND < 1.14	ND < 1.14
ACD-SS-Q8	0.0-1.0	48.50	113.00	ND < 2.12 ND < 2.91	12.20	38.10	46.00	0.1540	ND < 14.6	ND < 5.82
ACD-SS-S10	0.0-1.0'	14.20	69.80	0.607	12.20	77.90	27.10	0.0788	ND < 2.82	1.24
ACD-SS-O8	0.0-3.0'	59.30	117.00	ND < 11.7	ND < 23.4	ND < 46.8	ND < 117	ND < 0.0390	ND < 58.5	ND < 23.4
ACD-SS-B2R	0.2-1.3	7.40	224.00	ND < 17.0	ND < 34.1 21.40	ND < 68.2 32.40	ND < 1/0 14.00	ND < 0.0378	ND < 85.2	ND < 34.1
ACD-SS-A3	0.5-2.5	7.24	20.40	1.22	15.50	40.30	20.50	0.1090	ND < 2.12	ND < 1.06
ACD-SS-L9	0.5-2.5'	15.90	52.80	ND < 1.04	12.70	15.80	26.60	0.1170	ND < 5.19	ND < 2.08
ACD-SS-G2	0.5-3.0'	811.00	33.90	0.878	469.00	876.00	30.50	0.1260	ND < 2.23	ND < 1.12
ACD-SS-T10	0.5-3.0'	36.10	121.00	ND < 1.37	9.23	33.70	40.30	0.1840	ND < 5.46	ND < 2.73
ACD-SS-L4	0.5-3.0	21.50	93.00	ND < 2.82	12.80	44.20	55.10	0.1230	ND < 5.65	ND < 1.09
ACD-SS-H7	0.5-3.0'	19.50	59.00	ND < 5.56	16.70	28.70	ND < 55.6	0.1210	ND < 22.2	ND < 11.1
ACD-SS-Z9	0.5-3.0'	65.40	63.00	0.603	29.50	50.20	67.10	0.0624	ND < 2.90	ND < 1.16
ACD-SS-P3	0.5-3.0'	15.80	94.30	1.320	16.50	26.20	31.30	0.1030	ND < 5.82	ND < 2.33
ACD-SS-N5	0.5-3.0	40.00	104.00	ND < 11.9	10.60	29.40	1820.00	0.0628	ND < 39.5	ND < 5.64
ACD-SS-K6	0.5-3.0'	46.90	73.00	0.762	20.80	32.50	44.00	0.1120	ND < 2.99	ND < 1.20
ACD-SS-Y12	0.5-4.0'	31.40	107.00	2.06	25.90	60.30	328.0	0.2180	ND < 2.82	ND < 1.41
ACD-SS-SS7R	0.8-1.4	129.00	248.00	ND < 11.2	53.00	61.70	ND < 112	ND < 0.0373	ND < 56.1	ND < 22.4
ACD-SS-ABIU	0.8-1.5	20.50	77.30	0.805	19.20	45.50	76.00	0.1300	ND < 2.71 ND < 3.11	1.38
ACD-SS-Q6	1.0-3.0'	44.50	142.00	ND < 12.2	ND < 24.3	81.90	ND < 122	1.0000	ND < 48.6	ND < 24.3
ACD-SS-S2	1.0-3.0'	40.40	69.30	1.360	29.00	58.70	73.80	0.1290	ND < 2.91	1.57
ACD-SS-V8	1.0-3.0'	21.80	65.80	1.700	15.60	27.80	40.90	ND < 0.0562	ND < 2.81	1.60
ACD-33-X/	1.0-3.0	94,50	255.00	0.001 ND < 18.0	ZZ.00 ND < 36.0	00.50 ND < 71.9	03.00 ND < 180	0.0743	ND < 89.9	1.90 ND < 36.0
ACD-SS-S4	2.0-3.0'	11.00	22.10	1.87	20.30	56.30	19.10	0.0840	ND < 2.25	ND < 1.13
ACD-SS-19	2.0-5.0'	66.70	175.00	ND < 13.9	ND < 25.9	ND < 51.9	ND < 130	ND < 0.0432	ND < 25.9	ND < 25.9
ACD-SS-M2	2.0-5.0	148.00	40.70	ND < 5.81	ND < 11.6	ND < 23.3	ND < 58.1	ND < 0.0581	ND < 29.1	ND < 11.6
ACD-SS-E6	3.0-5.5	10.50	88.10	1.230 ND < 0.539	29.00	39.30	97.10	0.1740	ND < 2.74 ND < 2.69	2.02 ND < 1.08
ACD-SS-E4	3.0-6.0	44.20	106.00	ND < 6.14	19.70	ND < 24.6	77.10	ND < 0.0409	ND < 24.6	ND < 12.3
ACD-SS-E5	3.0-6.0'	ND < 121	383.00	ND < 60.5	ND < 121	ND < 242	ND < 605	ND < 0.0403	ND < 242	ND < 121
ACD-SS-V9	3.0-6.0	6.15	34.00	5.02	9.87	46.80	26.50	0.0392	ND < 2.24	1.23
4CD-55-29 ACD-55-03	3.0-6.0	24.50	60.70	1.20	13.60	35.00	125.00 ND < 28.3	0.1970 ND < 0.0566	ND < 2.47	1.19 × 1.24
ACD-SS-M6	3.0-6.0	34.60	130.00	ND < 5.75	ND < 11.5	28.40	110.00	ND < 0.0575	ND < 28.7	ND < 11.5
ACD-SS-U6	3.0-6.0'	21.90	97.90	ND < 2.55	21.20	47.90	ND < 25.5	ND < 0.0339	ND < 12.7	ND < 5.10
ACD-SS-Y7	3.0-8.0	8.73	715.00	0.655	18.60	34.90	650.00	ND < 0.0561	ND < 2.81	1.57
ACD-SS-AA11	3.0-8.0'	21.20	695.00	1.780	17.70	47.20	431.00	0.8650	ND < 3.08	ND < 1.23
ACD-SS-R8K	4.0-4.5	14,60	23.30	ND < 0.548	28.30	52.20	14,60 × 118	0.1210	ND < 2.74	ND < 1.10
ACD-SS-D2	6.0-8.0	6.04	22.20	1.35	15.90	33.20	13.80	ND < 0.0386	ND < 2.32	ND < 1.16
ACD-SS-V9	6.0-8.0'	11.30	45.20	2.27	31.50	43.00	17.30	0.0389	ND < 13.9	3.19
ACD-SS-Q3	6.0-8.0'	7.71	42.20	0.710	20.60	34.90	11.70	ND < 0.0596	ND < 2.98	1.82
ACD SS-T7	6.0-8.0	24.40	54.80	0.701	20.30	321.00	61.40	ND < 0.0412	ND < 3.09	2.32
ACD-SS-AA10	8.0-10.0	7,10	45.50	1.570	20.40	44,20	18,40	0.0717	ND < 2.78	2.49 ND < 1.15
ACD-SS-F2	8.0-10.0'	10.60	31.10	0.927	24.40	40.30	18.70	0.0512	ND < 2.96	2.27
ACD-SS-3HB6R	8.0-10.1'	12.10	24.90	0.893	33.60	39.00	7.13	ND < 0.0571	ND < 2.86	2.32
acd-ss-g4	10.0-11.0'	9.16	87.20	1.15	21.20	30.60	78.60	0.6590	ND < 2.76	ND < 1.38

Bold shaded values indicate results that exceed the Part 375-6 soil cleanup objectives.



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 2 Soils Data Summary - TCLP Analysis

		Arsonicmol	Baium	noll camium	chonium	mall lead mal	L) Mercury Imp	L) seenium	ng/L) Silver (ng/
TCLP Standa	rds (mg/L):	5	100	1	5	5	0.2	1	5
ACD-SS-E4	3.0-6.0'	ND < 0.500	ND < 1	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.003	ND <0.5	ND < 0.1
ACD-SS-G2	0.5-3.0'	1.59	ND < 1	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.003	ND <0.5	ND < 0.1
ACD-SS-T10	0.5-3.0'	ND < 0.5	1.09	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.003	ND <0.5	ND < 0.1
ACD-SS-B3	0.5-3.0'	ND < 0.5	1.48	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.003	ND <0.5	ND < 0.1
ACD-SS-D2	6.0-8.0'	ND < 0.5	ND < 1	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.003	ND <0.5	ND < 0.1
ACD-SS-AA10	8.0-10.0'	ND < 0.5	ND < 1	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.003	ND <0.5	ND < 0.1
ACD-SS-M2	2.0-5.0'	ND < 0.5			ND < 0.1				
ACD-SS-B8R	4.0-4.5'	ND < 0.5			ND < 0.1				

TCLP Standards taken from the NYSDEC Spills Technology and Remediation Series (STARS) Memo No. 1,

Hazardous Waste Regulatory Levels for Toxicity Characteristics



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 3 Soils Data Summary - Volatile Organic Compounds

Compound (µ g/kg)	ACD-SS-X7	ACD-SS-B8-R	ACD-SS-AA11	ACD-SS-AA10	ACD-SS-U5	ACD-SS-U6	Part 375-6 Soil Cleanup Objectives
(depth, ft. bgs)	8.0-10.0'	4.5-5.2'	12.0-13.0'	12.0-14.0'	4.0-8.0'	6.0-8.0'	(µg/kg)
Acetone	ND	ND	5.7 *	32.0 *			100000
Benzene	ND	ND	0.9 *	36.0	ND	ND	4800
Bromodichloromethane	ND	ND	ND	ND			NS
Bromophorm	ND	ND	ND	ND			NS
Bromomethane	ND	ND	ND	ND			NS
2-butanone (MEK)	ND	ND	ND	ND			NS
sec-Butylbenzene			ND	ND	ND	ND	100000
n-Butylbenzene			ND	ND	ND	ND	NS
tert-Butylbenzene			ND	ND	ND	ND	100000
Carbon disulfide	ND	ND	1.0 *	4.2 *			NS
Carbon tetrachloride	ND	ND	ND	ND			2400
Chlorobenzene	ND	ND	ND	ND			100000
Chloroethane	ND	ND	ND	ND			NS
Chloroform			ND	ND			49000
Chloromethane	ND	ND	ND	ND			NS
Dibromochloromethane	ND	ND	ND	ND			NS
1,1-dichloroethane	ND	ND	ND	ND			NS
1,2-dichloroethane	ND	ND	ND	ND			NS
1,1-dichloroethene	ND	ND	ND	ND			NS
cis-1,2-dichloroethene	ND	ND	ND	ND			NS
trans-1,2-dichloroethene	ND	ND	ND	ND			NS
1,2-dichloropropane	ND	ND	ND	ND			NS
cis-1,3-dichloropropene	ND	ND	ND	ND			NS
trans-1.3-dichloropropene	ND	ND	ND	ND			NS
Methyl-tert-butyl-ether (MTBE)			ND	ND	ND	ND	100000
Ethylbenzene	ND	ND	ND	ND	ND	ND	41000
2-hexanone	ND	ND	ND	ND			NS
Isopropyl benzene			ND	ND	ND	ND	NS
p-Isopropyltoluene			ND	ND			NS
Methylene chloride	ND	ND	9.9	110.0			100000
Naphthalene			ND	ND	ND	ND	NS
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND			NS
n-Propylbenzene			ND	ND	ND	ND	100000
Styrene	ND	ND	ND	ND			NS
1,1,2,2-Tetrachloroehtane	ND	ND	ND	ND			NS
Tetrachloroethene	ND	ND	ND	ND			19000
Toluene	ND	ND	ND	1.8 *	ND	ND	100000
1,1,1-trichloroethane	ND	ND	ND	ND			NS
1,1,2-trichloroethane	ND	ND	ND	ND			NS
Trichloroethene	ND	ND	ND	ND			21000
1,3,5-Trimethylbenzene			ND	ND	ND	ND	52000
2,4,6-Trimethylbenzene			ND	ND	ND	ND	52000
Vinyl Chloride	ND	ND	ND	ND			900
o-xylene	ND	ND	ND	ND	ND	ND	10000
m-xylene, p-xylene	ND	ND	ND	ND	ND	ND	100000

NS - Not Specified

* - Value is estimated by the laboratory.



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 4 Soils Data Summary - Semi-volatile Organic Compounds

Compound (µg/kg)	ACD-SS-X7 8270C STARS	ACD-SS-B8-R 8270C STARS	ACD-SS-AA11 8270C STARS	ACD-SS-AA10 8270C STARS	ACD-SS-U5 8270C STARS	ACD-SS-U6 8270C STARS	Part 375-6 Soil Cleanup Objectives
(depth, ft. bgs)	8.0-10.0'	4.5-5.2'	12.0-13.0'	12.0-14.0'	4.0-8.0'	6.0-8.0'	(µg/kg)
Acenaphthene	ND	ND	ND	ND	ND	ND	100000
Anthracene	ND	ND	ND	ND	ND	ND	100000
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	1000
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	1000
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	1000
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	100000
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	3900
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	500
Chrysene	ND	ND	ND	ND	ND	ND	3900
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	330
Fluoranthene	ND	ND	ND	400	ND	ND	100000
Fluorene	ND	ND	ND	ND	ND	ND	100000
Naphthalene	ND	ND	ND	ND	ND	ND	100000
Phenanthrene	ND	5000	ND	ND	ND	ND	100000
Pyrene	ND	ND	ND	990	ND	ND	100000



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 5 Groundwater Data Summary - Metals

Compound (µ g/L)	MW-A6 788070720-06	MW-E8 788070720-05	MW-15 329060113-03	MW-J10 788070720-03	MW-K2 788070720-04	MW-K2 788070720-04 DUP	MW-U8 788070720-02	MW-W8 788070720-01	MW-X7 329060113-01	MW-AA10 329060113-02	MW-AA10 329060113-DUP	329060113-FB	TOGS 1.1.1 NYS Ambient Water Groundwater Standard (µg/L)
Date:	7/20/2007	7/20/2007	1/13/2006	7/20/2007	7/20/2007	7/20/2007	7/20/2007	7/20/2007	1/13/2006	1/13/2006	1/13/2006	1/13/2006	
Arsenic	ND < 10	ND < 10	63.8	ND < 10	ND < 10	ND < 10	53.1	ND < 10	ND < 10	14.8	16.1	ND < 10	25
Barium	25.3	34.4	38.5	22.7	46.0	45.5	ND < 20	24.7	ND < 20	36.6	35.2	ND < 20	1000
Cadmium	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	5
Chromium	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	50
Copper	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	ND < 20	200
Lead	ND < 5	10.5	ND < 50	ND < 5	ND < 5	ND < 5	ND < 5	5.4	ND < 50	ND < 50	ND < 50	ND < 50	25
Mercury	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	0.7
Selenium	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	10
Silver	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	50

Bold shaded values indicate results that exceed the TOGS 1.1.1 Guidance values.



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 6 Groundwater Data Summary - Volatile and Semi-volatile Organic Compounds

Compound (µg/L)	MW-A6 788070720-06	MW-E8 788070720-05	MW-15 329060113-03	MW-J10 788070720-03	MW-K2 788070720-04	MW-K2 788070720-04 DUP	MW-U8 788070720-02	MW-W8 788070720-01	MW-X7 329060113-01	MW-AA10 329060113-02	MW-AA10 329060113- DUP	329060113- FB	329060113- TB	TOGS 1.1.1 Ambient Groundwater Standard (µg/L)	TOGS 1.1.1 Ambient Groundwater Guidance Value (µg/L)
Date	: 7/20/2007	7/20/2007	1/13/2006	7/20/2007	7/20/2007	7/20/2007	7/20/2007	7/20/2007	1/13/2006	1/13/2006	1/13/2006	1/13/2006	1/13/2006		
Volatile Organic Compounds															
Benzene	ND < 5.0	ND < 5.0	ND < 1.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	1	
sec-Butylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
n-Butylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
tert-Butylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
Methyl-tert-butyl-ether (MTBE)	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	NR	NR
Ethylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
Isopropyl benzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
p-Isopropyltoluene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
Naphthalene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0		10
n-Propylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
Toluene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
2,4,6-Trimethylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	NR	NR
1,3,5-Trimethylbenzene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
o-xylene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
m-xylene, p-xylene	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	5	
Semi-volatile Organic Compound	ds														
Acenaphthene	ND < 9.4	ND < 9.8	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		20
Anthracene	ND < 9.4	ND < 9.8	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		50
Benzo(a)anthracene	ND < 9.4	0.54 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA	NR	NR
Benzo(a)pyrene	ND < 9.4	0.69 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA	ND	
Benzo(b)fluoranthene	ND < 9.4	0.69 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		0.002
Benzo(g,h,i)perylene	ND < 9.4	0.65 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA	NR	NR
Benzo(k)fluoranthene	ND < 9.4	0.75 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		0.002
Indeno(1,2,3-cd)pyrene	ND < 9.4	ND < 9.8	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		0.002
Chrysene	ND < 9.4	0.53 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		0.002
Dibenzo(a,h)anthracene	ND < 9.4	ND < 9.8	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA	NR	NR
Fluoranthene	ND < 9.4	0.62 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		50
Fluorene	ND < 9.4	ND < 9.8	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		50
Naphthalene	ND < 9.4	ND < 9.8	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		10
Phenanthrene	ND < 9.4	0.37 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		50
Pyrene	ND < 9.4	0.63 J	ND < 11	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 9.4	ND < 11	ND < 11	ND < 11	ND < 11	NA		50



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 7 Sediment Data Summary - Metals

Sediment SCGs Sediment SCGs Compound SED-14 SED-13 SED-12 SED-11 SED-10 Lowest Effect Level Severe Effect Level (mg/kg) 329060120-04 329060120-05 329060120-06 329060120-07 329060120-08 (mg/kg) (mg/kg) 10.4 33.0 Arsenic 9.8 9.4 10.2 14.4 6.0 N/A Barium 153.0 150.0 39.4 119.0 111.0 N/A 9.0 Cadmium 0.6 1.8 1.7 1.6 1.7 1.8 26.0 110.0 Chromium 40.7 39.8 17.2 40.6 30.4 Copper 49.3 47.6 43.4 16.0 28.8 46.6 110.0 31.0 Lead 110.0 43.6 44.3 47.3 57.5 41.6 Mercury 0.15 ND < 0.04 1.3 0.19 0.19 0.18 0.15 Selenium ND < 2.9 ND < 2.4 4.3 2.13.2 N/A N/A 2.2 Silver ND < 2.4 1.0 ND < 2.9 ND < 3.0 ND < 1.3 ND < 2.4

Bold values indicate results that exceed the Lowest Effect Level criteria.

N/A - no guidance available.



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 8 Sediment Data Summary - Semi-volatile Organic Compounds

	SED 14	SED 12	SED 12	SED 11	SED 10	Organic	Human Health	Benthic Aquatic Life	Benthic Aquatic Life	Wildlife
Compound (µg/kg)	220040120 04	220040120 05	220040120 04	220040120 07	220040120 00	Carbon	Bioaccumulation	Acute Toxicity	Chronic Toxicity	Bioaccumulation
1 45 5	329060120-04	329060120-05	329000120-00	329060120-07	329000120-08	(qOC/kq)	(u a/ka)**	(u a/ka)**	(u a/ka)**	(u a/ka)**
							4-5-57	4-5 57	4-5 5/	4-5 57
Acenaphthene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91			407.4	
Acenaphthylene	ND < 2900	ND < 3000	ND < 8800	650*	280*	2.91				
Anthracene	ND < 2900	520*	ND < 8800	690*	360*	2.91		2869.3	311.4	
Benzo(a)anthracene	470*	1900*	ND < 8800	1800*	1000*	2.91		273.5	34.9	
Benzo(a)pyrene	490*	1800*	ND < 8800	2100*	960*	2.91	3.8			
Benzo(b)fluoranthene	410*	1500*	ND < 8800	1300*	740*	2.91				
Benzo(g,h,i)perylene	370*	1100*	ND < 8800	1400*	650*	2.91				
Benzo(k)fluoranthene	390*	1500*	ND < 8800	1500*	840*	2.91				
Benzyl alcohol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
butyl benzyl phthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Di-n-Butylphthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Carbazole	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Indeno(1,2,3-cd)pyrene	320*	1000*	ND < 8800	1100*	540*	2.91				
4-chloroaniline	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2 91				
Bis(-2-chloroethoxy)methane	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Bis(2-chloroethyl)ether	ND < 2000	ND < 3000	ND < 8800	ND < 1200	ND < 2400	2.01				
2-chloronanhthalene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.01				
2-chlorophenol	ND < 2000	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.71	1		17	
2 2'-oxybis(1-chloropropage)	ND < 2000	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.71	ł		1.7	
Chrysene	660*	1000*	ND < 0000	2100*	1300*	2.71	ł			
Dibenzo(a b)anthracono	ND < 2000	1700	ND < 0000	2100 ND < 4200	ND < 2400	2.71	l			
Dibenzofuran	ND < 2900	400 ND - 2000	ND < 0000	ND < 4200	ND < 2400	2.71	l			
12 dichlorobonzono	ND < 2900	ND < 3000	ND < 0000	ND < 4200	ND < 2400	2.91		240.2	24.0	
1,3-dichlorobonzono	ND < 2900	ND < 3000	ND < 0000	ND < 4200	ND < 2400	2.91		249.2	34.9	
1,2-UICITIOLODELIZETE	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		349.Z	34.9	
1,4-dichlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		349.Z	34.9	
3,3 -dichlorobenzidine	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91			17	
2,4-dichlorophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91			1./	
Diethylphthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Dimethyl phthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
2,4-dimethylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
2,4-dinitrophenol	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91				
2,4-dinitrotoluene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
2,6-dinitrotoluene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Bis(2-ethylhexyl)phthalate	400*	400*	ND < 8800	ND < 4200	310*	2.91			580.5	
Fluoranthene	870*	3600	1200*	3300*	2100*	2.91			2968.2	
Fluorene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		212.4	23.3	
Hexachlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91	0.4	26425.7	16208.7	
Hexachlorobutadiene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91	0.9	160.1	16.0	
Hexachlorocyclopentadiene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		128.0	12.8	
Hexachloroethane	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Isophorone	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
2-methylnaphthalene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		884.6	98.9	
4,6-dinitro-2-methylphenol	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91				
4-chloro-3-methylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
2-methylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
4-methylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Naphthalene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		750.8	87.3	
2-nitroaniline	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91				
3-nitroaniline	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91				
4-nitroaniline	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91	1			
nitrobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91	1			
2-nitrophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91	Ì			
4-nitrophenol	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91	İ.			
N-nitrosodimethylamine	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91	İ			
N-nitrosodiphenylamine	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91	İ			
Di-N-octyl phthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91				
Pentachlorophenol	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	2.91		291.0	116.4	
Phenanthrene	540*	1700*	980*	2000*	1500*	2.71	1	271.0	349.2	
Phenol	ND < 2000	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.71	1		15	
4-bromonbenyl-phenyletbor	ND < 2000	ND < 3000	ND < 0000	ND < 4200	ND < 2400	2.71	ł		1.0	
4-chlorophenyl phonylothor	ND < 2900	ND < 3000	ND < 0000	ND < 4200	ND < 2400	2.71	ł			
N-nitroso-Di-N-propylamino	ND < 2900	ND < 3000	ND < 0000	ND < 4200	ND < 2400	2.71	l			
Duropo	020*	2200	1100*	2400*	1ND < 2400 2100*	2.91		JEEJE J	2704 E	
ryrene 1.2.4 trichlorobonzono	93U	3300		3400	2100	2.91		20030.3	2/90.0	
1,2,4+UICIIIOIODEIIZEIIE	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91		204ŏ. I	204.0	
2,4,0-thcmolophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	2.91			1./	
z,4,5-ti ichioi opnenoi	IND < 2900	1ND < 3000	иD < 8800	IND < 4200	IND < 2400	2.91	I		1.7	

Bold Shaded values are in exceedance of the most stringent screening criteria
* Values are estimated by the laboratory.
** Screening criteria is provided per gram of organic carbon. The values listed have been multiplied by the concentration of OC in the sample.



Former A. C. Dutton Lumber Facility Remedial Investigation Report TABLE 9 Soils Data Summary - Background Areas On Site

						Part 375-6
Compound	BKGRD-01	BKGRD-02	BKGRD-03	BKGRD-04	BKGRD-05	Restricted Residential
(mg/kg)	329060120-01	329060120-02	329060120-03	804060320-01	804060320-02	Cleanup Objectives
						(mg/kg)
Arsenic	25.9	60.7	18.2	23.4	32.5	16
Barium	144.0	91.6	57.4	45.2	160.0	400
Cadmium	1.6	2.3	2.9	ND < 0.571	ND < 0.709	4.3
Chromium	36.9	51.6	23.7	26.0	30.6	110
Copper	45.7	103.0	99.1	45.8	67.7	270
Lead	89.8	293.0	192.0	139.0	704.0	400
Mercury	0.13	0.13	0.09	0.08	1.34	0.81
Selenium	2.80	3.80	2.40	2.19	4.64	180
Silver	ND < 1.3	ND < 1.3	ND < 1.1	ND < 1.14	ND < 1.42	180

Bold shaded values indicate results that exceed the Part 375-6 soil cleanup objectives for future restricted residential use.



FIGURES

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT






POUGHKEEPSIE

NEW YORK



					PROJ. MANAGER:		SCALE:	WWW.FandO.COM	
					CHIEF DESIGNER		HORZ: 1" = 100'		
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N	lo.	DATE	DESCRIPTION	BY					
			REVISIONS				GRAPHIC SCALE	80 WASHINGTON ST SUITE 301 POUGHKEEPSIE, NY 12601 845.452.6801	POUGHKEEP

NEW YORK

















APPENDIX A

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT

BULK STORAGE CERTIFICATES

	-		Rich	Poor Return Completed Form & Fees To:	
	(cosrenes marches)		New York Slate Leptences of Eavinemental Remediation Division of Eavinemental Remediation	NYSDEC	·
т			Hazardous Substance Bulk Storage Applicatio Purnutio to Hardow Substance Bulk Storage Law, Article 40 of ECL and & NYCRR 595.	1. Spill Prevention & Bulk Storage Section 1:529 .529 625 Broadway, 11th Floor Albany, NY 12233-7020	
d	Please Type or Print Clear	ţ	Section A Sections A & B)	Expiration Date: 08/09/2003	-
•	and Complete All Items		Eachity Name:	DF CHEMICAL FACILITY (Check only one)	
	3-000170	دمر	FORMER H.C. WITTON HUITUNE LU: 01	=Storage i ermuna. U 03=Other Wholesate Action =Retail Gasoline Sales Sales Sales	
981	DEC PBS Number (If applicable)	~ (3.1490FFMHN D1KCE1	a-Manufacturing(Other Then Municipal) Semical/Processing 7 07=Apartment Building	
6264	 DEC MOSF Number. (if applicable) 	<u></u>	City: POUGHKEEPSIB NY 12601 [F]	s=Trucking/Transportation	
(ç#8	DEC SPDES Number. ((f spjiteble)		County: Township or City: 08 Dutchess Poughkeepsie (c) 01 Name of Operator at Facility: 12 Construction: 12 Name of Operator at Facility: 12 Construction: 12	 School 11-AUINGAU LAN Private Residence 13-Municipality (Incl. Waste Private Residence Vater Treatment Plants, 	
ı	Transaction Type	⊱ ≻	Energency Contact Name: 20 20	Utilities, Swumung Pools, etc. / : 5=Railroad [] 21=Swimming Pools (Other b=Chemical Manufacturing than Municipal)	
าม	NOTE: Transition Types				
ТИ	1, 2 and 5 require a fte		The O'Neill (1000 - DUHDD, LLC [thresh	-ound (specialy) certify that the information on this form is true and correct. False termade berein may be punishable as a criminal offense in accordance	
40 T	2)Change of	c	213 Route 17 North 15 with 201 requirem	licable State and federal law. The facility has maintained us tents relating to daily, monthly, annuai and five year inspections as two most off and has had its SPR annually updated as required by	
TTai	3)Substantial	, ≥	Cliv Rounelle Bark NJ 107662 Part 598.	1(k). 1. Owner oc Authorized Representative:	4
1.0	Modification	7.	Federal Tax ID NUMBER	mus D Mc Iver	•••
Ng 54	A 4)Information Correction	e) ex	Type of Owner. 2 State Government 4 Tederal Covernment Type of Owner. 2 State Government 5 T	Associate Fuss & ONeill of NY FU	
in J	X 5) Renewal		1 Zrivate Actionia	(vit) OFFICIAL USE ONLY	
	Spill Prevention Report	ပဝ			
PC.	In addition, a copy of the soft Prevention Resort	~~	Attention: Richard Totico	7916 /	
2:1	(SPR)'s cover page, table	N N	Nerre of Company: FILES & O'Neill OF NY, P.C.		
τo	page is submitted.	L 0 3	Address &0 Washington Street, Sult SUL	Distriction of the second statement of the second statement of the second secon	
np	(201	Address: NY VAL		
n .	SPR: YES	u 7.	Cilyrstarzip Code: POUGHKEEFSIB	Reviewed by	
าธก	2	ပမ	Telephone Number: 845 -453-6801 E-Mail Address 170711		

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Page 1 of 1-

Section B - Tank Information

See enclosed instructions and use the key located

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03. Aboveground/Underground 02. Interstitial Macual Monitorini 03. Vapor Well 02. Underground/On-ground ૻૢઙૢૻ૾૾ Pise Lank Defection (29) 08. Tank Top Sump (Piping) 04. Groundwater Well 07. Pressurized Piping Leak 09. Exempt Suction Piping Piping Location (16) 00. No Piping Hiz Sub 01. Internativi Electronia 2 3 ß 2 \$ 8 8 ₿ 99. Other-please list." 01. Above yound Registration Expiration Date: Combination Monitoring CAS Number 1778-39-4 1778-39-4 1718-35-4 7718-33-4 7775-35-4 P-61-8441 1778-39-4 00. Nore Delector 03. Aviomatic Shut-off 00. Noae 04. Product Level Gauge(AVO) 01. Catch Busin 05. Vest Whistle 02. Trunsfer Station Containment 99. Other-Please list. 99. Other - Please list. ຄິ 8/9/2003 Secondary Containment (11/19) 00. None 06. Remote Impounding Area 07. Excavation/Treach Liber 10. Impervious Underlayment (Blader) 09. Modified Double-Waited Soll Prevention (19) 08. Nexible Internal Liner 11. Double Bottom (A/G) 59. Other-please list: Of, Double Walled (U/G) (List all Part 597 Substances, Razardous Substance Name if more than 3 please list on 02. Vault (w/access) 03. Vault (w/o access) 05. Synthetic Liner separate sheet) 01. Dibing (A/G) 3 Arsenic acid System Arsenic acid Arsenie acid Arsenic acid Arscold acid Arsenie acid Arsonie acid on the bottom of this sheet to complete each ttem/column). Overfill Prevention [13] 00. Noos 02.Kigh Level Aum 05. Steel Enceced in Concrete 01. Flose Vent Velve OI. Fiberglass Coated Steel 01. SteeVChebon SteeViron 03. Equivalent Technology 09. Coocrete Piping' Petersion 06. Fiberglass Reinforcod Plastic (FRP) ĝ 02. Gabranized Steel 03. Stainlert Steel Alloy 10. Copper 11. Flexible Piping 99. Other-pirate list:* Pipine Type (17) 00. None 1 8 8 8 8 \$ 8 k diale Mannes Sec OT. Plado NOT GIVE ANDERS Ň, * If other, please list on a separate sheet including Tank Numbed 8 8 3 8 10 Þ 5 05. In-Tack System (ATO) 66. Impervious Barrier/Concarte Past (A/G) 1 0 101 10 5 5 101 10 0 10 ((10)) 1 10 og saterstitus Electroale Monitorias Piping Location 01 5 10 03. Retrofited Impressed Ourrent 0 07. Reposited Sacrificial Anoda 02. Intersticial Manual Monitoring 03. Original Impressed Current 0 0 02. Original Sacrificial Anode 10 10 5 10 Esternal Protection (10/18) 00. None Spill Prevention 01. Painted/Asphalt Couting 99. Other-picese list" Tenk Lenk Detestion (12) Overfall Prevention 3 ;; 8 3 8 8 06. Wrapped (Piping) 3 JUE I 8 Of, Groundwater Well 99, Other-please list · **SO** ĥ : 05 • **50** ‡ <u>8</u> 50:10 6 3 Tank Leak Detection Ol. Fiberglue 03.Vapor Well 09. Urethane OS. Jacketed 3 10 10 S None nammaniale of Advectiones The Salors ŝ 8 8 - 66 1 k 8 Southern Control of the Southe 5 **\$**0 3 **\$**0 **\$0** 05. Steel Tank in Concrete 66. Fiberglass Reinforced Plattic (FRP) 07. Flastle 0 01. Steel/Curbon Steel/Iron 04. Fibergluss Couled Steel 02. Galvanized Storl Alloy 01. Equivalent Technology Fiberglass Liner (FRP) 03 [00 00 00 03. Stainless Steel Alloy 8 8 10. Unethane Clad Steel $\hat{\mathbf{S}}$ 0 03 00 Internal Protection (9) Tank locense Protection ß 99. Other-please list.* 99. Other-please list.⁴ 5 į, 10 C0 5 C. College Con Tenk Type (3) Rubber Liner 01. Epory Liner **Olase Liner** 23,000 100 15,000 12,500 3,600 12,500 Capacity 25,000 09. Concrete (Callors SO. None ତ ġ. ä A Permanent **Installation** \$861/1/5 Day/Year) 5961/1/1 5961/1/1 1/1/1965 2961/1/1 Vinnov. 2001 Date 1007 2. Temporarily out-of-service 5 ତ 3 5. Tank converted to 5 ~ 3 ~ Ξ 3. Closed-Removed 4. Closed- In Place Non-Regulated use Tank Location R NTPUT **CUTIN** NTNG1 IOTIN 10410 -OTPUL I OTPUS . In-service Status (G Number Tuck 2. Aboveground-contact w/ I. Aboveground on saddles, egs, stilts, suck of oradie J. Aboveground with 10% Underground, vaulted, I, Aboveground-contact 3. Close/Remove Tank 5. Recondition/Repair/ Tank (Piping) Nodel (Model x more below ground Tank Location (3) (2)3-000170 mervious burier Initial Listing Action (1) i. Underground 4. Information (A) (C) Add Tank Refine Tank Contestion AITA RECESS A isoil noiteA 6 1 2 ٠d ssnj 11:529 90 JeM 4252188 (842) ЪС YN 90 ILIAN, D 8 80

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New York State Department of Environmental Conserva Division of Environmental Remoduation	etroleum Bulk Storage App	d instructions and please be sure to complete S	r Nitton Limber Pa	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	8	Stite: Zip Code:	NY 13601	Township or City:	Facility Telephone Number	Ernergeney Triephone Number:			pr Multan Jere	orth, Suite 301	NJ DJUGS	Owner Telephone Number: 201-545553	ate Government	cal Government SS Corporate/Commercial	e up to date - this information is used for mailing and con	etino	D'Nell of NY, P.C.	aton Street, Suite 3)	Keepsie NY 12601	53-650
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ed Vcolu	(15)	Tark Disperses	8		8		8		8		8		
item	3	Tank Spill Prevention			_				\square				
he key i te each	3	Tank Overfill Prevention	8		5		6		8		8		
and <u>use t</u> o comple	(12)	Tank Lesk Detoction	68		8		8	•••••	8	••••	8		
uctions a <u>is sheel t</u>		armaning (Lattang Lattang	66		g		00		8		8		
ed instr <u>m of th</u>			6		01		01		01		01		
iclos <i>botte</i>	ŝ	Took Internal Protection	8		8		8		8		8		
ee en		- Martenta	5		5		2		2		5		
ତ୍ର ଶ	3	Froduct Scored	0008		0001		0001		ő		<u>100</u>	ŀ	ŀ
	ତ	Capacity (Gallous)	13,000		J. 1,500		3,000		275		275		
	3	Installation or Permanent Closure Date (Afontby Day/Year)											
•	ङ	टायात	6		0		7		5	4	1		1
	3	Tank Location	6	L	9	L	3		6	L	3	L	
<u>85 Numberi</u> 1-175935	(7) (7)	Anifest sentres 6 are spin-sentres are spin-sentres are spin-sentres are spin-sentres are spin-sentres are spin- sentres are spin- sentres are spin- sentres are spin- are spin- spin- are spin- spin- are spin- spin- are spin- spin- are spin- spin- are spin- spin- are spin- s	I Model: Number		. 2		5		4		5		
N .			ž										
	2	Verior	19	1	·	-[[-	1	-	1	-1-	1

ine Location (16) No Piping Aboveground Underground/Underground Aboveground/Underground hinstion hinstion hinstion assitical Electronic sesticial Manuel Monitorin por Well senticad Piping Leak serricad Piping Leak	ik Too Sump (Piping) smpt Suction Piping <u>Dirbenser 18.</u> 00. Nome 01. Submeshie 02. Subioa 03. Gravity
Conteinment (11/19) Ph ag (A/G) 00. It (w/access) 01. bie Watted (U/G) 03. bie Watted (U/G) 03. bie Watted (U/G) 03. bits Internal Liner 00. Int watton/fremch Liner 02. Int iffed Double-Walted 04. Gn	bit Boutom (MG) 68. Ta r please fist. 99. 00 III Trrrention (10) 99. 00 L None L None L Namfer Station Contairment . Transfer Station Contairment . Other - Please fist*
ne Troe (17) Carbon Szechfron mired Steel East Steel Alloy 13. Vau Easteel Alloy 13. Vau 13. Dou 13. Vau 13. Vau 14. Dou 14. Dou 15. Synte 16	Porten Inc. 11. Dov 2011 Prevention(13) 11. Dov 2015 Float Vent Valve 50. Oth 31. Float Vent Valve 50. 31. Automatic State 11. Dov 31. Automatic State 11. Dov 31. Automatic State 11. Dov 32. Vent Whistle 33. Other-please fist. ⁹ 33. Other-please fist. ⁹
tion (10/18) Co. None at Conting Co. None at Conting Co. None (15) State (15)	wonie Monitoring 99. Une oual Monitoring Kell a (ATO) a TO) (ATO)
from Extrant Protect Uloy 00. Noa Steel 00. Noa Steel 00. Original Sat Steel 00. Original Imp Steel 00. Wrapped Pri eed 00. Wrapped Pri of Sate 10 Now	2) 01.Intertitial Elec 02. Intertitial Elec 03.Vapor Well 04. Groundwater 05. In-Tark Syster 06. Intervious Ba 99. Otherpicate Ii list on a separate sheet ii
Tark Type (3) Tark Type (3) 01. Steel Carbon Steel 01. Steel Carbon Steel 01. Staintest Steel Alto 03. Steel Tark in Corre 05. Steel Tark in Corre 05. Steel Tark in Corre 06. Fiberglass Reinford 07. Plastic 08. Equivalent Techno 09. Consets 10. Urethane Clad Stee 99. Other-plasse litr	Internel Protectica f 00. None 01. Epory Liner 02. Rubber Liner 03. Fiberglass Liner 03. Fiberglass Liner 04. Glass Liner 99. Other-please list. 1161.* * If other, please
Status (4) I. In-service 1. In-service 2. Temporally out-ofes 2. Text converted to 5. Taxk converted to 5. Taxk converted to 2. Taxk converted to 3. Taxk converted to	Maket w' 0011. Jet Fuel addres, D009. Diteret cradies, D009. Gaubline cradie D013. Lunks O11 D13. Lunks O113. Lunks O11 D14 D0239. #5 Fuel O11 2542. Usted O11 frues 9999. Other -please
Action (1) 1. Initial Listing 2. Add Teak 2. Close Renk 3. Information Correction 5. Recondition/Rej Refine Teak Refine Teak 1. Aboveground-or wisoil	 Aboreground-e impervious barriet actives rack on legs, utics, rack on legs, utics, rack on active below grou or more below grou 5. Underground 6. Underground with accets

Page 1 of 1

Section B - Tank Information

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(842)

Puss & O'NeIII of NY PC

625:11 30 80 76M



APPENDIX B

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT

TEST PIT LOGS SOIL BORING LOGS MONITORING WELL COMPLETION FORMS

Test Pit # _____A2____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	10:15
Sample Prefix:	804051206- / ACD-SS- AD
Logged By:	PT

Contractor:	
Operator:	
Backfill	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -3.0'			weathered shale group/roots		
	·		litt f-c salar (+r-littop		•
			intop 0.2) Photos shows		
			Stricted shale (almost vert)		
			bucket able to pen to 3.0	· · · ·	
3,0'-			refusal - hard rock, water.		
**					
0 -0.5	006	10:30			
0,5-2,01	100	(0:35			
				· ·	

APPROS. SURFACE ELE, (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

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

COMMENTS:

TEST PIT SKETCH:

•	•	
	· · ·	

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				B	ORI	NGLO	G		SITE ID:	A3		
	FUSS	&O'N.	EILL	PROJECT	: ACD	utton	. •		PROJECI	[NO:	2004076	4.A1N
	Disciplin	es to Delive	r	LOCATIO	N: Pou	ighkeepsie,	NY		WEATHE	R: 2 deg.	F, 2-4" s	now
CONTRA	CTOR:						W	ATER I	LEVEL ME	ASUREMI	ents	
F&O REP	RESENTA	TIVE:	1			DAT	E	MS	.PT.	WATER	AT	TIME
SAMPLIN	G METHO	D: <u> </u>	sleeve							•		
HAMMER	RWT:	<u>na</u> Ni	HAMMER H	FALL (IN)	na		· .			•	• .	
GROUNI	DELEVAT	ION: na										,
SAMPLE	ARTED: PREFIX:	76705	51215- / ACE	-SS-		TIME AN	ID DAT	E OF C	OMPLETI	ON: <u>12</u> /	′15/05 ⁽	1:50
DERTH	BEC/	SAMPLE			1	<u> </u>	· ·	• .		olum a lur a	LITHO-	
(FI)	PEN	DEPTH (FT)	SAMPLE	No. AND TIME		SAM	IPLE DESC	RIPTION		CHANGE	LOGIC CODE	TESTING
0-0,5	2.5/4.0	0-0.5	007/P3	(0-0,5)	AS	phalt,	grau	el	·. · ·			
0.5-25		0,5-2,5	008/A31	0,5-2,5)	50	me M.	-C d	kM	m		•	
			9:50		50	wy 'ew	aUq	rave	a, no			•
					\mathbb{N}	official	le a	AV 01				
2.5						ganic	>					
					D	۷						· · ·
							•	•				
									•	•		
								•				
								• •	· · .			
							· .		· · ·		-	
							• .					
							· · ·			· · ·		
							· .	· ·	· · ·			
							• •					
							•			•	· .	
									•			
BOB	ING				REMAR	2KS					<u> </u>	
DIAM	ETER	BORING	METHOD	DEPTH	Field Ins	trument=		If refu	sal is encounte	red, describe a	ull efforts us	ed to confirm.
		· · · · · · · · · · · · · · · · · · ·						· · ·				
					Field De	con: Yes/No	o / Dedica	ted Device	2		•	
PROPORTION Trace 0	NS USED: to 10%	Some	20 to 35%		n		•			· <u>·····</u> ··	· · ·	
EXAMPLE DE	U TO 20%	And	35 to 50%	:	<u>BACKF</u> Native M	<u>ILL</u> Iaterial			To		See Moni	toring Well
SAND, F-C	Some F-C gra ie. No odor.	vel; Little silt; T	race clay; (10R5/	(4)	Bentonit	e Grout/Chips			То то		Completi	on Report
Reviewed by	/Staff:				Other				<u>_</u>			·
1												

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Test Pit # <u>A</u>Y

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	8:30
Sample Prefix:	804051206- / ACD-SS-
Logged By:	PT

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE	TT3 (T		USCS	FIELD
1011 20	NUMBER	1 IME	SOIL DESCRIPTION	CODE	TESTING
0 -0.3			Asp/glass slag/let glassy		
			molten slag)		
0.3 - 2.5'			bl-br f-c SA+f-c GR/cr shale.		
			layers of const. fill about		
			0.3 thick by Stlar alternates		
			w/ b/ cT shale + stores		
2.5'-			water		
-					
0 -0,5'	601	8:30			
0,5-25	002	8:35			
-					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

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

COMMENTS:

Test Pit # Ab

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	1455
Sample Prefix:	804051205- / ACD-SS-
Logged By:	LMG

Contractor:	
Operator:	
Backfill;	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -),			Apphalt	2 	
<u> 2" - 0.5'</u>			med bown f-m sand. The ce organics.		-
0.5'- 2'			dk provin m-c sand, take organics, Some gravel, some pulvenzed shall		-
2'25'			mod blawn C-VC sound mostly bale	-	
25'-4'			crubbed (4") fine knick. traces and no sample, glass shards		, '
4' - 6'			dark m-c sand, mostly gravel, gloss pieces. some fire brick pullerised		
6' -			GW		
0 - 1'	110	1500			
4-6	612	1505			· · · · ·

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

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Fuss & O'Neill of New York P.C.

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

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GENERAL INFORMATION	
Project Name: AC Dutton	Site ID (Boring/Well ID): MW-AU
Project Location: $POK(NN)$	Project No.: 20040 7/04
F&O Engineer/Geologist: NJL	Ground Surface Elevation:
Date of Completion:	Permit #:
Boring Location:ACD -AC	E1 Top of Steel Casing:
Drilling Contractor: Todd Syslca, Inc-	E1 Top of PVC Casing:
Drilling Method: Gebprobe	Measuring Point: TPS / PVC
WELL CONSTRUCTION	Well Cover (see codes):
Well Casing/Riser Sump (below screen)	Protective Casing
Diameter: <u>I</u> " in. Diameter: <u>N</u> A	in. Diameter: $N(A)$ in. Type:
Туре: Туре:	Stick-up:ft Depth to Bottom: ft
Stick-up: 2.3 ft. Length:	in. Seal Material:
Screen Intervals	
Screen Interval: $5'(10'-5)$ ft Diameter:	$\underline{ \hspace{1.5cm} }$ in. Slot Size: $\underline{ \hspace{1.5cm} }$ $\underline{ \hspace{1.5cm} }$ $\underline{ \hspace{1.5cm} }$ $\underline{ \hspace{1.5cm} }$ in.
Description: (PVC) Other:	
Type: Perforated / Slotted / Wire-Wrap / Other:	
ANNULAR FILL	
Surface Seal	(Approximate volumes if available)
Interval: $4 - 0$ ft. Tremied:	Y / N Volume:bags
Description: Concrete / Other: bentonice	
Backfill	
Interval: $10^{\prime} - 5^{\prime}$ ft. Tremied:	Y / N Volume:bags
Description: Bentonite Grout / Fill/ Other:	
Lower Seal	
Interval:ft. Tremied:	Y / N Volume:bags
Description: Bentonite / Bentonite Pellets / Grout / Other:	
<u>Filter</u> ()	
Interval: <u>5-4</u> ft. Tremied:	Y / N Volume:bags
Description: (Sand)Filter (type:) / Other:	·
Lower Backfill	
Interval:ft. Tremied:	Y / N Volume:bags
Description: Bentonite Grout / Fill / Other:	

Monitoring Well Field Data Sheet

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Client/Project Name: Project Location:	PROJECT #:			- 13 FF177 -				
Sample#: 788070720-0 5	<u>Well ID</u> MWA6		CUSS & O Disciplines to	J'NEILL Deliver				
Sample#: $788070720-0$ $WWT10$ Elevation Data Date: $7/20/07$ Time: $VIVT10$ Date: $7/20/07$ Time: $VIVT10$ Well Diameter (inches):								
Purge Data	······							
Start Time: 16,25 Stop Time: 16,40 Total Time Purged: 25 min Pump Rate: (gpm) Volume Purged: 125 gg (gallor)	Purge Device: C Device type: E Comments: ns) Well Yield: C	Dedieated / Non ailer / Peristalti Tigh / Moderate	udedicated 2/ Submersi 2 / Low / E	ible / Bladder Dry				
Sample Data Date: 7/20/07 Time: 1640 Approx. sample depth: (ft) Sampling method: Bailer / Peristaltic / Bladder Bailer type: SS 2" / SS 1.25" / SS Short / PVC 2"	er: <u>6-4</u> /	Container Amber Plastic Plastic Plastic	Quantity 1 1 1	Preservative H MO ₂ N _a OH				
Bailer Cord: < Dedicated /- Nondedicated Filtered in Field?: No/ @ Well / @ Lab Method of Filtration: Pressure / Vacuum / Syringe Pump ID # Filter: 10u / 0.45 Field Decon: Bailer / Tubing / Other Appearance:	u .	VOAVial	3	HC[
Field Parameters Note: SC of Instrument ID#	calculation based on (tem	p) at time of SC r Instrument II	neasurement. D# Spec. C 326	ond.				

C:\DOCUME~1\GTOOTH~1\LOCALS~1\Temp\monwellfielddat.doc Format Revised 1/26/07

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Test Pit # Location: AK 19

Project Name:	AC Dutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	13:20
Sample Prefix:	804051202- / ACD-SS- AS-
Logged By:	MP

Contractor: Operator: Backfill:



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-3(or-6)			Asphalt		12011110
0 - 18"			clay c. sand + grower, loose, dry layer of large -5' grower at		
			4-10"		
18"-			Water. rocks 4"-1.5 Lelow		
			Woder.		
0 - 0,5'	038/(0-5)	1336			
0.5-3	039/(15-3)	(33)			
-					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTILING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: NW CONDER of site pic 25+31

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				BC	ORI	NGLOG		SITE ID	<u> </u>		
	FUSS	&O'N	EILL	PROJECT:	AC D	utton		SHEET: PROJEC	T NO:	<u>of</u> 200407	64.A1N
Disciplines to Deliver LOCAT					CATION: Poughkeepsie, NY WEATHE			ER: 2 deg. F, 2-4" snow			
CONTRA OPERAT	CTOR:				WATER LEVEL MEASUREMENTS						
F&O REF	RESENTA	TIVE:	n la			DATE	М	S. PT.	WATER	AT	TIME
SAMPLIN	IG METHO	D DD:	sleeve			·					
BORING	LOCATIO	<u>na</u> N:	_HAMMER F	ALL (IN)	na						
GROUNI DATE ST) ELEVAT 'ARTED:	ION: <u>na</u>									
SAMPLE	PREFIX:	76705	51215- / ACD	-SS		TIME AND DAT	E OF C	COMPLET	ION: <u>12</u>	/15/05	9:05
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE N	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-7"	3.0/4.0	05'	001/B	3/0-0.5)	AV.	MAIN L-N	1 50	ind			
	- / 10		9:00	- (0 01))	fro	zen, some g	rovel	, little			
					oro	anics	2				
J"-4"					sh	ile					
4"-6"				(ion	crete, some	grai	ee.			
6"-8"		0.5-30'	009/198	(0.5 - 30)	7-	m It how	n sa	nd, SOM	2		
5"-1.51			9:03		900	Wel, dry Mawns L-1	n sa	ind, DOSS	no Ano		
					00	land ash.	puli	ierized			
15-2.01					1v	ice, some sr	vall	gravel			
(10 210					me	1 provent	-m 5	and			
10-30'		20-5.5'	003/33	(3.0-5.5)	nw	J WITH F	Jran Sand	SMR			
2,0, 3,0			9:05	()	gravel, some silt. Seemsdry			4			
			1 00		f0	ightly mor	54.		1		
4-4.5'	1.9410						-				
4.5-55					BP.	0+5.5'					
				-							
				-							
BOR	ING	BORING	IFTHOD	DEPTH RI	 EMARI	S					l
DIAMETER BUKING METHOD DEPTH		Fie	eld Instr	ument-	If refu	sal is encounte	ered, describe a	ll efforts us	ed to confirm.		
PROPORTION						on: Yes / No / Dedicat	ed Devic	e			
Trace 0 t Little 10	Frace 0 to 10% Some 20 to 35% Little 10 to 20% And 35 to 50%			BA	ACKFII	T .					
EXAMPLE DESCRIPTION: SAND, F-C; Some F-C gravel: Little silt: Trace clav. (10R5/4)			Na Be	ative Ma entonite	terial Grout/Chips	-	To To		See Monit	oring Well	
Moist. Loose. No odor.					oncrete/	Asphalt		To		Completic	a report
Reviewed by Staff:							·	10			

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Test Pit # <u></u> Location: <u>C</u>J

Project Name:	ACDutton		
Project Number:	20040764.A1N		
Date:	12/2/2005		
Time:	14:30		
Sample Prefix:	804051202- / ACD-SS-CJ-		
Logged By:	MP		

Contractor: Operator: Backfill:



FUSS & O'NEILL Disciplines to Deliver

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
- , -0			Asphalt		
0 -1"			Angular rock		-
1 - 6"			c, sand trace clay, gray 10052,		
6"-19"			brick mostly) + silt & fine sand roots. It brown bose driv	. *	
Pj"-			bedrock-dry		
0 -0,5'	043/0.5	14:50			
05-3'	044(5-3)	14:40			······································
					· · · · · ·
		<u> </u>			
		, <u></u>			
			· · · · · · · · · · · · · · · · · · ·		

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION
METHOD OF SAMPLE COLLECTION

COMMENTS: NE end of site

TEST PIT SKETCH:

Test Pit # ______ Location:_____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	650
Sample Prefix:	804051206- / ACD-SS- (^山
Logged By:	RT

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Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS	FIELD
0 -081			D" POL USA List as alal		ILSING
0.0			a KKD WI WI ON WI WOODN	· · · · · · · · · · · · · · · · · · ·	
			or shale rock, dry, loose		
			compacted (non-cohesive).		
0,8-3,0			or reworked shale mostly rock	-	
			little salar in spores dle ar	- 1	
-			SI irred ("aly" lodging")		
2.0 - 5.0'			dk br Spick trab /grav fill.	:	
	: 		Frag of iron steel, glass, brick		
			very hard/compaced		
5.d-	<u>,</u> ;;		Refusal, no water		-
0 -0.5'	003	9:05			
05-3.0'	004	9:16			
3.0-5.0	005	d:00			
APPROS. SURFACE	E ELE, (FT-MSL)	TEST PIT SKETCH:		
TOTAL DEPTH					
DEPTH TO BEDROCK				. •	
DEPTH TO MOTTLING					· .
DEPTH TO ROOTS					
DEPTH TO WATER					
WERE PHOTOS TA	AKEN?				•
METHOD OF SAM	IPLE COLLECT	ION			
COMMENTS					

20 Test Pit # ____ Location: (1)

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	13:55
Sample Prefix:	804051202- / ACD-SS- C.6
Logged By:	MP

Contractor: Operator: Backfill:



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-)" - 0			Asphalt		
0 - 3"			c. Sand clay & gravel. loose dry	· · ·	
3" - 12"			layer of rock		
12 -16"			Silt sond gravel dauk brown		
16 - 33"			rocks (1-5") blue green	•	
23 - 47"			gravel, some coarse 'sand t silt, brown trace brick t wire		
47" -			water. gravel trace C, sand &		
		-	silt,		
0 - 0,5	040/(0-5)	14:20		•	
0,5-3'	041/(.5-3)	14:00			
3-4'	042/(34)	14:10			

APPROS. SURFACE ELE. (FT-MSL)
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: Nend of site, pic 32-33

TEST PIT SKETCH:

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Test Pit # ______

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	
Sample Prefix:	804051205- / ACD-SS-
Logged By:	LMG

Contractor: Operator: Backfill:



	DEPTH	SAMPLE			USCS	FIELD
	trom to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
	0 - J''			Asphalt	·	
	<u> </u>			Concrete w/ 19 stones		
	10" - 3'			C-VC Sand, Some forquel, 9 lass		
0	1-1.5'			de brown		
	1 -15'			stig that ash.		
					-	
	1, -9,	010				· · ·
	-					
	-					
	-					

APPROS. SURFACE ELE, (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

METHOD OF SAMPLE COLLECTION	
COMMENTS:	
F:\PAD\ADFLDOPS\FLDOPS\DataSheets\testpitFDS.xls	

	:			BO	RI	NGLOG		SITE ID:	D9-	of		
FUSS&O'NEILL PR				PROJECT: AC Dutton				PROJECT NO: 20040764.A1N			.A1N	
Disciplines to Deliver LOCATION:					Pou	Poughkeepsie, NY WEATHER:						
CONTRA	CTOR:			· · · · · · · · · · · · · · · · · · ·		W	ATERI	EVEL ME	EASUREME	NTS		
OPERATO	DR: RESENTAT	IVE:				DATE	MS	. PT.	WATER	AT	TIME	
DRILLIN	G METHOI):m	lp		[le -	·	
SAMPLIN	G METHO	D: na	<u>sleeve</u> HAMMER F	ALL (IN)	na						•	
BORING	LOCATION	J:					<u> </u>					
GROUNE	ARTED: \\	0N: <u>na</u> 2119105					ļ	l	10	<u></u>		
SAMPLE	PREFIX:	80405	1219- /	ACD-SS-		TIME AND DAT	te of c	OMPLET	ION: $\frac{17}{2}$	[7]		
DEPTH	REC/ PEN	SAMPLE DEPTH	SAMPLE	No. AND TIME		SAMPLE DESC	CRIPTION		STRATA CHANGE	LITHO LOGIC CODE	FIELD TESTING	
		(F1)								-		
0-4	2.0%4.0					· ·						
0-03					(J)	asph	· · · · ·			· · ·		
ما (محرم)					1.00	f-m sa	19r 15	i fill	,		· .	
10,2 800					0	stale fr	0.g.,	Some				
				· .	5.11	~rod stores	, coas	islage	(Php			
11.9	26/	10	804051	219-D2	100	jindo	, 		1			
14-0	2410	6-0		(6-8)	SA	A. Net 4	1.6-5	Jane	1			
			0 14:	15	6.	2-6.6.lg	Store	5.9-5.	4			
2 m	2.00						: 	<u>~ 0 1 0 5</u>	n			
10-19	0.0%					ST and	N CO		5			
					14	grav capps	ans	40 42				
					V.	small (1-	SW	m)Sha	le .			
					B.	over, very	l sot.	- ZIRENI				
						ull of work	OF.					
					ľ			· · ·				
						·	•					
							•	· ·				
							• •					
	VIDINIC	<u> </u>		ΤΤ	REM	ARKS		· · · · · · · · · · · · · · · · · · ·				
	METER	BORING	METHOD	DEPTH	Field I	nstrument-	If	refusal is enco	ountered, descri	be all efforts	usea to contirm.	
					T: 11	Decon: Vec / No / De	dicated De	evice	· · · .	- - -		
PROPORTI	ONS USED:			1	rield						· · · · · · · · · · · · · · · · · · ·	
Trace Little	0 to 10% 10 to 20%	Some And	20 to 35% 35 to 50%		BACI	KFILL		.т-		See M	onitoring Well	
EXAMPLE	DESCRIPTION:	mual. Tinta aike	Trace class (10)	R5/4)	Nativ Bento	e Matenal nite Grout/Chips		10 To	·	_ Comp	letion Report	
SAND, F Moist. Lo	-C, Some F-C g pose. No odor.	ravei; Little silt;	Trace ciay; (10)	с <i>ы</i> г ту	Conc	rete/Asphalt		To	·		· :	
Reviewed	by Staff:				Other	۲	• . •	10		<u> </u>		

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				B	OR	NGLOG		SITE ID:	.04		
Disciplings to Delinge						ECI: AC Dutton PROJECT				2004076	54.A1N
	Disciplin	ies to Delive	<i>r</i>	LOCATIO	ION: Poughkeepsie, NY WEATHER: 2 deg. F, 2-4" snov					snow	
CONTRA OPERAT	CTOR: OR:				WATER LEVEL MEASUREMENTS						
F&O REI	RESENTA	TIVE:	1_			DATE	MS.	PT.	WATER	AT	TIME
SAMPLIN	NG METHO)D:1)D:	sleeve								
BORING	R WT: LOCATIO	<u>na</u> N:	_HAMMER F	FALL (IN)	na		-				
GROUN	DELEVAT	ION: <u>na</u>									
SAMPLE	PREFIX:	7670	51215- / ACD	-SS-		TIME AND DAT	l'E OF CC	MPLETI	ON: <u>12</u> /	/15/05	9:29
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE 1	No. AND TIME		SAMPLE DESC	TRIPTION		STRATA CHANGE	LITHO- LOGIC	FIELD TESTING
$(1-2)^{*}$	25/40	0-05	0041	4(0-5)		ohalt			-		
	0.740					LA DIDA FLICI		no nist			
3"-0.5			7.30	,	d	-C Sand. L	itte c	muel			
			005/011	1.5-3)				h kik			
0.5-1.5		0.5-3	1005/04		s ic	no little aro	wel,	Hace			
			1.9	2	50	nd.)				
1.5-2.5'						110000	<u>00 50</u>	in l			
		3-6.0'	006/04	(3-6)	m	Id DWWN 7.	in an a	ailt.			
			d:9	5	STV	AL MA GYO	mel.	trace	•		
					0.3	rand Kilr	n slag	y. '			
4-4.5	30/4.0				m	-c dk Mou	NN 50	nd,	-		
	1				pi Sm	worized ce	oal, Ma	LCC		· · ·	
15'-48'		5			02	h, pulveri	sed k	iln			
					ast	1		•			
4.8-7.01					ch	unks of ki	in slo	શ્ર			
1					54	trace of f-1	m Sa	Md,			·
					14+H	e ground we	27	•		· ·	
しい					61	N	•	· · ·	· · · ·		
BORING DIAMETER BORING METHOD DEPTH		DEPTH	REMAR Field Ins	KS rument =	If refusa	is encounter	red, describe a	ll efforts use	ed to confirm.		
		.									
					Field Da	on: Yes / No / Dedice	ted Davida	•	· .	•	
PROPORTION Trace 0	IS USED: to 10%	Some	20 to 35%			Jone 105/110/ DealCa		· · ·			
Little 10) to 20%	And	35 to 50%		<u>BACKF</u> Native M	LL aterial		То	• • •	See Monit	
SAND, F-C;	Some F-C grav	el; Little silt; Ti	race clay; (10R5/4)	Bentonit	e Grout/Chips		To	· ·	Completio	on Report
Reviewed by	Staff:				Concrete Other	/ Asphait		· То То	·····		
1	~~~~~								• • —		

				B	ORI	NG LOG		SITE ID:	Db			
FUSS&UNEILL PROJEC						ROJECT: AC Dutton SHEET: PROJECT						
	Discipli	nes to Delive	er	LOCATIO	CATION: Poughkeepsie, NY WEATHER: 2 deg					<u>;. F, 2-4" snow</u>		
OPERAT	CTOR: OR:	1. m.				l v	VATER	LE VEL ME	EASUREM	ents		
F&O REI	PRESENTA	TIVE:	nla			DATE	M	S. PT.	WATER	AT	TIME	
SAMPLIN	NG METHO	D:	sleeve									
BORING	LOCATIC	na N:	_HAMMER F	ALL (IN)	na							
GROUNI DATE ST) ELEVAT 'ARTED: _	ION: na										
SAMPLE	PREFIX:	7670	51215- / ACD	-SS-		TIME AND DAT	TE OF C	OMPLETI	ON: <u>12/</u>	/15/05	<u>10:45</u>	
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE N	lo. AND TIME		SAMPLE DESC	RIPTION	· · · ·	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING	
0-2"	3.0/4.0	0-0.5'	009/04	(0-0.5)	A.	phalt, litt	le onc	panics				
2"-05			10:35		are	wel, little	à 190	MCS,				
		0 (7)	and .	<u>م</u> تر م م ک	m	ed hown	fr	n zand				
0.2-0.1		0.5-5.0	1010/Db(05-30)	gre	ywacke			· · ·			
0, 1-0,8			10.40		dk so	nd, was a	pulik	rized		· · ·		
0.8-1.6					as	h, gravel		· .				
1.0-2.0					dk	Hown of	-m 🗧	sand				
					li	the gravel.	some	ash				
2020		30-6.0'	OULALS		at	- 1.0'		• • • •	· .	•		
2.00			(0:49	5	fi	U, ash, gra	Neli	Male				
					me	d hown f	-W 2	and			· · ·	
4-5'	2.5/4.0				fi	1, pulverized	1 Mi	Uk,		· · ·		
					bra	vel.		• • •				
5-5.5		1			61	V. med br	own	wet				
					4	m sound, s	ണ്	Silt	•			
					Sor	nog small	grø	wel.				
BORI	ING			¥	REMAR	KS						
DIAME	ETER	BORING	IETHOD	DEPTH F	Field Inst	rument=	If refu	sal is encounter	red, describe al	ll efforts use	d to confirm.	
							•		- 	•		
PROPORTION	S USED:			F	ield Dec	on: Yes / No / Dedicat	ed Device			·		
Trace 0 to Little 10	o 10% to 20%	Some And	20 to 35% 35 to 50%	E	BACKFI	<u>LL</u>	•					
EXAMPLE DES SAND, F-C, S	CRIPTION: Some F-C grav	el; Little silt; Tr	ace clay; (10R5/4)) I E	Vative Ma Sentonite	aterial Grout/Chips	· · · · · ·	To To		See Monito Completion	n Report	
Moist. Loose.	. No odor.				Concrete/ Other	Asphalt		To To				
reviewed by S	DIATI:								· · · · · · · · · · · · · · · · · · ·			

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Test Pit # EQ Location:_____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	11:05
Sample Prefix:	804051206- / ACD-SS-
Logged By:	RT

Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS	FIELD
60-			3" asphalt		
0 -0,5'			It br F-C salar (Rund D) lift		
			cn. stone (si H		
0.5-2.0'			JE br-bl Sala Randerstale		
			tr br/on pag highly compacted		
-			Some stag. (as descr. before)		·
2.0 - 3.5			It br VF.F sand + weathered		
			rock + silt, nighly compacted		
			stiff/hard, shale occurs	· .	
			adjacent to fire S.		
3,5' -			refusal-rock, no water.		
0 -0.5	008				
<u>0,0 3,0</u>	609		ана стана br>По стана стана стана стана стана стана стана стана стана стана стана стана стана стана стана стана стана стана с		
APPROS. SURFACE	E ELE. (FT-MSL)		TEST PIT SKETCH:		
DIMENSIONS OF	PIL			÷	
DEPTH TO REDR	<u>~</u>			· • ·	
DEPTH TO MOTT			4		
DEPTH TO ROOT	S S			•	· · ·
DEPTH TO WATE				· · ·	· · ·
WERE PHOTOS TA	AKEN?				
METHOD OF SAM	PLE COLLECTI	ON	1		
			-		
COMMENTS:					
		·····			
				· · ·	
			· ·		
					•

				B	ORI	NGLOG	SITE ID:	E3		·		
	FUSS	&O'N	EILL	PROJECT	: ACD	utton	SHEET: PROJEC	T NO:	ot 2004076	4.A1N		
Disciplines to Deliver LOCAT						ION: Poughkeepsie, NY WEATHER						
CONTRA OPERAT	CTOR:		<u></u>		WATER LEVEL MEASURI					REMENTS		
F&O REI	PRESENTA	TIVE:	.1			DATE	MS. PT.	WATER	AT	TIME		
SAMPLIN	VG METHO	D: <u> </u>	sleeve									
BORING	R WT: LOCATIO	na N:	HAMMER 1	FALL (IN)	na		· · · ·		• •			
GROUN	DELEVAT	ON: na										
SAMPLE	PREFIX:	80405	512 <u>19-</u> /	ACD-SS-		TIME AND DAT	E OF COMPLET	ION:?	3:50	·		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING		
0-4	2.7/ 4.0	-			6,7	3' cr/plv. Que	ph.					
0-25					h	bl stainds	-c stalar		· .			
					50	me cr ston	elshale #	-				
					Var	- proglamic	, mod still	1				
					den	sedry						
25-27					blu	e-gr kilna	sh. wet					
4-8	1.0/10					U .		-		· ·		
4-5	1910				50	the mat	•					
666						$a \leq a + c b \leq c$	bal story					
5-2.6		÷			+-	alass chips.	Sait.	13				
8-12	0,1%,6							•				
8-8.8					m	nd st fm	br sa and	ļ				
					r	/plv shale J	109					
8:8-9,4				·	SA	HA grading "	to mod ding	e/				
QUINT					ŠŦ	it silt who	mall ang chi	βŞ				
1.1.10 10					SA	A to ly	gray- dr	en i				
					is is	Venal-pos	sorthing this	httu				
BOF	UNG	BORING	METHOD	DEDTH	REMA	<u>cket shall s</u> uks	nards (Jimini	(m)	<u> </u>			
DIAM	ETER				Field Ins	trument-	If refusal is encoun	tered, describe	all efforts u	sed to confirm.		
									· · · · ·			
					Field De	con: Yes / No / Dedica	ted Device		· · ·	-		
Trace 0 Little 1	NS USED: to 10% 0 to 20%	Some And	20 to 35% 35 to 50%		BACKF	<u></u>		;		•. •		
EXAMPLE DE	SOME F-C and	al. T inta alles 'T'	men class (10DF	(4)	Native M	Aterial	To	· · · · · · · · · · · · · · · · · · ·	See Mon	toring Well		
Moist, Loos	e. No odor.	ei; Little SBC; 11	ace ciay; (HUKS)	(11)	Concrete	e/Asphalt	10 To	· · · · · · · · · · · · · · · · · · ·	Completi	ωι κεροπ		
Reviewed by	Staff:				Other_		To			•		

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Test Pit # _____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	9:30
Sample Prefix:	804051206- / ACD-SS-
Logged By:	RT



DEPTH	SAMPLE			USCS	FIELD
trom to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -1.01			br-debr f-c SAW cr stone!		
			graw, little orgs/roots dry		
-			10050/ compacted		
1.0 - 3.0			cr concrete/slag-poss kiln	· ·	
	1		brick sand & grav, mostly		
-			solid-lift salar in spaces		
3,0'-			brfc sa, some arow/or		
	:		stone shale		
~~	020				· · · · · · · · · · · · · · · · · · ·
	031				
	035				

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

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

				BC	RING	GLOG		SITE ID:	E5	of	
FUSS & O'NEILL PROJECT			PROJECT: A	: AC Dutton SHEE 1: PROJEC			T NO:20040764.A1N				
Disciplines to Deliver LOCATION:				Poughke	Poughkeepsie, NY WEATHE						
CONTRACTOR:					WATER LEVEL MEASUREMENTS						
OPERATOR:						DATE	M	S. PT.	WATER A	AT	TIME
DRILLING METHOD: mlp						· · · · ·			•		
HAMMER WT: <u>na</u> HAMMER FALL (IN) <u>r</u>					1a						
BORING LOCATION: GROUND ELEVATION:											
DATE ST	ARTED: PREFIX	<u> 31 19 100</u> 80405	<u>.</u> 1219- /	ACD-SS-			FE OF	COMPLET	ION:		· · · · · · · · · · · · · · · · · · ·
										LITHO.	
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LOGIC CODE	FIELD TESTING
D-4	3.0/4.0						. •				
0-04					or p	iv asph					
0,4-1.1					11	Concre	He				
11-2.8					br-bl stained f-C SA			C SA	-		
10.00					WISI	H & & 101	$ \alpha \rangle$	stone			
					or st	rale, plu) br	tragkon	C.	•	
08-30					ct st	meikil	n a	sh			
an 20		,		10-15/20							
4-8'	1.34.0	3-6	8040512	2 · 10	SAA	, COALD	græ	Jellin Or			
				2. /~	KIM	- Litt 1	ral	slog +			
					ash	wet as	5.0	4/-0.3	N s.		•
8-12'	1.5/10				A	Junta 1000	D.X	· ·			
	/ / 4/0				loos	VOITOIN	. 010				
8.8-99	Sen				JAA	saturo	yed	•			
888.80	P ^Q				bl or	Q - V 3	st.	loose			
					peat	1511++1	f-ci	sand 5a	5		•
					5190	ng mat.	, · AN m (pips, U			
986 M	ble car	185	€0B		PINS	rale ch	unks	2			
BORING DIAMETER BORIN		BORING	METHOD	DEPTH	REMARKS Field Instrum	ent=	If	refusal is encou	untered, describ	e all efforts	used to confirm.
		·						· · ·			• •
					Field Deser	Vec / No / Dec	licated D	evice	• •		
PROPORTIO	ONS USED:	s	20 - 250	<u> </u>	Tierd Decon:	1637 1407 DEC			· · · ·		
Little	10 to 20%	And	35 to 50%		BACKFILL Native Mater	ial _		То	· · ·	_ See Mo	onitoring Well
EXAMPLE DESCRIPTION: SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4)			25/4)	Bentonite Gr	rout/Chips <u></u>		To	<u>_</u>	Compl	etion Report	
Moist Loose, No odor.				Other			To		-		
Reviewed by Statt:							• • •	-		,	· · · · · ·

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Test Pit # ______ Eb____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	19:15
Sample Prefix:	804051205- / ACD-SS-
Logged By:	LMG

Contractor:	
Operator:	
Backfill	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 7"			Asphalt		· · · ·
2" - 15'			Some c-vc sand, large gravel trace organics		
1.5'- 2'			coarse gravel. Mace ash.		·
2' -25'			light-mod brown F-m sand		•
2,5' -4,5'			cruched fire brick, trace f-m Sand, little grave!		· ·
4.51			5W	· · ·	
nd -	013	1520			
nd -	014	1525			
					•

APPROS. SURFACE ELE. (FT-MSL)
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:

TEST PIT SKETCH:

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

Test Pit # <u>E</u>S

Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	
Sample Prefix:	804051205- / ACD-SS-
Logged By:	LMG

Contractor;	
Operator:	
Backfill	



DEPTH SAMPLE USCS FIELD NUMBER TIME SOIL DESCRIPTION CODE TESTING from -- to - ว" Asphalt Ð Concrete where bar. dk prown f-csand + Nf. gravel. pulverized shale, crushed stone, very wet/moist, trace sitt Э" 6 6" 3 MDz GW 008 -05' ~3 -3,6' 009 ... --

APPROS. SURFACE ELE. (FT-MSL) TEST PIT SKETCH: DIMENSIONS OF PIT: TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION 8/045 progment COMMENTS: brick down to water + Coal slog, turnace . brick v. 008 ortainedas igh as or Repallast up to 8-12" most apaces. DOg from

Fuss & O'Neill of New York P.C.

-

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

-

-

GENERAL INFORMATION	
Project Name: AC Dutton BCP Site	Site ID (Boring/Well ID): MW-ES
Project Location: POK, NY	Project No.: 20040764. AIN
F&O Engineer/Geologist: NJL	Ground Surface Elevation:
Date of Completion:	Permit #:
Boring Location: A-C-D-E8	E1 Top of Steel Casing:
Drilling Contractor: Todd Syska, Inc.	E1 Top of PVC Casing:
Drilling Method: Geoprobe	Measuring Point: TPS/PVC T _ PVC
WELL CONSTRUCTION	Well Cover (see codes):
Well Casing/Riser Sump (below screen)	Protective Casing
Diameter:in. Diameter:N/Ain.	Diameter: <u>NA</u> in. Type:
Type: Type:	Stick-up:ft Depth to Bottom:ft
Stick-up: <u>2.3′</u> ft. Length:in.	Seal Material:
Screen Intervals	
Screen Interval: $5'$ (10'-5') ft Diameter:	$1^{\prime\prime}$ in. Slot Size: $0 - 010^{\prime\prime}$ in.
Description: PVC Other:	
Type: Perforated / \$lotted Wire-Wrap / Other:	
ANNULAR FILL	
Surface Seal (Ap	proximate volumes if available)
Interval: $4-0$ ft. Tremied: Y	/ N Volume:bags
Description: Concrete TOther: bestonife	
Backfill	
Interval: <u>10¹-5</u> ft. Tremied: Y	/ N Volume:bags
Description: Bentonite Grout / Fill Other:	
Lower Seal	
Interval:ft. Tremied: Y	/ N Volume:bags
Description: Bentonite / Bentonite Pellets / Grout / Other:	
<u>Filter</u> /	
Interval: <u><u><u></u><u></u><u><u></u><u><u></u><u></u><u><u></u><u></u><u><u></u><u></u><u></u><u><u></u></u><u></u><u></u><u></u><u></u></u></u></u></u></u></u>	/ N Volume:bags
Description Sand Filter (type:) / Other:)	
Lower Backfill	
Interval:ft. Tremied: Y	/ N Volume:bags
Description: Bentonite Grout / Fill / Other:	

.
Monitoring	Well Field Data	a Sheet	
Client/Project Name: Project Location:	PROJECT #:		
	Well ID		&ONEILL
71070722-05	MAGEO	Discipli	nes to Deliver
Sample#: 1880 (0 (20-03	Proco		
Elevation Data			
Date: 7/20/2007 Time: 15:45	Well	Diameter (inches):	
Depth (feet) + Correction =	= True Depth Wate	r Column Height:	(feet)
Water Level TPS +		al/foot x 3 factor: x	
Bottom of Well $\gamma_{\mathcal{L}}$ + =	= Volu	me to be Purged:	(gal)
Measuring Device ID#:	Sampler:	AT	
Comments:	Weather:	805° F partly clou	14
General Condition: Good / Needs Repair Protective Steel: OK / Cracked / Leaking / Bent Well # Visible?: OK / N Well # Visible?: OK / N Evidence of rain water between steel and PVC2: Y / I Evidence of ponding around well?: Y / I Gopher-type boles around collar?: Y / I Comments: Y / I Purge Data 15.447 Start Time: 15.447 Stop Time: 16.05 Pump Rate: Volume Purged: Pump Rate: 4.5 Ga	/ Loose / None Is well / Loose / None Is well PU Conce V Curb Bos Curb Conce Curb Bos Curb Bos Comments: (gallons) Well Yield: (curb Curb Curb Curb Curb Curb Curb Curb C	I plumb?: I cock: Good / Broken und cap?: Y / N C Riser: Good / Dama ete collar: OK / Cracked Evidence: Rodents / Inse urb Box: Y / N (key is. C Gasket: OK / Replace Dedicated / Nondedicat Bailer / Peristaltie / Su High / Moderate / Low	ed / None ged / None / Leaking / None cts/ Dame Hex/Pent/Other) / Other red bmersible / Bladder w / Dry
Sample Data		Container Quan	tity Preservative
Date: <u>HD0/07</u> Time: <u>16:05</u> Approx. sample depth: (ft) Weather: <u>54</u> Sampling method: Bailer / Peristaltic / Bladder Bailer type: SS 2" / SS 1.25" / SS Short / D	Sampler: <u>GAT</u> <u>15 °F port(y Cloudy</u> PVC 2" / Other	plastic i plastic i plastic i Amber i Loop (int) 7	NG OH HN Oz
Bailer Cord: Dedicated / Nondedicated Filtered in Field?: No / @ Well / @ Lab Method of Filtration: Pressure / Vacuum / Syringe Pump ID #	/ 0.45u		H()
Field Parameters Not	te: SC calculation based on (t	emp) at time of SC measure	ement.

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4

Instrument ID#Instrument ID#pHTempD7.71 $25.79/^{0}$ (26.3%)3/9

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				H	BORI	NGLOG		SITE ID:_	FZ	-	
	FUSS	&O'N]	EILL	PROJECI	: ACD	utton		SHEET:_ PROJECI	' NO:	<u>of</u> 2004076	4.A1N
	Disciplin	es to Deliver	^	LOCATIO	DN: Pou	ighkeepsie, NY		WEATHE	ER:		
CONTRAC	CTOR:					w	ATER	LEVEL ME	ASUREMI	ENTS	
F&O REP	RESENTA	IIVE:	1			DATE	М	S. PT.	WATER	AT	TIME
SAMPLIN	G METHO	D: <u> </u>	sleeve						-		
BORING 1	LOCATIOI	na V:	HAMMERI	FALL (IN)	na						
GROUND	ELEVATI ARTED: <u>\</u>	0N: na 7/19/65)			- 					<u> </u>
SAMPLE I	PREFIX:	80405	1219- /	ACD-SS-		TIME AND DAT	E OF C	COMPLETI	0N:(1.45	}
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION	• • •	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-4	J.8/4.0						• •	-			
5-0.7	• -				- O	Ibn arby				· · ·	
0.7-1.4					SA	A wildk br	f-m	, 5a15/			
					gr	ON .	· -				•
1.4-28					6	r t-m 50-	Silt	erstore			
						1-3000 r	nod	don AO1	· · · ·		
					Sti	A, SI ma	ł				
4-8	9.X1'0				H.		•				
4-5.6		-				coorse kil	n - n	Mr Seit		· ·	
					- M	ll Waser-m	any)	g Spcs.			
					Śơ	me liner m	at '	2040-			
						PN KINDER	Som	r gran)			
						U. 5+5 6-65	4.4 v	s be sitt			
					4	f-c SA/f gr	av (3	trale Chip	\$)		· · ·
8-12	4.0/				50	1 01 12 0	-				
8-105	1410				5A	HA.	• •			· .	
10.5-12					gri	ading si to br	, gh =	siltw_			
BORI DIAMI	ING ETER	BORING	1ETHOD	DEPTH	Field Ins	RKS O Shale H	OĞ n	usal is encounte	ered, describe :	U all efforts us	ed to confirm.
					-	Ching		· ·			•
					Field De	econ: Yes / No / Dedica	ated Devi	ce			
PROPORTION Trace 0 o Little 10	1 S USED: to 10%	Some And	20 to 35% 35 to 50%		BACKE					· · · ·	
EXAMPLE DES	SCRIPTION:			(A)	Native N	Material	·.	To		See Monit	oring Well
Moist, Loose	50me F-Cgrav 2. No odor.	ei; Little silt; Ti	ace clay; (10R5/	4)	Concret	e/Asphalt		10 To		Completio	m Report
Reviewed by	Staff:				Other_			To			

Test Pit # <u>Fb</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time:	10130
Sample Prefix:	180+051214 / ACD-SS F-6
Logged By:	мр

Contractor:	
Operator:	
Backfill:	



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DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-3"-0			Asphalt cracked		· · ·
0 - 11"			angular gravel, gravel C. sand		· · ·
			d brawn dry poppus rock louter-1.		
11." -70,,			porous rock ayer 1. gray trace silt.		
20 - 46"			'growel, clay. little sand. dry trace on the	· .	
46 -			water, growel + trace sand.		- - -
				•	
D -0,5'	007/0-5)	11:68		•	
0.5-3	008/(53)	11:03			· · · ·
3-6	009/B-6)	NiDb			
-					

APPROS. SURFACE ELE. (FT-MSL)	
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: pic 5-6

TEST PIT SKETCH:

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Test Pit # <u>F7</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time:	9:30
Sample Prefix:	804051214- / ACD-SS-F
Logged By:	MP

Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION		TESTING
4"-0			Arsohalt	· · · ·	
0 -34"			Angular gravel c. sand trace		
			clay d. brown dry loose trace		
-			rails brick and glass		-
34"-			water, same as above:		
0 -0,5'	004/05	10:10			•
0.5-3	005/(.5-3)	10:13			· · ·
3-6'	006/8-6)	10:15		. <u></u>	

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOIS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

COMMENTS: DIC # 3-4

TEST PIT SKETCH:

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

Test Pit # _____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	11:30 (LMG)
Sample Prefix:	804051206- / ACD-SS-
Logged By:	RT

Contractor: Operator: Backfill:



.

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -1.8'			br f-c SA, some gr/apph		
1.8 -2.5			and + cr shale		
2.9-5.0			Load ash (solidified) "kiln		
			brick" porous (like pumice)		
			blast pockets some	-	
			Sand Larav		
J,0'-			water		
	023				
	PGO		• • • • • • • • • • • • • • • • • • • •	•	
				-	

APPROS. SURFACE ELE, (FT-MSL)	
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:

TEST PIT SKETCH:

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

		ÀA ·		·			BORI	NGLOG	SITE ID	: (1	1		
		📄 Fl	USS &	O'NEI	LL	PRC	JECT: AC D	utton	SHEET:	TNO	<u>of</u> · 200	40764A1	/N
	7	Di.	sciplines to	Deliver		LOC	CATION: Pou	ighkeepsie, ny	WEATH	ER: <u>(</u>	loaria	22	
	CONT	RACTO	R:	id				W.	ATER LEVEL M	EASUR	REMENT	S	č
	F&O H	REPRES	ENTATIV	E: <u> </u>		• • • •		DATE	MS. PT.	WA	TER AT	T	IME
	DRILI	LING MI	ETHOD:	<u>geopi</u>	<u>robe</u>			· · ·			· .		
	HAM	MER WT	: <u>na</u>	HA	MMER	FALL (I	N <u>na</u>	· · · · · · · · · · · · · · · · · · ·					
	BORI		ATION:	<u>64-11</u>	sice 1	N MAR.	Bilding						
	DATE	START	EVANONED:	2012105									
	SAMP	LE PREI	FIX:	76805121	3 CRAVI	ACD-SS-	.64	TIME AND DAT	E OF COMPLET	10N: _		· · ·	· .
	DEPTH (FT)	SAMPLE No. AND TIME	SAMPLE DEPTH (FT)	SAMPLE JARS/ PRE- SERVATIVE	REC/ PEN	BLOWS 6"		SAMPLE DESCRIPT	TON		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
	n_u	001	06)	462	17/		f.sond, C	resha nickner	sshr q as and	-		·	
	1	191			148	na	105 dr	I ne oder					н.
		- Witt			•		crish dn/	red clps. 20.	s harry		9"	,	
				- tt			1	· · · · · · · · · · · · · · · · · · ·		Ļ	Ŧ		
	4-8	1			445	W. 614 (L 1)	Wet car Coarse	sant sint possible alc	pock that	L			
	8-12				36/48		Sove	s above		•	8"		
		002 1228	(10-11)	•			day, n dak v	ret, high pl pr./grai/ n	is oder	-	•		
	1-							· · ·					
					,							· .	
r.	j												
	I Di	BORING	В	ORING MET	HOD	DEPI	TH REMAR	<u>KS</u>	If refusal is encount	tered. des	cribe all effe	orts used to	confirm.
		2		xop. ir	بكر	15	- Tro	ion boring u	nar and	W	F (-10	·'')	
							Field De	con: Yes / Nov Dedicat	ed Device		•	,	
	PROPOR Trace	TIONS USEI 0 to 10%	<u>, </u>	Some 20	to 35%		- I ARU DO						
	Linle EXAMPL SAND, Moist. I Reviewe	10 to 20% E DESCRIPT F-C, Some I Loose. No c d by Staff:	TON: F-C gravel; Li odor.	And 35 ttle silt; Trace c	ю 50% lay; (10R5	/4)	BACKEI Native M Bentonit Concrete Other	ILL Iaterial e Grout/Chips e/Asphalt	To To To To	12	∑ . See Cor 	Monitoring npletion Re	g Well port

G:\PAD\ADFLDOPS\FLDOPS\DataSheets\BoringLog061405.doc (Format Revised 11/16/05)

Test Pit # 17 Location: (16

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	1240
Sample Prefix:	804051202- / ACD-SS-
Logged By:	MP

Contractor:	•
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS CODE	FIELD TESTING
30					
-107"			Asphalt		
-76"			Small angular grovel		
- 63"			Asphalt		
-3"-0			Angular rock		
0 - 18"			gravel-trace day, loose trace		
			brick + fine Mick.		
(%"-			water	• .	
0 -0,5	037/66	13:00			

DIMENSIONS OF PIT: TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEND	APPROS. SURFACE ELE. (FT-MSL)
TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEND	DIMENSIONS OF PIT:
DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEND	TOTAL DEPTH
DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE DEPOTOS TAKEND	DEPTH TO BEDROCK
DEPTH TO ROOTS DEPTH TO WATER WERE DEPOTOS TAKEND	DEPTH TO MOTTLING
DEPTH TO WATER	DEPTH TO ROOTS
WEDE DUATAS TAKEND	DEPTH TO WATER
WERE FROIDS TAKEN?	WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION	METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

comments: Nend of site, between building and LI shaped netaining wall, pic 19-17 encountered 2 pipes

Test Pit # 18 Location: 68

Project Name:	ACDutton					
Project Number:	20040764.A1N					
Date:	12/2/2005					
Time:	13/10					
Sample Prefix:	804051202- / ACD-SS-					
Logged By:	MP					

Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS CODE	FIELD TESTING
-2"-0			Asphalt		
0 - 8"			Angular gravel		
			Fountation or slub with 2		
			~H" pipes sticking out of it		
				-	
NO SA	AMPL	ES			
				· ·	

APPROS, SURFACE ELE. (FT-MSL)
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: NW ST SITE pic 18-22 no samples

TEST PIT SKETCH:

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

			B	ORI	NGLOG		SITE ID:	69	of	
	FUSS	&O'NEILL	PROJECT:	ACD	utton		PROJEC	ľ NO:	20040764	4.A1N
	Discipline	es to Deliver	LOCATION	N: Pou	ghkeepsie, NY		WEATHI	ER:		
CONTRAC	CTOR:				W	ATER	LE VEL MI	EASUREME	INTS	
F&O REPI)R: RESENTAT	ſĨVE:		-	DATE	М	S. PT.	WATER.	AT	TIME
DRILLING	G METHOI	D: <u>mlp</u>	a mi:							
HAMMER	WT:	<u>na</u> HAMMER	FALL (IN)	na			······			
BORING I	LOCATION FIEVATI	N: ON: na			· · · ·			·		
DATE ST	ARTED: 1	¥119105	(100.00						, <u>60</u>	
SAMPLE 1	PREFIX:	804051219	ACD-SS-		TIME AND DAT	EOF	COMPLET:	ION: <u>]</u>	<u></u>	
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH SAMPLE (FT)	No. AND TIME		SAMPLE DESC	RIPTION	· · · · ·	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
				0.	time for	0 () •	•		
				KS	fuedal as		.		- -	
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				1.	•	· · ·				.
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	1						· .			
						. •	· · · · ·		:	
BOR DIAM	NING IETER	BORING METHOD	DEPTH	<u>REMA</u> Field In	<u>RKS</u> strument=	If re	fusal is encour	itered, describe	all efforts u	sed to confirm.
		· · · · · · · · · · · · · · · · · · ·			:			• •	:	
				Field D	econ: Yes / No / Dedic	cated Dev	rice		• • •	•
PROPORTIO Trace 0	NS USED: 0 to 10%	Some 20 to 35%	<u>t</u>							· ·
Little 1	10 to 20%	And 35 to 50%		<u>BACK</u> Native	Material	· · ·	То	· · · · · · · · · · · · · · · · · · ·	See Mon	itoring Well
SAND, F-C	Some F-C gra	wel; Little silt; Trace clay; (10R	5/4)	Benton	ite Grout/Chips te/Asphalt		To To		Complet	ion Report
Reviewed by	v Staff:			Other_			To		•	-
	,							· :		

Test Pit # H]

-

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time:	8:00
Sample Prefix	\$4051214 / ACD-SS- HM
Logged By:	MP

-

_	
C	ontractor:
c	Operator:
E	ackfill:



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DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-4"-0			Asphalt		
0 - 14"			C Sand & gravel, trace clay, d brown, dry loose		
M"-41"			comples, gravel trace sand & clay		
41" -			water. gravel below water		
			table - slight petroleumodor. Slight sheep on rocks and water	-	
0-0,5	60	9:00			
0.5-3	003/(5-3)	9:10			
3 - 6'	003/3-6)	9:13			

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

Test Pit # <u>T</u>D_ Location:

-

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	6:30
Sample Prefix:	767051207- / ACD-SS- Lみ
Logged By:	LMG

-

Operator:	
Backfill:	

-



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DEPTH	SAMPLE	7		USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -9,			Asphalt		
2 -15'			large crushed stone little m-c sand dark brown frace organics		
1.5' - 4.5'			some f-m derle brown' sound, trace Silt, large crushed stone. broken		
			concrete chunks, some kiln slag		
Ц'-			GW		
			•		
0 -0,5'	001	8:39			
0,5-3'	00	8:40			
3 -4.5'	003	8:45			
-					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS:

				BC) RI	NGLOG	SI	TE ID:	<u>I</u> 3		
	FUSS	&O'N	EILL	PROJECT: A	AC Du	itton	SF	IEET:	NO	of 2004076	4. A 1N
Disciplines to Deliver					: Pou	ghkeepsie, NY		EATHE	NO: R:_ <u>2 deg.</u>	<u> </u>	now
CONTRA	CTOR:			1		W	ATERLEV	/EL ME	ASUREME	INIS	·····
OPERATO F&O REP	OR: RESENTA	TIVE				DATE	MS. P	Г.	WATER	AT	TIME
DRILLING METHOD: <u>mlp</u>								· .			
HAMMEI	IG METHC R WT:	D: na		ALL (IN)	na				· .		
BORING	LOCATIO	N:				•		·····	. • •		
DATE ST	ARTED:	IOIN: IIa								15/05	14113
SAMPLE	PREFIX:	76705	91215- / ACD	-SS-			E OF COM	APLE IIC	JIN: <u>127</u>	15/05	
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESCI	RIPTION	-	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
"	0.67/	0-06'	025/17	3(0-0,9)		onics all M	own f	sand			
0-2	V. /4 0	0-015	14:21	1	108	Just we de		lle Lam			
2"-8"		0,5-30'	026/IT	\$(0.5-3.0)	f s	and, little c	journe o	an pron	m		
8"-13"			191-1-	-	la	nge growel, so	me m	ed .			
18"-9,					Ki'	in slag					
9,-9'2,					me	d brown fr	he SO	rug			
		2 11-581	יבן דכח	3/0/3.0-5.8)gra	oist, sorre s rvel.	11+, 117	FT-IC	· ·		
		J.0 510	14:43)		· .		•			
4-412'	20"/4.0'				ki1	nslog-	• • •	•••			
4,2-55'					we	t Fine mer	1 mou	n sound	-		
						surgers)		deg.		• •	
5.5-58							•				
					pe	Troior chal		north			
					lae	singurea)	i sand	Kilt	· .		
					Sic		1 22 - 4	/= (()	• .		• .
BOF	UNG	BORINGI	METHOD	DEPTH R	EMAR	KS				·····	
DIAM	ETER	Dordi (d)		F	ield Inst	nument=	If refusal i	s encounter	ed, describe a	ul efforts us	ed to confirm.
							- 	-		·	
				F	ield Dec	con: Yes / No / Dedica	ted Device				
PROPORTION Trace C	NS USED: to 10% 0 to 20%	Some And	20 to 35% 35 to 50%	R	ACKEI	TT			•		
EXAMPLE DE	SCRIPTION:	, nu	55 10 54 10	N N	Native M	laterial		То		See Moni	oring Well
SAND, F-C Moist. Loos	; Some F-C gra se. No odor.	vel; Little silt; T	race clay; (10R5/	(4) B C	ientonite ioncrete	e Grout/Chips /Asphalt		То То	· · · ·	Completie	on Report
Reviewed by	v Staff:			C	Other	·	·	То	·		· · ·

FUSS & O'NEILL Disciplines to Deliver

Revised 10/27/05

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

GENERAL INFORMATION	D7-T49
Project Name: <u>AC Dutton</u>	Site ID (Boring/Well ID):
Project Location: Poughkeepsie, NY	Project No.:20040764A1N
F&O Engineer/Geologist:mlp	Ground Surface Elevation: NA
Date of Completion:12 / 12 / 05	Permit # :
Boring Location: 105 Wof AST Drwn buildings new MW IR	E1 Top of Steel Casing:NA
Drilling Contractor: Jed	E1 Top of PVC Casing: NA
Drilling Method: geoprobe	Measuring Point: TPS / PVC
WELL CONSTRUCTION	Well Cover (see codes):
Well Casing/Riser Sump (below screen)	Protective Casing
Diameter: in. Diameter: in.	Diameter: Type:
Type: Type:	Stick-up:ft Depth to Bottom:ft
Stick-up:ft. Length:in.	Seal Material:
Screen Intervak	040
Screen Interval: <u>7</u> . ft Diameter:	in. Slot Size: 0.000 in.
Description: <u>EVC</u> /Other:	
Type: Perforated / Stotted / Wire-Wrap / Other:	
ANNULAR FILL	
Surface Seal (Approx	imate volumes if available)
Surface Seal (Approx Interval: ft.	imate volumes if available) Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other:	imate volumes if available) Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: Backfill	imate volumes if available) Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Backfill ft. Interval: ft.	imate volumes if available) Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: Backfill ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other:	imate volumes if available) Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other:	imate volumes if available) Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: Backfill ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: AHVC	imate volumes if available) Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: Backfill ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: OHHVC Lower Seal ft. Tremied: Y / N Interval: ft. Tremied: Y / N Description: Bentonite Pellets / Grout / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: Backfill ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: Lower Seal ft. Tremied: Y / N Description: Bentonite Pellets / Grout / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: ft. Tremied: Y / N Description: Bentonite Pellets / Grout / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: ft. Tremied: Y / N Backfill ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: Off V. Lower Seal ft. Tremied: Y / N Description: Bentonite Pellets / Grout / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: ft. Backfill ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: OHHVC Lower Seal ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: ft. Tremied: Y / N Description: Bentonite (type: ft. Tremied: Y / N Description: Send Filter (type: / / Other: / / Other: Lower Backfill Interval:	imate volumes if available) Volume:bags Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: ft. Tremied: Y / N Description: Bentonite Pellets / Grout / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags Volume:bags
Surface Seal (Approx Interval: ft. Tremied: Y / N Description: Concrete / Other: ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other:	imate volumes if available) Volume:bags Volume:bags Volume:bags Volume:bags

Test Pit # ______ []o

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	
Sample Prefix:	804051205- / ACD-SS-
Logged By:	LMG

Contractor:		
Operator:		
Backfill:		



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 2"			then blacktop		
J" - 8"			crushed rock - like ER Hed.		
8" -1.5'			die brown some sand, that a silt Some stone		
1,5' -			bedrock		
_					
-					
6" - 7"	006				
1'-2'	007				
-					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

at surface under blacktop is wated with noteria, no notice of contamunication. COMMENTS: YOCK material

Test Pit # ______ Location:______

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/8/2005
Time:	10:45
Sample Prefix:	767051208- / ACD-SS-
Logged By:	LMG

Operator	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - <u>3</u> "			Asphalt		
@2"-05			tar wated large gravel Sublase, black.		
0.5-1			gravel fill. little med brown f-m Send, mostly 19 glavel, dry		
<u> </u>			pust line	. <u>.</u>	
1, - 9,			dic brown m-+ sand, some groups, slightly moist ann + pullurized brick		
ə [`] - 3 [']			some med at brown sund, place silt. liftle gravel		
3' - 55'			mod brown + m sand little day. Little Small gravel. Very maist no visible		
			GW strange due to proximity tor iver		· · · ·
·					
0 -0.5'	054	11:00		•	
0.5-3'	055	11.05			
3'-5.5'	056	11:16			

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

found throughout no Her

COMMENTS; ER fie nail/pins wood though.

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

				BC)RI	NGLOG		SITE ID:	Iq	6	·	
FUSS&O'NEILL PROJECT:						utton	<u>oi</u> NO: 20040764.A1N					
	Discipline	es to Deliver	*	LOCATION	V: Poughkeepsie, NY WEATH				3 R:			
CONTRAC	CTOR:					W	ATER	LEVEL ME	ASUREM	ENTS		
F&O REP	RESENTAT	IIVE:				DATE	M	S. PT.	WATER	AT	TIME	
DRILLING SAMPI IN	G METHOI G METHO	D:m D:	<u>llp</u> sleeve	il de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	<u> </u>		-		-			
HAMMER	WT:	na	HAMMER F	ALL (IN)	na	······						
GROUND	ELEVATI	№ О№:а	-									
DATE ST.	ARTED: \ PREFIX:	<u>2 19 19</u> 80405	<u> </u>	ACD-SS-		TIME AND DAT	TE OF (COMPLETI	ON: 11'	30		
										· · · · ·		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE 1	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING	
6-4	2.2/40											
n-Dih	, -110				p)	v asph/con	nche	te				
0.6-22	_				8	Vas Vill	wh	slag,				
					Vi	In ash brid	dia	al the				
						in moder	alst	14 dry				
	161							11	· . •			
Ц-8	174.0	_1	C/NJ 051	19-19(25		· .						
1-65		25	200101	11:45		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			2			
				•	pa	- for sile			N ·			
					p b	AT SAIg		y STORY				
						TED) ST						
						1-2101-30	C 7					
		ļ						· · ·				
						· · · ·						
								· · ·	· .		•	
							•					
	X					· · ·	-					
BOR	UNG ETER	BORING	METHOD	DEPTH	REMA Field In	<u>RKS</u> strument=	If re	fusal is encount	ered, describe	all efforts u	sed to confirm.	
						*		•	· · ·		•	
									•			
PROPORTION	NS USED:				Field D	econ: Yes / No / Dedi	ated Dev	rice		· · · ·		
Trace O Little 1) to 10% 10 to 20%	Some And	20 to 35% 35 to 50%		BACK	TILL	· ·			S 14		
EXAMPLE DE SAND, F-C	SCRIPTION: Some F-C gra	vel; Little silt; I	race clay; (10R5/	(4)	Native . Benton	Maternal ite Grout/Chips		Io To		See Mon Complet	on Report	
Moist. Loos	se. No odor.				Concre Other	te/Asphalt		To To		•		
Reviewed by	y Staff:				ounci _					1		

				B	BORING LOG SITE ID:				: J2-			
FUSS & UNEILL PROJECT: Disciplines to Deliner					: AC Dutton PROJECT			CT NO:	['NO: 20040764.A1N			
- Disciplines to Deuber LOCATIC					V: Poughkeepsie, NY WEATHER: <u>2 deg. F, 2-4" snow</u>					<u>now</u>		
CONTRA OPERAT	CTOR: OR:					W	ATER LEVEL	MEASUREMI	ENIS			
F&O REP	RESENTA	TIVE:	alo			DATE	MS. PT.	WATER	AT	TIME		
SAMPLIN	IG METHO)D:	sleeve					· · · · · · · · · · · · · · · · · · ·				
BORING	LOCATIO	<u>na</u> N:	_HAMMER I	FALL (IN)	na		• •			· .		
GROUNI	D ELEVATI ARTED:	ION: na							((1) 2		
SAMPLE	PREFIX:	76705	51215- / ACT	D-SS-		TIME AND DAT	E OF COMPLE	TION: <u>12</u> /	15/05	<u>4 13</u>		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING		
0-5"	3.940	0-0.5	022/52	(0-0,5)	A:	phalt		-				
5'-8"			19:0	8	dk	Nown f-m	sand, so	me				
0 0		0.5-3.0	023/JƏ	(0.5-30)) gri	wel little c	wh. '					
8"-33"			19:10)	as	h, coal (lut	le) moist					
33'-36"					coc	1. petroleur	n odor, mo	Dt.				
							• . •					
36-47"	2.9/4.0	3,0-5.0'	024/53	(3,0-5,0)	ast	n, coal, no	sand					
47-48"			14:1	5	ki	In slog chu	nks					
48-55'					we	t, f-m Sa	nd, gravel		·			
					ALO H	n coal.						
55-60"					pet	roleum so	a ked grave	2, 2				
				、	ĊĎĊ	el pieces, (p	ossivly					
					WO	for survey.)	•				
						,			· :			
BOR	ING	BORING		ראזעד	 REMAR	KS						
DIAM	ETER	BOILING			Field Ins	rument=	If refusal is enco	untered, describe a	ill efforts us	ed to confirm.		
								. ·	•			
PROPORTION	IS USED:			, , , , , , , , , , , , , , , , ,	Field De	con: Yes / No / Dedica	ted Device					
Trace 0 Little 10	to 10% 0 to 20%	Some And	20 to 35% 35 to 50%		BACKF	LL	· · · ·					
EXAMPLE DE SAND, F-C; Moist. Loos	SCRIPTION: Some F-C grav e. No odor.	vel; Little silt; Ti	ace clay; (10R5/	(4)	Native M Bentonit Concrete	aterial e Grout/Chips /Asphalt	To _ To _ 	·	See Moni Completi	oring Well on Report		
Reviewed by	Staff:				Other		To	•	•			

FUSS & O'NEILL Disciplines to Deliver						NGLOG utton Ighkeepsie, NY	: T NO: ER:_2 deg.	J7 of NO: 20040764.A1N L: 2 deg. F, 2-4" snow			
CONTRA	CTOR:					W	ATER LEVEL M	EASUREM	ENTS		
F&O REP	OR: RESENTA	TIVE:				DATE	MS. PT.	WATER	AT	TIME	
DRILLIN SAMPLIN	G METHO IG METHO)D: <u> </u>	nlp								
HAMMEF BORING	R WT: LOCATIC		_HAMMER F	ALL (IN)	na						
GROUNE) ELEVAT ARTED:	'ION: <u>na</u>							\		
SAMPLE	PREFIX:	76705	51215- / ACD	<u>-SS-</u>		TIME AND DAT	E OF COMPLET	ION: <u>12</u> /	/15/05		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE N	No. AND TIME		SAMPLE DESC	RIPTION	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING	
		0-21	012/57	(0-2)	W	se hand a	uger to.				
					4	, After 4'c	uger bind	S		,	
		2-41	013/57	(2-4)	W	P. Likelya	layer				
			11.11		to	-~J' bel	ow grade	14			
					of	Jaggedruck	. or who				
					194	merally si	wind arian.	•			
					10	SUNNWIN	y or accord		•		
							• •	•			
						•	•				
							•	•			
									· · ·		
						· · ·	· · · ·				
							•				
		-									
							•				
BOR DIAMI	ING ETER	BORING	METHOD	DEPTH	REMAR Field Ins	trument ==	If refusal is encoun	tered, describe	all efforts us	sed to confirm.	
					Field De	con: Yes / No / Dedica	ated Device				
PROPORTION Trace 0 t Little 10	IS USED: to 10%) to 20%	Some And	20 to 35% 35 to 50%		BACKE	ILI.	· · · · · ·	•	•		
EXAMPLE DES SAND, F-C;	SCRIPTION: Some F-C gra	vel; Little silt; T	race clay; (10R5/4	4)	Native M Bentonit	faterial e Grout/Chips	To To		See Moni Completi	toring Well on Report	
Reviewed by	Staff:				Other	/ Asphalt	To To				

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FUSS&O'NEILL JTO (UNG) Disciplines to Deliver oF MONITORING WELL COMPLETION REPORT GENERAL INFORMATION GENERAL INFORMATION $M \setminus M$ Project Name: AC Dutton Site ID (Boring/Well ID): Project Location: <u>20040764</u>A1N Poughkeepsie, NY Project No.: F&O Engineer/Geologist: Ground Surface Elevation: NA <u>mlp</u> 12/13 NA /05 Date of Completion: Permit # : Boring Location: Of SN Carner of Brick Ruilling by 140 A1A E1 Top of Steel Casing: Drilling Contractor: Todd NA E1 Top of PVC Casing: Drilling Method: geoprobe Measuring Point: TPS / PVC Well Cover (see codes): ____ WELL CONSTRUCTION Well Casing/Riser Sump (below screen) Protective Casing nml ł Diameter: in. Diameter in. Diameter Type: ____ NC. NC Depth to Bottom: ft Type: Type: _ Stick-up: ft \sim Stick-up: __ ft. Length: _ in. Seal Material: Screen Intervals Slot Size: 1. ()10 1 ft in in Screen Interval: Diameter: Description: PV2/ Other: Perforated (Slotted / Wire-Wrap / Other: ____ Type: ANNULAR FILL Surface Seal (Approximate volumes if available) Interval: ft. Tremied: Y / N Volume: bags Description: Concrete / Other: _____ Backfill Volume: Interval: ft Tremied: Y / N _bags Description: Bentonite Grout / Fill / Other: ______ Lower Seal ft. Interval: O Tremied: Y / N Volume: bags Description: Rentonite / Bentonite Pellets / Grout / Other: Filter ft. Interval: Tremied: Y / N Volume: bags Description: Sand Filter (type: ______) / Other: Lower Backfill Interval: ft. Tremied: Y / N Volume: bags Description: Bentonite Grout / Fill / Other:_____

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	\mathbb{N}	lonitoring	g Well	Field I	Data	Sheet		
Client/Project Name: Project Location:			·	PROJEC	CT #:			ONIETT I
Sample#:	Well ID Mw 140							
Elevation Data				<u>I</u>	g (LN	ng)		
Date: 7/20/200	7	Time: 13:41		3	Well Di	ameter (inches)	: _/	
	Depth(feet)	+ Correction	= True D	epth	Water C	Column Height:		(feet)
Water Level PVC	7.02	+	=		Gal/	foot x 3 factor	: x	
Water Level TPS		+	=		Volume	e to be Purged:		(gal)
Bottom of Well	9:45		=					
Measuring Device ID# Comments:	¢:			Sampler: Weather:	<u>C-AT</u> 805°F	pdrtly (1	ordy	
Well Condition	Checklist	ſ	circle approp	riate item(s):	cross out	if not applicable	el	
Evidence of rain water be Evidence of ponding arou Gopher-type holes around Comments: Purge Data	tween steel and PV nd well?: collar?:	C?: Y / Y / Y /	N N/A		Concrete Other Ew Curb Curb Box G	collar: OK / idence: Roden b Box: Y / casket: OK /	Cracked / L ts / Insects/ P D key is: Hex7 Replace / Ot	eaking (None Sone Pent/Other) her
Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged:	17777 14:09 20 m 5 ga	in 1	(gpm) (gallons)	Purge Dev Device t Comme) Well Yi	rice: CD ype: Bi ents: ield: H	edicated / No ailer / Peristal	tic / Submets	iible / Bladder Dry
Sample Data						Container	Quantity	Preservative
Date: <u>7/70/07</u> Approx. sample dept Sampling metho Bailer typ	Time h:	(ft) Weather: ristaltic / Bladder 1.25" / SS Short	Sampler:	 / Other		Amber plastic Voravial	2 1 2	Hrc1
Bailer Cor Filtered in Field Method of Filtratio Pump ID Field Deco Appearance:	d: Dedicated / R: No / @W n: Pressure / # n: Bailer / Tu	/ Nondedicated /ell / @ Lab Vacuum / Syring] Filter: 1 lbing / Other	e Ou / 0.45u					
Field Parameter	rs	1	Note: SC cal	culation base	d on (tem	p) at time of SC	measurement.	d
Instrument	íD#				``'	Instrument	ID#	· · ·
	рН 7,9	16 Temp 23,4/	00	,			Spec. (Cond.
			74,87	0			2/2	, 7

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and the second sec

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Test Pit # 16 Location: K-7-

 Project Name:
 AC Dutton

 Project Number:
 20040764.A1N

 Date:
 12/2/2005

 Time:
 112/2/2005

 Sample Prefix:
 804051202- / ACD-SS

 Logged By:
 MP

Contractor:	
Operator:	
Backfill	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-3"-0			Aphalt		
0 - 7"			silt some coarse sand + gravel loose dry, trace or opinic delitis roo	ts	
7-21			porous stone-blue/green, some orange	2	
			brick.		
21"-68"			gravel trace fine sand	•	
			J I		
0 - 0,5'	034/02	11:35			
0.5-3	035/167	11:22			
3-6'	036/276)	11:27			
	ŕ				
-					
-					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: Cofsite in parking lot. just wot active RR.

Fuss & O'Neill of New York P.C.

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MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

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GENERAL INFORMATION		
Project Name: <u>AC Duttsn BCP</u>	Site ID (Boring/Well ID): $MW - K2$	
Project Location: POK, NY	Project No .: 20040761.AIN	
F&O Engineer/Geologist:N L	Ground Surface Elevation:	
Date of Completion:	Permit #:	
Boring Location: <u>ACD - KZ</u>	E1 Top of Steel Casing:	
Drilling Contractor: Todd Syska, Inc.	E1 Top of PVC Casing:	
Drilling Method: <u>Geopvobe</u>	Measuring Point: TPS PVC	
WELL CONSTRUCTION	Well Cover (see codes):	
Well Casing/Riser Sump (below screen)	Protective Casing	
Diameter: $\underline{\hspace{0.1cm}}^{\prime\prime}$ in. Diameter: $\underline{\hspace{0.1cm}}^{\prime\prime} \underline{\hspace{0.1cm}}^{\prime\prime}$ in.	Diameter: <u>NA</u> in. Type:	
Туре: Туре:	Stick-up:ft Depth to Bottom: ft	
Stick-up: <u>2.4'</u> ff. Length:in.	Seal Material:	
Screen Intervals		
Screen Interval: 12-7' ft Diameter:	11 in. Slot Size: 0.010 in.	
Description: PVC Other:	* water (a) ~ 5.6 bas	
Type: Perforated (Slotted) Wire-Wrap / Other:		
ANNULAR FILL		
Surface Seal (Approx		
	imate volumes if available)	
Interval: $(p - 0)$ ft. Tremied: Y / N	imate volumes if available) Volume:	
Interval: <u>6-0</u> ft. Tremied: Y / N Description: Concrete / Other: <u>benfonife</u>	imate volumes if available) Volume:bags	
Interval: <u>6-0</u> ft. Tremied: Y / N Description: Concrete / Other: <u>benfonife</u> <u>Backfill</u> (/	imate volumes if available) Volume:bags	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: 660 ft. Tremied: Y / N Backfill Interval: $12-7$ ft. Tremied: Y / N	Volume:bags	
Interval: $6 - 0$ ft. Tremied: Y / N Description: Concrete / Other: $66 - 6$ ft. Tremied: Y / N Backfill Interval: $12 - 7$ ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other:	imate volumes if available) Volume:bags Volume:bags	
Interval: $6 - 0$ ft. Tremied: Y / N Description: Concrete / Other: $66 - 6$ ft. Tremied: Y / N Backfill $1 - 7$ ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: Lower Seal	imate volumes if available) Volume:bags Volume:bags	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: 660 ft. Tremied: Y / N Backfill $1/2-7$ ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: Lower Seal Interval: ft. Tremied: Y / N	Volume:bags	
Interval: <u>6-0</u> ft. Tremied: Y / N Description: Concrete / Other: <u>benfonite</u> <u>Backfill</u> / / Interval: <u>12-7</u> ft. Tremied: Y / N Description: Bentonite Grout / Fill) / Other: <u>Lower Seal</u> Interval: <u>ft</u> . Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: <u></u>	imate volumes if available) Volume:bags Volume:bags	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: $66/6n/66$ Backfill / / Interval: $12-7$ ft. Tremied: Y / N Description: Bentonite Grout / Fill / Other: Lower Seal Interval:ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: Filterft. Tremied: Y / N	imate volumes if available) Volume: bags Volume: bags Volume: bags	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: $ben font felt ben font felt ben font felt Backfill 12-7 ft. Tremied: Y / N Description: Bentonite Grout / Fill Other: felt Tremied: Y / N Description: Bentonite Grout / Fill Other: felt Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: felt Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: felt felter felter Interval: 7-6 felt Tremied: Y / N $	Volume:bagsbag	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: $ben font felt ben font felt Backfill 12-7 ft. Tremied: Y / N Description: Bentonite Grout / Fill) / Other: ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: ft. Tremied: Y / N Description: Sentonite / Bentonite Pellets / Grout / Other: ft. Tremied: Y / N Description: Sentonite (type: ft. Tremied: Y / N $	imate volumes if available) Volume: bags Volume: bags Volume: bags Volume: bags	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: $ben font felt Backfill 1 1 Interval: 12 7 ft. Tremied: Y / N Description: Bentonite Grout / Fill) / Other: Lower Seal Interval: ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: Filter 7 Interval: 7 ft. Tremied: Y / N Description: Bentonite / Bentonite Pellets / Grout / Other: Filter 1 Tremied: Y / N Description: filter (type:) / Other: $	imate volumes if available) bags Volume: bags Volume: bags Volume: bags Volume: bags	
Interval: $6-0$ ft. Tremied: Y / N Description: Concrete / Other: $ben font felt Backfill 12-7 ft. Tremied: Y / N Description: Bentonite Grout / Fill) / Other: $	Volume:bags	

	ing Well Fi	eld Data	Sheet			
Client/Project Name: Project Location:	PR	OJECT #:			NIETI I	
Sample#: 788070720-0	y p	Well ID 16 KZ		CUSS&C Disciplines to .	D INEILL Deliver	
Elevation Data	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		
Date: <u>772072007</u> lime: 77	-77 - T D 1		lameter (inches):			
Water Level PVC 9.08 +	on=-Inue-Depth =	Water (Gal	Column Height: /foot x 3 factor:	x	(feet)	
Water Level TPS + Bottom of Well 0.26 +	=		e to be Purged:		(gal)	
Measuring Device ID#: Comments:	S	Sampler: <u>64</u> 7 Weather: <u>80</u>	F Partly (londy		
Well Condition Checklist	[circle appropriate	item(s); cross out	if not applicable]	·		
Well # Visible?: X / N Well Cap: Good / Broken / None Evidence of rain water between steel and PVC?: Evidence of ponding around well?: Gother-type holes around collar?:	Y / A Y / A Y / A	Kust around PVC Concrete Other Eu	t cap?: Y / F Riser: Good / collar: OK / idence: Rodents	Damaged Cracked Le J Insects/N	None aking None	
Comments:		Cur Curb Box C	b Box: Y /(I Fasket: OK /	Key 15: Hex/1 Replace / Oth	Pent/Other) er	
Comments: Purge Data		Cur Curb Box C	b Box: Y /(I Gasket: OK /	V(key 15: Hex/) Replace / Oth	Pent/Other) er	
Comments: Purge Data Start Time: 15' DP Stop Time: 15' 2P Total Time Purged: Pump Rate: 4,25 gal	Pu Pu I (gpm) (gallons)	Curb Box C Curb Box C Inge Device: Device type: Comments: Well Yield: H	Box: Y /(I Casket: OK / Dedicated / Nor ailer / Peristahi ligh / Moderate	Acey is: Hex/J Replace / Oth idedicated ic / Submersi e / Low / D	Pent/Other) er ble / Bladder ory	
Comments: Purge Data Start Time: 15' DP Stop Time: 15' 2P Total Time Purged: Pump Rate: 4:25gal Sample Data	Pu Pu I (gpm) (gallons)	Curb Box C Curb Box C Device type: E Comments: Well Yield: H	Box: Y /(I Casket: OK / Dedicated / Nor ailer / Peristalti Ligh / Moderate	Acey is: Hex/J Replace / Oth adedicated C / Submersi e / Low / D Quantity	Pent/Other) er ble / Bladder bry Preservative	
Comments: Comments: Purge Data Start Time: $15' D^{D}$ Stop Time: $15' 2D$ Total Time Purged: $4.75 gal$ Volume Purged: $4.75 gal$ Sample Data Date: $4/20/07$ Time: $15' 45$ Approx. sample depth: (ft) Weat Sampling method: Bailer / Peristaltic / Bl Bailer type: SS 2" / SS 1.25" / SS S	Image: Property of the second seco	Curb Box C Curb Box C Inge Device: Device type: Comments: Well Yield: Well Yield: 47 Cond C	Bax: Y /(I asket: OK / Dedicated / Nor ailer / Peristakti Tigh / Moderate Container Amber Plastic Plastic Plastic	(key is: Hex/J Replace / Oth $dedicatedc / Submersi e / Low / DQuantity2dedicatedc / Low / D$	Pent/Other) er ble / Bladder pry Preservative Va 0 7 ANOz	
Comments: Comments: Start Time: $15' 0!^{\circ}$ Stop Time: $15' 2!^{\circ}$ Total Time Purged: $15' 2!^{\circ}$ Pump Rate: $4:75 9:1^{\circ}$ Volume Purged: $4:75 9:1^{\circ}$ Date: $7/20!07$ Time: $15' 2!^{\circ}$ Sample Data $4:75 9:1^{\circ}$ Date: $7/20!07$ Time: $15' 2!^{\circ}$ Approx. sample depth: (ft) Weat Sampling method: Bailer / Peristaltic / Bl Bailer type: SS 2" / SS 1.25" / SS 5 Bailer Cord: Dedicated / Nondedicat Filtered in Field?: No / @ Well / @ Lab Method of Filtration: Pressure / Vacuum / S Pump ID #	Pu Pu Pu (gpm) (gallons) 	Gurb Box G urge Device: G Device type: E Comments: Well Yield: H 47 7 Cland G her	Pasket: OK / Pedicated / Nor ailer / Peristahi Tigh / Moderate Container Amber Plastic Plastic Plastic VOA Viu	Replace / Oth Replace / Oth idedicated c / Submersi c / Low / D Quantity 2 2 1 2 2 2 1 2 2 2 3 2 3 3 3 3 4 3 3 3 4 3 3 3 3 3 4 3 3 3 3 4 3 3 3 3 3 3 3 3	Pent/Other) er ble / Bladder ry Preservative $V\alpha 0 P$ A/VO_2 H/C	
Comments: Comments: Start Time: 15:00 Start Time: 15:00 Stop Time: 15:00 Total Time Purged: 15:00 Pump Rate: 15:00 Volume Purged: 15:00 Pump Rate: 15:00 Volume Purged: 4:1259al Time: 15:00 Date: 7/20/07 Time: 15:00 Approx. sample depth: (ft) Weat Sample Data Bailer Cord: Bailer / Peristaltic / Bl Bailer Cord: Dedicated / Nondedicat Filtered in Field?: No/ @ Well / @ Lab Pump ID # Field Decon: Bailer / Tubing / Othe Appearance:	Pu Pu (gpm) (gallons) Pu I (gpm) (gallons) Pu I I Sampler: <u>Gr</u> (gallons) Crr Adder Short / PVC 2" / Other ted Syringe r: 10u / 0.45u er Note: SC calculati	Curb Box C Curb Box C Device type: E Comments: Well Yield: F A T Cond C ner ion based on (tem	Pedicated / Nor ailer / Peristaki Tigh / Moderate Container Plustic Plastic Plastic VOA Viu	Aced Is: Hex/J Replace / Oth Indedicated C / Submersi C / Low / D Quantity 2 2 4 4 6 6	Pent/Other) er ble / Bladder ry Preservative Va 0 f HNO_3 HC	
Comments: Comments: Start Time: 15'0? Start Time: 15'0? Stop Time: 15'0? Total Time Purged: 15'0? Pump Rate: 15'0? Pump Rate: 15'0? Volume Purged: 4:75 gal Sample Data Date: 7/20/07 Time: 15:05 Approx. sample depth: (ft) Weat Sample Data Bailer type: SS 2" / SS 1.25" / SS 5 Bailer Cord: Dedicated / Nondedicat Filtered in Field?: N@/ @ Well / @ Lab Pump ID # Field Decon: Bailer / Tubing / Othe Appearance: Field Parameters Instrument ID#	Pu Pu I (gpm) (gallons) Sampler: Gr (gallons) ther: Gr por fly adder Short / PVC 2" / Other ted Syringe r: 10u / 0.45u or Note: SC calculation	Curb Box C	Plastic Plastic	Meey is: Hex/J Replace / Oth indedicated ic / Submersi e / Low / D Quantity 2 1 2 1 2 6 3 2 6	Pent/Other) er ble / Bladder bry Preservative $Ma 0 f + MO_3 + MC_3 + MC_1$	
Comments: Comments: Start Time: Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Time: Volume Purged: Time: Joint Colspan="2">Colspan="2" Start Cord: Dedicated / Nondedicate Filtered in Field?: NO / @ Well / @ Lab Method of Filtration: Pressure / Vacuum / S Pump ID # Filte Field Parameters <td colsp<="" td=""><td>Pu Pu Pu (gpm) (gallons) $\underline{\qquad} (gpm)$ (gallons) $\underline{\qquad} (gpm)$ (gallons) (gall</td><td>Gurb Box G</td><td>Plastic Plastic</td><td>$\frac{(key is: Hex/J}{Replace / Oth}$ $\frac{1}{Replace / Oth}$</td><td>Pent/Other) er ble / Bladder ble / Bladder ry Preservative Va 0 7 A/VO_2 H/C H/C ond.</td></td>	<td>Pu Pu Pu (gpm) (gallons) $\underline{\qquad} (gpm)$ (gallons) $\underline{\qquad} (gpm)$ (gallons) (gall</td> <td>Gurb Box G</td> <td>Plastic Plastic</td> <td>$\frac{(key is: Hex/J}{Replace / Oth}$ $\frac{1}{Replace / Oth}$</td> <td>Pent/Other) er ble / Bladder ble / Bladder ry Preservative Va 0 7 A/VO_2 H/C H/C ond.</td>	Pu Pu Pu (gpm) (gallons) $\underline{\qquad} (gpm)$ (gallons) $\underline{\qquad} (gpm)$ (gallons) (gall	Gurb Box G	Plastic Plastic	$\frac{(key is: Hex/J}{Replace / Oth}$ $\frac{1}{Replace / Oth}$	Pent/Other) er ble / Bladder ble / Bladder ry Preservative Va 0 7 A/VO_2 H/C H/C ond.

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Test Pit #	
Location:	VЧ

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	8120
Sample Prefix:	804051202- / ACD-SS-
Logged By:	MP

Contractor:	
Operator:	
Backfill:	

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DEPTH	SAMPLE			USCS	FIELD
trom to	NUMBER	TIME	SOIL DESCRIPTION	CODE	IESTING
-5 -0"			Asphalt(Eside) 4" concrete (Waid		· · ·
"8-8"			f sands trace gravel dark brown loose, dry	•	
8" - 39"			porous rock layer mostly blue green some reddish orawar	-	
			Spots (oxidized)	· · · · ·	
29" -			bedrock		•
0 - 1'	039/K4 (6-1)	8:30			
					· · ·

APPROS. SURFACE ELE. (FT-MSL)	
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: DIC 475

TEST PIT SKETCH:

Test Pit # K6

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Project Name:	ACDutton	
Project Number:	20040764.A1N	
Date:	12/8/2005	
Time:	1020	
Sample Prefix:	767051208- / ACD-SS-	
Logged By:	LMG	

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Contractor:	
Operator:	
Backfill:	

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DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -)"			Asphalt		
<u>)</u> " - 05'			anothed store (12") sub-base, some		
09'-1'			some m-f sand dark bown some gravel, no organics, dry.		
1'-			frost line		
1' - 2.5'			Jork brown mf Sand, trace killnost Slag, tlace brick. Some byge gravel		
			put 1' + 1.5' there is a 1" line of Ivery eavily sand possibly propartic layor, slightly	Moist.	
2.5'-3.5'			long 0-4" preces of crubbed kills blog		
35'-3.7			dark brown m-t sand, little gravel Sightly moist, no GW, retuse at 3.	7'	
-			, t		
0-0,9	052	10:30			
0.53	053	10:35			

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

COMMENTS:

Test Pit #	_12_
т .'	10

Contractor: Operator: Backfill:

Location: <u>KS</u>

	FUSS & O'NEILL Discipline: to Deliver	•	

Project Name:	ACDutton			
Project Number:	20040764.A1N			
Date:	12/2/2005			
Time:	850			
Sample Prefix:	804051202- / ACD-SS-			
Logged By:	MP			

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-9 ₄ - 0			ASObalt		
0 - 16"			gravel trace c sand + clay. Hoose dry dark troum	· .	
16 - 30"			rock layer-bard		
30"-38"			porous rock		
38"-			bedrock-dry		
0 -11	003/168	9.JD			
				· .	
**					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: 044 SE corner of wick building 6-8

Test Pit # 10

Location:

Project Name:	AC Dutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	
Sample Prefix:	804051205- / ACD-SS-
Logged By:	RT

Contractor:	
Operator:	
Backfill:	



FUSS&O'NEILL Disciplines to Deliver

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 -1.0			pe ballast & Cr. rock. 1: ++ br salar slightly moist.		
1.0-15			dk bridkgr F-m 'SA; Hs, littgrav SI mst.		
1.5 - 2.0'			or f-c SA, some RRb +f-m ang vocks.		
2.0`-			refusel - unknown surface.		
			probably rock. some matlooks		
-	· · · · · · · · · · · · · · · · · · ·		live coal or augh slog, o ther frogs		
			are dkibl glassy stag.	1	
1.0-1,2'			rock either coard wibiglasy		
			tarry subst of this is solid thru		
			(slog) see photo; photosland 2		
			- ·		-
1.0-20	005	19:90		 	

APPROS, SURFACE ELE. (FT-MSL) TEST PIT SKETCH: DIMENSIONS OF PIT: TOTAL DEPTH DEPTH TO BEDROCK DEPTH TO MOTTLING DEPTH TO ROOTS DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION sample collected at 1.0-2.00 0.0-1.0' isall COMMENTS: 4 KIGVOUR VDC

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				B	ORI	NGLOG		SITE ID:	L7		
FUSS&O'NEILL PROJECT					OJECT: AC Dutton SHEET: PROJECI				of 1' NO• 20040764 A1N		
	Disciplin	es to Delive	r	LOCATION	N: Poughkeepsie, NY WEATHER: 2 deg. F, 2-4" snow					now	
CONTRACTOR:						W	ATER I	LEVEL M	EASUREM	ENTS	
F&O REPRESENTATIVE:						DATE	MS	5. PT.	WATER	AT	TIME
DRILLING METHOD: <u>mlp</u> SAMPLING METHOD: sleeve									• .		
HAMMEI	RWT:	na Ni	_HAMMER H	FALL (IN)	na						
GROUNI	DELEVAT	ION: na									
DATE ST SAMPLE	ARTED: PREFIX:	76705	51215- / ACD	-SS-		TIME AND DAT	E OF C	OMPLET	ION: <u>12</u>	/15/05	13:53
DEPTH	REC/ PEN	SAMPLE DEPTH	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION		STRATA	LITHO- LOGIC	FIELD
(11)	201	(FT)	no ho l				AL L.	· · · · ·		CODE	
0-3"	3.94.0	0-05	014/220	(כי ט-ט	Hs	phalt, grau	el STO	NL			
2" ~1"		0.5-3.0	070/121	0,5-3,0)	S	Lasis Di-C	501	nd. littl	e		
5-1			13.50		dik	whend Invide	ma	ngr.			-
					Str	uning Str	ne Cr	inched		, .	
					Coc	l.		1			
7"-20"					UN	ushed pulie	rise	d coal,			
					li	the glass she	Ngz	, owh			
20"-28"					or	20" <u> </u>	Jula	£-m	•		
						nd wet so	meg	ravel	· .		
28"-36"					100	ALL FSOUL	lem	loieus	S		•
					Ju Ju	are Mick M	acer	ned.			· .
	330	2010	BALLA	30-60)	IN.	own f. sa	nd.				
36-43	0.74.0	3.0-0.0	13:57		Se	m same a	al.				
43-44"				, ,	a	sh.	••••				
44-50"					$ \omega$	al, liftle a	oh,S-	fone			
50-55"					(at	-50"					
55-60"					h Ut	and day, w	iet n	ot natu	ro		-
60"-65"					lei	Ithe gravel, h	birde	ned ash	λ.		
BOR	ING ETER	BORING	METHOD	DEPTH	 <u>REMAI</u> Field Ins	trupent=	If refu	isal is encoun	tered describe	all efforts u	sed to confirm
						·····					
l							•	· ·		•	•
PROPORTION	NS USED:				Field De	con: Yes / No / Dedica	tted Devic	e	· · · · · ·		
Trace 0 Little 1	to 10% 0 to 20%	Some And	20 to 35% 35 to 50%		BACKF	ILL			•		
SAND, F-C	SCRIPTION: Some F-C gra	vel; Little silt; T	race clay; (10R5/	(4)	Native M Bentonii	Aaterial e Grout/Chips		To To		See Moni Completi	toring Well on Report
Moist. Loos	e. No odor.	•			Concret Other	e/Asphalt		То	· .		
Reviewed by	Reviewed by Staff:				Janu _			10			

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Test Pit # <u>L</u>3 Location:_____

Project Name:	ACDutton			
Project Number:	20040764.A1N			
Date:	12/13/2005			
Time:	11:50			
Sample Prefix:	379051213- / ACD-SS-			
Logged By:	NJL			



FUSS & O'NEILL Disciplines to Deliver

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-3"- 0			Asphalt	-	
0 - 6"			Angular growel, little medium-fine		
6" - 36"			porous rock. mostly gray. little blue green little oxidized some		
			party loose sand, dary brown		
			some blick mixed in, dry		
36' -			rock too hard for excavator to		
			penetrate. dry.		
·				· .	
0 - 05	005	1250			
0.5-3	006	12:55			

APPROS, SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

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COMMENTS:

3

TEST PIT SKETCH:

Test Pit # Location: LY

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/13/2005
Time:	13:00
Sample Prefix:	379051213- / ACD-SS- L-4
Logged By:	NJL

Contractor:]
Operator:		
Backfill:		1

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FUSS & O'NEILL Discipline: to Deliver

DEPTH	SAMPLE			USCS	FIELD
Irom to	NUMBER		SOIL DESCRIPTION	CODE	TESTING
-5" 2"			Asphalt		
			item 4		
0 - 4"			Angular gravel. Jark Mown. med -		
4 -13"			light gray porous rock. dry.	-	
13 -26'			light gray porous rock + dark Moun med - fine grain sand dry.		
26 - 33"			gray potous rock. + red and fire brick. dry.		
33"-44"			buisharpy partly metamorphosed		•
44 - 64"			dark brown fine grained soil porous rock, red brick, motor-		··
-			manphased rock. dark gravel clay.		
64"-			water		
0-0,5	009	14:16			
0.5-3'	800	14:12			
3-6'	001	14:05			
APPROS. SURFACE	EELE, (FT-MSL)	l	TEST PIT SKETCH:	•	
DIMENSIONS OF	PIT:				
TOTAL DEPTH					• • •
DEPTH TO BEDRO					
DEPTHTOMOT	LING	- · · · · - · · · · · · · · · · · · · · - ·		•	· · · ·
DEPTH TO WATE	<u>p</u>				
WERE PHOTOS T	AKEND	<u>.</u>		· . •	
METHOD OF SAM	PLE COLLECT	ON		•	•••••
COMMENTS: p[(C#3		1		

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Test Pit # <u>L5</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/13/2005
Time:	14:00
Sample Prefix:	379051213- / ACD-SS- 65
Logged By:	NJL

Contractor:	
Operator:	
Backfill:	7



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-64"			Asphalt		
-4" - 0			ítem 4		
D - 19"			angular growel, littlered brick, little fire brick, dark modifing arained		
			Sand. gray porous voce. Toose, dry.		
19" -			rock too hard for excavator to		· ·
			penetrate, dry.		
				· · · · ·	
0 -0.5	610	14:36			
0,5-3	011	14:40			
					·····

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTILING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

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COMMENTS: pic #-2

TEST PIT SKETCH:

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				B	ORI	NGLOG	SITE I	D:		· · · · · · · · · · · · · · · · · · ·
	FUSS	&O'N	EILL	PROJECT:	ACD	utton	SHEE PROJE	1: ECT NO:	ot 2004076	4.A1N
	Disciplin	ies to Delive		LOCATION	ON: Poughkeepsie, NY WEATHER: 2 deg. F, 2-4" snow					now
CONTRA	CTOR:					W	ATER LEVEL	MEASUREM	ENTS	
F&O REP	RESENTA	TIVE:				DATE	MS. PT.	WATER	AT	TIME
SAMPLIN	G METHO IG METHO	D: <u> </u>	nip sleeve							
HAMMEI BORING	R WT: LOCATIO	 N:	_HAMMER1	FALL (IN)	na	· ·			- .	
GROUNI DATE ST) ELEVAT 'ARTED:	ION: <u>na</u>					·			
SAMPLE	PREFIX:	7670	51215- / ACI)- <u>\$</u> \$-		TIME AND DAT	E OF COMPLE	ETION: <u>12</u> /	15/05 \	1732
DEPTH (FT)	REC/ PEN	REC/ SAMPLE PEN DEPTH SAMPLE No. AND TIME (FT)				SAMPLE DESCR	IPTION	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
D-3"	3.0/4.0	0.0-0.5	014/47	(0-0.5)	Pr.	pholt asauc	r L			
2"-10"	1 1 -	0530	015/17/	6 105-30)		1 hannin 1	- na sou l			· · · ·
2 - 10		0,5-2,0	11:3	,0 ,0	m Sir	m sin aral	el drul	J		
					pu	szen.	~ 17			
1.0-1.51					Je	brown /blac	k wal, M	ace		
					rus	sty metal. tr	l			
1.5-2.0					al	h, fire muu	k, genera	Q		
20-30		3.0-6.5	016/176	0-65)	f		Colles			
0.0 0.0			1173	ン	m	I Trace over	tenta su			
					וכן זיט	thin. Little	eash at	3,	· ·	
4-4.5'	2.5/4.0		E		co	al, Mick, ou	shiluttle			
					fi	re sound.				
4.5-6,5					μ	U med size	gravel;			• •
					lit	Heash. So	me finé			•
					dk	now sand	d.little			
					50	it. COOL puls	seure			
					p.	- YW			. .	
BOR DIAM	ING ETER	BORING	METHOD	DEPTH	REMAR Field Inst	<u>KS</u> rument =	If refusal is enco	untered, describe a	ll efforts us	ed to confirm.
						, .	• •		•	
					Field Dec	con: Yes / No / Dedicate	ed Device	· · · · · ·	•	
PROPORTION Trace 0	IS USED: to 10%	Some	20 to 35%			TT				
EXAMPLE DE	SCRIPTION:	∩uŭ	JJ 10 30%		Native M	LL aterial	To		See Monit	oring Well
SAND, F-C; Moist. Loose	Some F-C grav e. No odor.	vel; Little silt; T	race clay; (10R5/	(4) [] [0	Bentonite Concrete	e Grout/Chips /Asphalt	To To	· · · · ·	Completio	n Report
Reviewed by Staff:					Other	<u> </u>	To			

			ń.	Ē	BORI	NGLOG		SITE ID:	L9	of	
	FU33 Disciplin	&ON les to Delive		PROJECT	: AC Dutton PROJECT NO: 20040764.A1N WEATHER: 2 deg. F. 2-4" snow			64.A1N			
CONTRA	CTOR:		• • • • • • • • • • • • • • • • • • • •		WATER LEVEL MEASUREMEN				ENTS	<u></u>	
F&O REP	OK: RESENTA	TIVE:	1			DATE	M	S. PT.	WATER	AT	TIME
SAMPLIN	G METHO	D:n)D:	sleeve				•		,		
BORING	LOCATIO	 N:	_HAMMER F	ALL (IN)	na						
DATE ST	DELEVAT	ION: na							<u></u>	115/05	12-10-
SAMPLE	PREFIX:	76705	51215- / ACD	-SS					01N: <u>12/</u>	/ 15/ 05	<u> </u>
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE N	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-2"	2.5/4.0	0-0,5'	017/191	0-0.5)	n-	phalt, litt	le or	ganics	• · · · · · · · · · · · · · · · · · · ·		
2"-0.51			13:12	•	St	one sub be	gibe,	partial) I		
		6.201	na lial	06-76)	pu	ueruge co.	ncrei	rl.			
0.5-15'		0.2-29.	010/21(15	m	ed & dk Mou	on t	- M SQUM			· ·
19-75					du	wel (shall)	, 000	I Moker	n		· .
1. 5 2. 5					gr	avel, little	f=n	n said	,		
					1	acesilt.					
					4	N-35-4.0)				
								•			
							• .			· ·	
								• •			
						·· ·	·				
						<u>.</u> .					
								· · · · ·			
							•	•			
							. :	•			· ·
BOR	ING	BORING N	1ETHOD	DEPTH	REMAR Field Inc	KS	 T££		<u> </u>	11	C
					1 1.11 1115		n ren	LICOUNTE	icu, ucscribe a		eu to coniirm.
					Eicld D-	Non Vog / NI- / TD- 1'	*		•		
PROPORTION Trace 0 t	S USED:	Some	20 го 35%		Ticki De	UIL ICS/ INO/ Dedica		c	·		
Entle 10 EXAMPLE DES SAND, F-C, 1 Moist. Loose	to 20% SCRIPTION: Some F-C grav 2. No odor.	And vel; Little silt; Tr	35 to 50% ace clay; (10R5/4	•)	BACKFI Native M Bentonita Concrete	LL aterial Grout/Chips /Asphalt		To To To	· · · · · · · · · · · · · · · · · · ·	See Moni Completi	toring Well on Report
Reviewed by:	Staff:				Other		-	To	•		

Test Pit # M2 Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time;	
Sample Prefix:	804051206- / ACD-SS-
Logged By:	RT

.



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS CODE	FIELD
0 05	Ø				
0 - 5.01			or. Stone + Salgr with solid		
			kilnash/slog. dry, loose,		
F -			very compacted		
5.0-			refusal no water		
0,0-0,5	610				
,0 کے جے 0	013				
2.0-5.0'	014				
					-
					· · ·

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENT'S:

Test Pit # <u>MU</u> Location:____

Project Name:	AC Dutton	
Project Number:	20040764.A1N	
Date:	12/6/2005	
Time:		
Sample Prefix:	804051206- / ACD-SS-	
Logged By:	-RT	



DEPTH SAMPLE USCS FIELD from -- to NUMBER TIME SOIL DESCRIPTION CODE TESTING - 0,3 coal +asph. 0 0.3-3.0 br f-c St, cr shale + stores Some kin ash (solid) dry 100sel compaced 3.0-Solid Kilnash, tr salgn/s very hard compacted 3.0-. refusal 0-0.9010 1.0-25011 ---

APPROS. SURFACE ELE. (FI'-MSL)	
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:

TEST PIT SKETCH:

Test Pit # 10

Location: M6

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	7:46
Sample Prefix:	804051202- / ACD-SS-
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH SAMPLE USCS FIELD from -- to NUMBER TIME SOIL DESCRIPTION CODE TESTING - 0" PSphalt gravel + f sand loose, dry, r+ brown. -______ 0 gravel Some C Sand little clay on N wall Hue/green rock, smells like sulfur. also trace brick tfine brick - 48" 2 10 -19" --48"bedrock-no water •... 019 0-1' 8:07 - 3' 020 1:51 ١ - 41 3 02 8:00 -----

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPIH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: CUNTER Of Site. pic#1-3
Test Pit # <u>M8</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	9:10
Sample Prefix:	767051207- / ACD-SS- M&
Logged By:	LMG

Contractor: Operator: Backfill:



.

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0-2"			Asphalt		
2."-0,5'			large crushed stone base, Place M-C sand, place organics		
0.5-25			dark brown ni-c sand, large Stone (2-3") little kilnslag		
**			trace brick.		
2.5 - 3.5'			kilnslag, Macem. sand dark		
<u>3,5 - 4,5'</u>			m. dk brown sand, some gravel. trace It prown f-m sond place sitt		
4.5-51			It brown clay, W silt likely notived native	· · ·	
5' -			GW	•	
0-0,5	004	9:20			
0.5-3.	005	925			
3-5'	006	9:30			-

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

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

COMMENTS:

Test Pit # ________ Location:_____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/5/2005
Time:	
Sample Prefix:	804051205- / ACD-SS-
Logged By:	We RT D

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DE SCRIPTION	CODE	TESTING
0 -1.0			JKpr f-c tound of grt sa		
			asph/shale frag, glass/br frag		
			Mst-wet		
1.0-3.0			SAA w more f-m gr very little		_
		:	Sandbill, very sat *		
3,0-			water		
				-	
0 -1.0	003	12:10			
1.0-3.0	004	12':15			
				-	-
-				· ·	

APPROS. SURFACE ELE, (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	_
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: * 1; 14 10 matrix to Sample-mostly Some RR ballburg, furnace brick freq. pt All.Sh VOU lo ssible tim PD

Test Pit # <u>N5</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/12/2005
Time:	1320
Sample Prefix: 15	804051212- / ACD-SS-NG
Logged By:	мР

Contractor: Operator: Backfill:



DEPTH	SAMPLE	TIME		USCS	FIELD
	NUMBER	TRAFE	SOIL DESCRIPTION	CODE	TESTING
-)" -0			Asphalt		
0 -)"			layer of nearly layed brick (red		
			+ Fine) SII+ dry loose brown.		-
1" - 4"			grave) + C. Sant fight dry black		
4" - 36"			porous gray rock some Mick Mace		
			1002 brown,		
36" - 49"			Porans bigg rock. Some light gray		· · · ·
49" -			bedrock. dry.		
-					
0 -0,51	00 %5)	14:14			-
05-3	006/1.5-3)	14:20			

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTILING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: ~ 30' east of light pole in conter of DDND

Test Pit # <u>N9</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time: RN	11:30
Sample Prefix: 11	804051214- / ACD-SS- N9
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-6 -0			concrete & wive		
0-6"			c. sand some clay. dry d. brown trace brick	1	
6" -18"			brick & gravel trace C. Sand + clay.		
18" - 28"			f. sand trace gravel: I brown dry		
Æ" -			hard nock layer - cannot	-	
			penetrate		
0-05	010/(0-5)	19:07		•	
0.5-2'	011/5-2)	19:10			

APPROS. SURFACE ELE. (FT-MSL)	
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: DIC 7-8

TEST PIT SKETCH:

Test Pit # _____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	
Sample Prefix:	804051206- / ACD-SS-
Logged By:	RT

Contractor:	
Operator:	
Backfill:	



.

.

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
			8" asph coal		
0 - 5,0'			br f-m sa, some f-m cr	-	
			st/grav (ang)		
			lift kiln ash (solid), day mot		
5.0'-			refusal, no water		•.
					• •
0 -0,5	015			:	
0.5-3.0	016			··· · ·	
3.0-5.0	017				

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTILING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS:

Test Pit # 03 Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/12/2005
Time:	1430
Sample Prefix: 10	804051212 / ACD-SS 03
Logged By:	MP

Contractor: Operator: Backfill



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-4" - 0			Asphalt		
0 -1"			Angular growel		
1 - 5"			growel some clay dry tight		
5-17"			bird rock layer porous, lightgray 61/9r rock - trace reddish (oxidized)ro	ĸk	
17"-46"			clay thace sand + gravel. dry 1+.		
46-56"			hard rock layer, porous, Igray-		
56 - 76"			gravel trace clay + sand.		
76" -			water, same as above.		
0 -0.5'	007/(0-5)	19;25			-
0.5-3	008/(5-3)	15:31			

APPROS. SURFACE ELE. (FT-MSL)	_
DIMENSIONS OF PIT:	_
TOTAL DEPIH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	_
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: Dic 16-18.

stone wall -SW W. connor foundation?

Test Pit # 09 Location: 04

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/1/2005
Time:	15:15
Sample Prefix:	804051201- /ACD-
Logged By:	MIP

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	<u>NUMBER</u>	TIME	SOIL DESCRIPTION	CODE	TESTING
3"-0	1		Asphalt		
0 - 9"			bedrock + loose sand I brown dry		
9" -19"			bedrock - no water		
					-
0 - 1'	0175504	15:32			· · · ·
1 - 3'	018/5504	15:40			
					-
					······································
				· ·	

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

۰.

COMMENTS: Southern Sife meto Ø M 51 PIC # 31 -32

Test Pit # ______5

Project Name:	AC Dutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time:	14:00
Sample Prefix: 10	804051214- / ACD-SS- 05
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
- 7" - 0			Asphalt, bricklayer		
D - 8"			gravel sand trace clay + brick.	·	
8" - 18"			porous rock layer	· · · · ·	
15" - 31"			Sand + gravel - brick dry.		
31''-			vocklaver too hard to		
			penetrate. dry.		-
0 -0,5	014/10-51	14:46			
0.5-3	014/53)	14:51		-	
				· · · · ·	
				· · · · · ·	

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

Test Pit # <u>06</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	10:05
Sample Prefix:	767051207- / ACD-SS- 06
Logged By:	LMG

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 3"			red bricklayer at surface. Some organis		
3"-0.5'			m brown from sound some	•	
0.5' - 2.5'			little de pown f-m sand, lerge grouel and crushed concrete paceloni	k.	
2,5'- 3'			Sk brown f-m sand " very dauk organic Jover, some gravel trace organ	KS_	
3' 3,5'			concrete layer, could not break	-	· · ·
-				· · ·	-
D -0.5	010	al:0			
05-3	011	10:30		•	
				-	
-					

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

Test Pit # ______8

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	9:40
Sample Prefix:	767051207- / ACD-SS-
Logged By:	LMG

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0-2"			brick, organics		
3"-0,5'			ned brown I-m sand little organis	· ·	
0.5-3			little Jk brown m-c sand. Kiln slag, large glawel, brick		
3' - 4'			f-milk brown sand some large annuel (most 14)		
4'-55			It brown silt. that co clay. Some gravel		
5,5' -			4W		
-					
0 -05'	007	9:45			
0.5-3'	008	9:50			
3-55	009	9:55			
				· · · · ·	

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

Test Pit # 3Location: 0.10

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	930
Sample Prefix:	804051202- / ACD-SS-
Logged By:	MP





DEPTH	SAMPLE				USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION		CODE	TESTING
			Asphalt		-	
0 - H"			Angular gravel Jark gray-	black		
4" - 73"			clay, c sand, made growel + organics (roots), dark M	sun		
			100se morst			
33 - 33"			Angular gravel some clay.	wet		
33'`-			Water			
	-		· · · · · · · · · · · · · · · · · · ·			
0-1'	024/819	9:35				· · ·
1 -3'	005/010 (1-3)	9:40				
						-
						-

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

comments: center of site adjacent to river, pic #9.

Test Pit # <u>P3</u> Location:

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time:	15:00
Sample Pretix: 1	\$ 804051214- / ACD-SS- \$ P3
Logged By.	MP

Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS	FIELD
-3,-D			asphalt, brick layer		
0 - 1"			silt 1. brown dry.	-	
), -),			C. Sand gravel trace clay.		
<u>Э.,</u> - Л.,			porous rack layer		
11, - 122,			Sand moves, brid wood, druj.		
Щ5" -			rock buyer to have to penote	e	
0 -05	016/0-5	19:30			
0.3- 2'	017/(.5-2)	15:33			
					······································

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS:	

Test Pit # _____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/13/2005
Time:	1105
Sample Prefix:	379051213- / ACD-SS-
Logged By:	NJL

Contractor:	•
Operator:	
Backfill:	
	-



DEPTH from to	SAMPLE NUMBER	TIMF.	SOIL DESCRIPTION	USCS	FIELD
-4" - 0			Asphalt, dry		TESTING
0 - 4"			layer of brick dry		
4" - 6"			Fine sand - light runon tight soildn]	· · · ·
6" - 30"			gray porous rock dry	J	
30" - 36"			gray porous rock, dark from, Some fine sand-sit, soil tight on	И.	
36" -			rock too hard for excavator	-1	· · · ·
			to penetrate. dry.		
05-3	004	11:35			· · · ·
					·

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: pic#3. Sand from 4-6" too hard to collect

Test Pit # _ P5 Location:_____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/15/2005
Time:	14:00
Sample Prefix:	768051215- / ACD-SS- P5
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-18"16"			Asphalt		
-16"- 0			concrete + wire mesh		
0 - 45"			gravel, brick - top foot.		
			c. sand trace clay. dry		
			10050 porous volk-		
45" -		· · · · · · · · · · · · · · · · · · ·	mostly gravel.		
1 - 4'	013/(1-4)	14:55			
	, 				

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	_
DEPTH TO MOITLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS:

Test Pit # _____ P 9

Project Name:	AC Dutton
Project Number:	20040764.A1N
Date:	12/14/2005
Time:	13:00
Sample Prefix: 10	804051214 / ACD-SS- P9
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS	FIELD
-10" - 0			concrete + wire mesh.		TESTING
0 - 29"			availed f. sand clay + brick		
94° 99"			Water. Sand + grovel below		
0 -0,5	012/0.5)	1340		-	-
0.5-2'	012/(5-2)	1350			-
				•	

APPROS. SURFACE ELE. (FT-MSL)	
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: DIC 910

TEST PIT SKETCH:

Test Pit # _____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/6/2005
Time:	
Sample Prefix:	804051206- / ACD-SS-
Logged By:	RT

Contractor:	
Operator:	
Backfill:	

.



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS	FIELD
			3" asph, 3" wallslag.		TESTING
0 - 1.01			brf-c salar with some		
		·	kilhash (solid pieces 4-6")		
			wood frag 11mmber at top 1.0'		
			duy-mot, some 1g cr stone	•	
1.0-6.0'			solid kin ash chunks mosly		
			hard material no sig salar		-
6.0 - 8.0'			cripty kin ash and glass		
			Unipts, litt salsilar sample		
-			coll, but may not be usable.		
0.0-0.5	018				
6.0-8.0	019				

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	-
DEPTH TO MOTTLING	-
DEPTH TO ROOTS	_
DEPTH TO WATER	
WERE PHOTOS TAKEN?	-
METHOD OF SAMPLE COLLECTION	_
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

not sampled : 1.0-6.0' COMMENTS:

Q3 Test Pit # _____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/13/2005
Time:	10:40
Sample Prefix:	379051213- / ACD-SS-Q3.
Logged By:	NJL

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-4"- 0			Asphalt		
0 - 7"			angular gravel		
7 - 27"			green. Yellowish orange gray, some fue		
			some red brick. dry.		
27"-43"			porawarak. dank brown finesand. Bilt. Haceclay. dry.		
43" - 93"			light-dark trown clay, some fine Eand, trace rock, dry,		
93'' -			excavator can't go deeper, dru.		
-					
0.5-3'	002	10:53			-
3-6'	001	10:47		· ·	
6 - 8'	003	11:00			

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	-
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	
DEPTH TO WATER WERE PHOTOS TAKEN? METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

electrical conduit on 5 Some scrap metal 24 #3 COMMENTS: f54 ShI 21de Some

Test Pit # _____ Location:_____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/8/2005
Time:	11:40
Sample Prefix:	767051208- / ACD-SS-
Logged By:	LMG

Contractor:	
Operator:	
Backfill;	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0-0,	• •		Asphalt		
<u>ð'</u> -0,5'			conducte with reinfor coment		
0,5-1			die brown m-F sand, mostly gravel	•	
1' -35'			ash kilnslag trace m-fmed brown sand little coal, basically		
-			all put what hat is nordered.	· . ·	· .
3,5' -			no GW refusal - bedrack		
00-0,5'	651	11:50			
0.5-3	058	11:55			

TEST PIT SKETCH:

guonalt hu rampto COMMENTS: $\delta \Omega$ Mm rand 15 M Ω MAC \cap (O)Þ We Ma ۵. 0 C)

Гest Pi	t#	the	
Location	(Q6)		

Contractor	
Operator:	
Backfill:	



Project Name:	ACDutton	
Project Number:	20040764.A1N	
Date:	12/1/2005]
Time:	Hils	1
Sample Prefix:	804051201- ACD-	1
Logged By:	MP	1

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-3"-0			Asphalt		
0 -7"			Angular gravel. little cisandt		
7" - 39"			gravel (some porous, somegreen Smells like slufur) little	•	
391 - 211"			coarse sand & clay	-	
39"-41"		-	layer of bilger rock smells like		
49"-			Water	· · · ·	
				•	
6 - 1'	ollege	14:30		•	
1-31	012 (30)	14:20			
3-41	013/506	14:23			

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

. . .

COMMENTS: SC portion of site. W of southern Metal building. pic #25-28, NO VOC jar for DI3 because not enough soil

Test Pit # ______ Location:_____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/15/2005
Time:	13:30
Sample Prefix:	768051215- / ACD-SS- (2-1)
Logged By:	

Contractor:	
Operator:	
Backfill:	



FUSS & O'NEILL Disciplines to Deliver

DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS CODE	FIELD
-D"- D			Asphalt		
0 - 3.,			Angular gravel.		
2" - 43"			porous rock, wood dry loose		
43" -			bedrock - dry.		·
0 -0.5	011 /10:5	13:50			
0.5-3'	012/15-3	(3,53			
				•	
·				· · · ·	

APPROS. SURFACE ELE. (FT-MSL)	
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: DIC 26-27

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TEST PIT SKETCH:

Test Pit # _ 08 Location: Q8

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/1/2005
Time:	14':50
Sample Prefix:	804051201- /ACD-
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE					USCS	FIELD
from to	NUMBER	TIME		SOIL DESCRIPTION		CODE	TESTING
-)" - 0			Asphalt				
0 - 4"			angular c	iray grau	el.	· · ·	-
4" -31"			gravel, c. sar	& trace cla	y trace		
-			red & oroung	je brick la	yer at 28"		
31" -			water	•			
-							
0-1'	014600	14:54		. ·			•
1 -3'	015 508	14:48				· · ·	
-							
					•		
					· · ·		
				· · ·			

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

site between motol trui Purple rock showed we COMMENTS: SC of MCo Dic #29-31 ¢ excavated oi le ND IN К material.

Test Pit # 15 Location: 52

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/2/2005
Time:	10:15
Sample Prefix:	804051202- / ACD-SS-
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 105			Silt & roots trace gravel		
			loose dry organic debris-		
			including red brick & fire brick		
			wive metal wood - top 4"		
			lenses of clay about 1" throughout		
105"-			bottom of TP		
0-,5'	039 53	10:41		•	
5-3'	031 (32) (,53)	10:24			
3-6'	031 52	10:46		-	
6 - 8'	033 (53)	10:57			
8 -10'	033 57	11:00			

APPROS. SURFACE ELE. (FI'-MSL)	
DIMENSIONS OF PIT:	_
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

ON SSILE - bottom at 54" coulds, trace sand PICID-

	- 			<u></u>			BORI	NG LOG		SITE ID	k	18	4	
		722	8	O'NEL	LL	PRO	JECT: ACD	utton	.*	PROJEC	TN	D; 200)40764A1	/N
		scipli	nes to	Deliver			ATION: Pou	ighkeepsie, ny		WEATH	ER:_	deer 10	5	
CONI OPER	TRACTO	R:	rod	λ	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	<u>, s</u>		W	ATER	LEVEL M	EASU	REMENT	S	
F&O REPRESENTATIVE:								DATE	М	S. PT.	W	ATER AT	T	IME
SAMP	LING M	ETH	OD:	<u>geopi</u> sle	eve					-				
HAMI BORII	MER WT NG LOC	: ATIC	<u>na</u> DN: Σ	HA 건 주 jm)	MMER	FALL (I กอ	N) <u>na</u>							
GROU		EVA'				3	· · · · · · · · · · · · · · · · · · ·							
SAMP	LE PREF	-:		76805121	3-60	ACD-SS-		TIME AND DAT	E OF (COMPLET	ION:	12.13.	05	
				SAMPLE	1		- <u></u>	· · · · · · · · · · · · · · · · · · ·			-01 "	· · · · ·		
DEPTH (FT)	SAMPLE No. AND TIME	SAM DE (I	IPLE PTH ⁷ T)	JARS/ PRE- SERVATIVE	REC/ PEN	BLOWS 6"		SAMPLE DESCRIP	TION			STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
	03	(10	·"(")	402	31/	~	gravel	trace F. Sand				4		· · · · · · · · · · · · · · · · · · ·
107	13:20				16	Ша					•		•	
		-					clai so reapitor	t find brick	dire)	trau		6		
	05-1	4	31)	402		-	clay tra	a c, abel that	CK 1	sahr.d	N	16 11	·	******
	13:25		-	11			Tight	preun :		0				
11.67	005	5	W.Y	abit U	21/		Some as	above			·····	· · · · · · · · · · · · · · · · · · ·		
7-8		5-	631	10%	146		Wet @	23 "	•	· .				
									•			······································		
							/ ee	b d		et i			21 	
			1					98'		· · ·			• •	
						(
						• •			,		÷			
												• ·		
					х.	2					· .	· · ·		
						·		······································					· · · ·	
												·		
						1								
E DI	ORING AMETER	,	во	DRING METH	IOD	DEPT	H <u>REMAR</u> Field Inst	KS rument =	If refu	isal is encount	ered, de	escribe all effo	rts used to	confirm
	<u>a``</u>		Q.	prope		8		•		·. ·	,	·		
	¥,		0									•		
PROPORT	TIONS USED		l				Field Dec	on: Yes / No / Dedicat	ted Devic	e				
Trace Little	0 to 10% 10 to 20%			Some 20 a And 35 a	o 35% o 50%		BACKFI		3		$q^{\mathbf{b}}$			
EXAMPLI SAND, I Moist. L	DESCRIPTI F-C; Some F .00se. No of	ON: -Cgra lor.	vel; Lit	tle silt; Trace cl	ay; (10R5/	/4)	Native M Bentonite Concrete	aterial Grout/Chips Asphalt		To To To	<u> </u>	See . Con	Monitoring pletion Rej	Well port
Reviewed	d by Staff:						Other			To				

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Test Pit # _____6

Project Name:	ACDutton		
Project Number:	20040764.A1N		
Date:	12/7/2005		
Time:	11:00		
Sample Prefix:	767051207- / ACD-SS-		
Logged By:	LMG		

Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	COIL DESCRIPTION	USCS	FIELD
D = 2"			ASSIL	CODE	
2" 70,5'			large gravel sub vasi, trace mic sand ik brown		
0.5'-1'			2nd tar/asphalt layer, Bayer layer w/ Some large gravel subfase		
			sume m-c sand in between		
11 - 2,5'			large pieces of crushed kin Jog, little m-c'sand. Ik brown		· ·
			pieces of bnick		· ·
2.5-4'			Some dark known m-f sand, growel Some large rocks (6"), All Fill Moderial.		
щ· -			refusal, no GW		
0 - 0.5'	014	11.90			
0.5-4	015	11:25		-	

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

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COMMENTS:

Test Pit # _58 Location:_____

Project Name:	ACDutton		
Project Number:	20040764.A1N		
Date:	12/7/2005		
Time:	10:40		
Sample Prefix:	767051207- / ACD-SS-58		
Logged By:	LMG		

Contractor:	
Operator:	
Backfill	



FUSS & O'NEILL Disciplines to Deliver

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - J.,			Asphalt		•
2" - 1'			lange rock love, trace m-c sand durk brown.		
1 - 1.5'			little dk brown f-m sand mostly		
1.5-25			Some pullerized too. Make make		· · · ·
			brown'sand little growel.		
25-3'			4-m de brown sand, some grouel, little at top, briln slag, den se		-
			likelý natříve no GW		
0 -0.5	012	10:45			·
06-3'	013	10:50		-	
-					

APPROS. SURFACE ELE. (FT-MSL)	
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:

TEST PIT SKETCH:

$\frac{\text{Test Pit # } | \Psi}{\text{Location: } S10}$

Project Name:	AC Dutton		
Project Number:	20040764.A1N		
Date:	12/2/2005		
Time:	9:58		
Sample Prefix:	804051202- / ACD-SS-		
Logged By:	MP		

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
- 2' - 0			Asphalt		
0-9,,			Angular gavel		
2" - 11"			Silts trace c sandt gravel organics derre brown , heat Plantonty (D)		
11" - 45"			Clay trace gravel + sand moist		
			(11-20")		
45"-	-		Water. gravel below.		
					-
0 - 1'	026/510	9:58			
1-3'	07/510	10:02	,		
3-4"	028/510,	10:05			
					······································
-					

APPROS. SURFACE ELE, (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: SC of Site adjacent to RR + river 028-no voc joir be cause not enough soil. PIC# 10-05

				I	BORI	NGLOG		SITE ID:	Tb		
	FUSS	&O'N	EILL	PROJECT	: ACD	utton		SHEET:		of	4 A 45 Y
	Disciplin	es to Delive	 r	LOCATIO	CATION: Poughkeepsie, NY WEATH					<u>2004076</u> 20. clear	4.A1N
CONTRA	CTOR:				WATER LEVEL MEASUREMENTS						
OPERAT	OR:	TTUE				T A 1752		DT	3177 A (11)7-3 7-3		
DRILLIN	IG METHO	D: <u> </u>	nlp			DAIE	MS	6. PT.	WATER.	AT	TIME
SAMPLIN	NG METHO R W/T.)D:	sleeve			· ·			· · ·		
BORING	LOCATIO	N:		·ALL (IIV)	na	· .					
GROUNI) ELEVAT	ION: na									
SAMPLE	PREFIX:	1530513	108-18	ACD-55-		TIME AND DA'	te of c	OMPLETI	ON: <u>12/</u>	8/05	3.18
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DES	CRIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0.0-0,4	^{3.0} /4.0	0-0.5	023/Te	(0-,5) 12:0	5 A	phalt.		••			
0,4-4,0		0,5-3.0	024 M	e(.5-3) 12:1	Fi	11, sand F-	C,50	me.			· ·
					y.	L. D. r. odar	5. 5. 16	2211			4. ¹
a a a d	281 -	3.0-6.0	025/76	(3-6)				1011		· ·	
4.0-4.8	2,24.0			1911		une as ou	UVec.	vy	· · .		
4.8-8.0		6.0-8.0	1026/TI	0 10-8)	μu) of ur 1 R-M S		0.14			
1. –			0 -11	12:11	5	und reins	un to	an, + (- 10	• •	-	
				1011		He gruiner.		i at			
						400br. J	INCE	val .			
					φ.	luce sin	ωı	M)			•••
8.0-9.2	1.4.2	8.0-9.2	17/160	(8-9.9)	Sa	me as abou	IR.				· ·
				12:1	8 20	husal at a	7.2'	·			
						1					
						· ·	•	·· ·			
							;				
											· .
						· · ·	•	· ·			· .
						. *		.*	• .		•
BOR DIAM	ING ETER	BORING	AETHOD	DEPTH	REMAR Field Inc	KS nument=	If mfn	sal is encounte	ared describe a	ll efforts un	d to confirm
						· · · ·	. iciu		and another a		ла со сощиць
							t t				
BROBORIZION	IC LICE D				Field De	con: Yes / No / Dedic	ated Device	:			
Trace 0 Little 10	15 USED; to 10% 0 to 20%	Some And	20 to 35% 35 to 50%		BACKE	T.T.					
EXAMPLE DE	SCRIPTION:				Native M	aterial		To	·•	See Monit	oring Well
SAND, F-C; Moist. Loos	Some F-C grav e. No odor.	vel; Little silt; Ti	race clay; (10R5/	4)	Bentonite Concrete	e Grout/Chips /Asphalt		To 	•	Completio	n Report
Reviewed by	Staff:				Other	- r		To			

		,		B	ORI	NGLOG		SITE ID:	<u> </u>				
	FUSS	&O'N	EILL	PROJECT:	ACD	utton		SHEET:_ PROIFC	of NO: 20040764 A1N				
	Disciplin	es to Delive	r	LOCATION	ION: Poughkeepsie, NY WEATHE					R: 15 deg. clear			
CONTRA OPERAT	CTOR:				WATER LEVEL MEASUREMENT								
F&O REP	RESENTA	TIVE:				DATE	MS.	PT.	WATER	AT	TIME		
SAMPLIN	G METHO IG METHO	D: <u>n</u> D:	<u>lp</u> sleeve						-		•		
HAMMER	RWT:	na	HAMMER	FALL (IN)	na	· · ·		• •					
GROUNI	ELEVAT	ION: na							•				
DATE ST	ARTED: PREFIX:	153051 8	108- f	ICD-55-		TIME AND DAT	te of co	OMPLETI	ON: <u>12</u>	/8/05	1:40		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION	• • •	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING		
0-0.3	2.0/4.0	0-0.5	016 \ T	7 (05)	A	sphalt	· · · ·						
0.3-4.0		0.5-3.0	ONT	1(0.5-3.0)) Fi	11 Sand F	-C,50	me					
				11:42	2 ar	avel some	Alage	+10Ce	• ·				
			. 1		Ϋ́	uck, slag 1	nas si	afor			·		
		3.0-6.0	018/1	1(3.0-6.0)	sr	nell, mois	+ .						
4.0-8.0	25/4.0	6.0-8.0	019/7-	1(6.0-5.0)	15 50	measal	JOVE.						
				11.0	20	+ at 6,5	ם מח	dor					
8.0-9.5	3,9/4,0	8.0-10.0	020/T	7 (8.0-10.0			100-10						
				ne <u>s</u>	30 30	N 200 2011		•••					
					1 We	Lt,100 001		•		-			
4,5-12.0		10-12.0	021/TT	1(10,012.0)	2)Sh	ale fragm	ents (ind					
				11.3	6 SI+	, wet no o	dor	•	•		· .		
				-1 - 34	10.	424/2							
12.0-15,8	1.3/4.0	12.0-16.0	1022/T	-1(12,0-16,	9/50	me as all	ove.n	o pdor					
				()iu	10	- -							
15,8-16,6	I				a	1+	<i>.</i> .			· ,			
										,			
								• •					
							•	• • *			•		
BOR DIAM	ING ETER	BORING	METHOD	DEPTH	<u>REMAF</u> Field Ins	<u>tKS</u> trument –	If refus	al is encounte	ered, describe	all efforts us	ed to confirm.		
						مور و م		•	2	•			
PROPORTION	IS USED:	÷	20 += 150'		Field De	con: Yes / No / Dedic	ated Device			· · ·			
Little 10	to 20%	Some And	20 to 35% 35 to 50%		BACKE	ILL feterial	: .	Ŧ			397 11		
EXAMPLE DE SAND, F-C,	SCRIPTION: Some F-C grav	vel; Little silt; Ti	race clay; (10R5.	/4)	INATIVE M Bentonit	e Grout/Chips	· ·	_ 10 _ To	<u> </u>	See Moni	on Report		
Moist. Loose	e. No odor.				Concrete Other	e/Asphalt		_ To To	· · · · ·		•		
Reviewed by	Staff:								•				

Test Pit #

Project Name:	ACDutton]	Contractor:			
Project Number:	20040764.A1N		Operator:		FUSS&O'NEILL	
Date:	12/15/2005]	Backfill	1.	Disciplines to Deliver	
Time:	1000			-		
Sample Prefix:	768051215- / ACD-SS-79]				
Logged By:	MP]			,	

DEPTH	SAMPLE		•	USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-5"-0			Asphalt		
0 - 3,,			Angular gravel		
<u> 2" - 42"</u>			gravel C. sand. Cay wood (Rettes) delow, by ck, wet, odor		
			concrete wall on S. Side		
-			shoen on water		
419" -			water		•
0 -05'	001/	11:50		•	
0.5-3'	008/(63)	11:59			
	·	•			•
~					

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

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COMMENTS:

TEST PIT SKETCH:

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Test Pit # ______ IO_____

Project Name:	ACDutton		Contractor:			
Project Number:	20040764.A1N		Operator:		FUSS &	O'NEILL
Date:	12/15/2005		Backfill:		Disciplines to	Deliver
Time:	15:05 12:40	TAP)	·······	· ·		
Sample Prefix:	768051215- / ACD-SS- T10]				
Logged By:	MP]			. •	•

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-3" - 0			Asphalt		
0 - 3"			Angular gravel		
2" - 16"			csahd clary & gravel dry loose porous vogek. cool(?) dry.		
16" - 18"			light brown of material		
18., -39.,			same as 2-16	•	
<u> - "6C</u>			water. gravel + c sand trace		
0 -0.5'	009/6-5)	13:10			
05-3'	010/(0.5)	13:14			
					•

APPROS. SURFACE ELE. (FT-MSL)	
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: DIC24-25

TEST PIT SKETCH:

	ÂA.				·	BORI	NGLOG		SITE ID):		U	1
	F	USS &	O'NEI	LL	PRO	JECT: AC D	utton		SHEET	: `T N(<u>ot</u> O: 20040764A1/N		
	Di	sciplines t	o Deliver		LOC	ATION: Por	TION: Poughkeepsie, ny WEATHER:				dear 105		
OPEI		DR:	M		4		WATER LEVEL MEASUREMENTS						
F&O	REPRES	ENTATIV	/E: <u>mlp</u>				DATE	MS	5. PT.	W	ATER AT	T	IME
DRIL SAMI	LING M 'LING M	ETHOD:_ ETHOD:	<u>geop</u> sle	robe reve							· .	-	
HAM BORI	MER WI NG LOO	: <u>na</u> ATION:_	H4 	MMER	FALL (II	N <u>) na</u>							
GRO DATI	<u>jnd el</u> E start	EVATIOI ED:	<u>V: na</u> 12/13/C	5			· · ·		•				
SAMI	PLE PRE	FIX:	76805121	3- I	ACD-SS-	<u>u4</u>	TIME AND DAT	'E OF C	OMPLET	TION:	B.13.C	5	·
DEPTH (FT)	SAMPLE No. AND TIME	SAMPLE DEPTH (FT)	SAMPLE JARS/ PRE- SERVATIVE	REC/ PEN	BLOWS 6"		SAMPLE DESCRIP	TION			STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
04		-			па	refusal	e2ft - Otim	o2					
	006 1465	(06")	402	28/48		dry the	ght	Brick	-1.50	iy)			
44	057 1433	(28-3)	()	39/48		chy to	aveldy M	-ght-			• • • • • • • • • • • • • • • • • • •	· · · ·	
	008 1440	Water 1.55	5) 5)			NOL 10	ya	-	· .		110	•	
						day so wet	e gravel t	bint Dich	-17		H.		
812	-			35/48		gravel +	race silt we						
						gravel	t chy high f	kssicit	ynd		6"		
					÷.	clay Hg Godt	ht dry he nuck- extru	MM	had	-	24"		
					tetasti (day 1.1	Orain Apter	NAS	/		32"		
							MW-INStal	ud	•	-			
D	BORING LAMETER	В	ORING MET	HOD	DEPT	H REMAR Field Ins	RKS trument -	If refu	sal is encoun	tered, d	escribe all effe	orts used to	confirm.
	Ju		grop.t	pp	19,		•		•	·	•		
			-			Field De	соп: Yes/No/Dedica	ted Devic	e				
PROPOP Trace Lintle EXAMPI SAND, Moist. Review	TIONS USEI 0 to 10% 10 to 20% E DESCRIPI F-C; Some Loose. No c	ION: F-Cgravel; L odor.	Some 20 And 35 ittle silt; Trace c	to 35% to 50% lay; (10R5/	/4)	BACKF Native M Bentonit Concrete Other_	ILL Iaterial e Grout/Chips /Asphalt	· · · · · · · · · · · · · · · · · · ·	To To To To		See	Monitoriną npletion Re	g Well port

G.\PAD\ADFLDOPS\FLDOPS\DataSheets\BoringLog061405.doc (Format Revised 11/16/05)

			<u> </u>	BC	DRI	NGLOG		SITE ID:	U5	· · · · · · · · · · · · · · · · · · ·	
	FUSS	&O'N	EILL	PROJECT:	AC Di	itton		SHEET:	[NO	of 2004076	4 A 1N
	Disciplin	ies to Delive	r	LOCATION	: Pou	ghkeepsie, NY		WEATH	ER: <u>15 d</u>	eg. clear	
CONTRA OPERAT	CTOR:					W	ATER I	EVEL ME	ASUREM	ENIS	
F&O REP	RESENTA	TIVE:	1			DATE	MS	.PT.	WATER	AT	TIME
SAMPLIN	G METHC IG METHC	D: <u> </u>	sleeve								· · · · ·
HAMMEI BORING	R WT: LOCATIO	na N:	_HAMMER F	ALL (IN)	na 🛛	-			· .		
GROUNI	DELEVAT	ION: na									
SAMPLE	PREFIX:	153051	908 - 1	ACDSS-		TIME AND DAT	'E OF O	OMPLETI	ON: <u>12</u> /	/8/05 ():08
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE 1	No. AND TIME		SAMPLE DESCI	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0.0-0,3	3.9/4.0	0,0-0,5	008/1	5(0-05) 10:01	P:	phalt		•			
0,3-4,0		0.5-4.0	009/4	5(.5-4.0)	Fil	1. Sand F-C.	som	لل ا			
-		0.00	- 1	10:05	gre	wel, trace b	rick	and.			
					as	n. dry. no	odor				
					57	K 3/2		•			
40-80	1.6/110	4.0-8.0	010/49	j(4-8)	(P	10 stuck in	1 1 m	n+		•	
	7970		- , .	10:08		moler hot	tom	tip ol			
					Sn	mple. Con	tain	Δ	· .	· .	
					Nec	ickish fill	mat	erial		· ·	
					Wi	th slight pe	trole	im			
					loga	or.	•	•		· · .	
					Fill	, sound, F-C	,S0	me			
					gr	wel little	SIL	trace			
					br	ick and ca	yal s	light			
					odi	or oxp3/2	-				, .
								· .			
									· ·		
							•				
BOR DIAMI	ING ETER	BORING	IETHOD	DEPTH R	EMARI	<u>KS</u> ument=	If refus	al is encounte	red, describe a	ll efforts use	ed to confirm
							-	• .		2	
PROPORTION Trace	IS USED:	Same	20 to 35%		ield Dece	on: Yes / No / Dedicat	ed Device	• •			
Little 10) to 20%	And	35 to 50%	B	ACKFII	<u>_L</u> teriol	· ·	Т <u>~</u>	• • •	See Merel	oring 197-11
EXAMPLE DES SAND, F-C;	SCRIPTION: Some F-C grav	vel; Little silt; Tr	ace clay; (10R5/4	b) Bo	entonite	Grout/Chips		_ To	·	Completic	n Report
Reviewed by	5. 1NO OLIOF, Staff-			0	oncrete/ ther	Asphalt		_ To _ To			
THE VIEWED DY.	Juan.				_					• •	

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Test Pit # ______ U (

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	13.05
Sample Prefix:	767051207- / ACD-SS-U()
Logged By:	LMG

Contractor:	· · · ·
Operator:	
Backfill:	



DEPTH	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS	FIELD
0 -)"			Asphalt		TESTING
2 -6"			Stone gray.		•
6" - 7"			Asphalt		· · · ·
7" -1.5'			Same Subbase		•
1.5' - 2.5'			little f-m die brown sand. Some mostly Targe nurvel. trace organics (free roots)		
2.5' -7.5'			med brown f-m sand sitt. trace Grannics, tracegravel *11204 native*		
7.5' -			petholeum impacts same soundy silt impacts seen nl3 thills	•	
			trace shalle. GW, ipoks improved - could be where an from soi		
0 -0.9'	016	13:20			
0.5-3	710	13:25			
3-6	018	13:30			
6' - 8'	019	13:35			

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

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

COMMENTS:

					BOR	ING LO	G	SITE ID	<u>.</u> U7		
	FUSS	&O'N	EILL	PROJEC	T: AC	Dutton		PROJEC	T NO:	<u>ot</u> 2004076	4.A1N
	Disciplin	es to Delive	er	LOCAT	ION: Po	oughkeepsie, N	٧Y	WEATH	ER: <u>15 d</u>	g. clear	
OPERAT	CTOR: OR:						WATI	ER LEVEL M	EASUREMI	ents	
F&O REF	RESENTA	TIVE:				DATE		MS. PT.	WATER	AT	TIME
SAMPLIN	G METHO	,D: <u>r</u> DD:	nip sleeve		matri						
BORING	RWT:	na N·	_HAMMER F	ALL (IN)_	na	· · · · · · · · · · · · · · · · · · ·					
GROUNI	DELEVAT	ION: na									
SAMPLE	PREFIX:	1530512	208-1F	100-55-		TIME AND	DATE O	F COMPLET	ION: 12/	′8/05 [′]	9:20
		SAMDI F									
DEPTH (FT)	REC/ PEN	DEPTH (FT)	SAMPLE N	№. AND TIME		SAMPL	E DESCRIPTI	0N	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-0.4	3.0/4.0	0-0.5	-001/-U71	(0-,5) 9	1:00 f	Isphalt		· · · · · · · · · · · · · · · · · · ·			
0.4-4.0		0.5-30	002/47(.	5-3) °	1:03 F	ill sam	9 EC	Some			
						rowel, tr	acesil	t, coal,			
					si	cg. dry	ND CE	tor odor			
4.0-8.0	1.4/4.0	3,0-8,0	003 / 117	(5-8) c	1:05 5	ame as	above				
					W	et at 7.	0°.Ψ	race			
	~ ~ `				V	ick. no	odor	-			
G, EI - O, 8	3.0/4.0	8.0-10.0	004711718	5-10) 0	1.07 A	vallel (5	ihale)	little			
		 0_0-0_0	005/117	(10-17)	n Si	14. Nace	sand	weet			
		1010 1210	0-97.0(1	(10 12)	"." N	odor.					
12.044.7	3.0/4.0	12.0-14.0	006/1476	2-14) 9	1:15 5	sme					
14.7-16.0		14.0-16.0	007/476	U-16) 9	:20 Si	1+ tight	••			•	
				- 10/							
1010					E	qB					
		-									
								·			
			l								
DIAMI	ETER	BORING	ÆTHOD	DEPTH	Field In	<u>RKS</u> strument=	If	refusal is encounte	ered, describe al	l efforts use	d to confirm.
					-	·					
					- 	CON Ver / NTr /	Dadiased D				
PROPORTION Trace 0 r	S USED; o 10%	Some	20 to 35%			101E 1CS / INO / .	Demicated De	evice			
Little 10	to 20%	And	35 to 50%		BACKI	ILL Asterial		'T~		San M*-	W-1
SAND, F-C,	Some F-C grav	el; Little silt; Tr	ace clay; (10R5/4))	Bentoni	te Grout/Chips		To		Completio	n Report
Reviewed ber	. INO OUOF. Staff.				Concret Other_	e/Asphalt		То То			

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Fuss & O'Neill of New York P.C.

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

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GENERAL INFORMATION	
Project Name: <u>AC Dutton</u>	Site ID (Boring/Well ID): <u>MW - US</u>
Project Location: <u>POK</u> , NY	Project No.: 200407/04-AIN
F&O Engineer/Geologist:N_TL	Ground Surface Elevation:
Date of Completion:	Permit #:
Boring Location: <u>ACD-U8</u>	E1 Top of Steel Casing:
Drilling Contractor: Todd Syska, Inc.	E1 Top of PVC Casing:
Drilling Method:	Measuring Point: TPS/PVC
WELL CONSTRUCTION	Well Cover (see codes):
Well Casing/Riser Sump (below screen)	Protective Casing
Diameter:in. Diameter:iAin.	Diameter: N / A in. Type:
Type: Type:	Stick-up:ft Depth to Bottom:ft
Stick-up: <u>2-3</u> ft. Length:in.	Seal Material:
Screen Intervals	
Screen Interval: $5'(10'-5')$ ft Diameter: $1'$	$\underline{ in.}$ Slot Size: $\underline{ O \cdot \mathbf{o} / \mathbf{O} }$ in.
Description: PVC Other:	
Type: Perforated / Slotted / Wire-Wrap / Other:	
ANNULAR FILL	
Surface Seal (Approxi	mate volumes if available)
Interval: $\underline{4'-0'}$ ft. Tremied: \underline{Y} / N	Volume:bags
Description: Concrete/Other: bentonle	
Backfill	
Interval: $10^{\prime} - 5^{\prime}$ ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / Fil / Other:	
Lower Seal	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite / Bentonite Pellets / Grout / Other:	
<u>Filter</u>	
Interval: <u>5-4</u> ft. Tremied: Y / N	Volume:bags
Description: Sand Filter (type:) / Other:)	
Lower Backfill	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / Fill / Other:	

Monitoring Well Field Data Sheet

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Project Location:				PROJECT	#:		
	rk/ 2 7 8-7	120 - 07	2	Well II		FUSS & Disciplines to	O'NEILL Deliver
Sample#:	880 [0]				8		
Elevation Data							·
Date: 7/20/200	ア	Time: 12;0	~ 7	<u> </u>	Well Diameter (inches	»):	
	Depth (feet)	+ Correction	—= True D	epth	Water Column Heigh	t:	(feet)
Water Level PVC	7.69	+	=		Gal/foot x 3 facto	r: x	
Water Level TPS		+	=		Volume to be Purged		(gal)
Bottom of Well	9,76	+	=		onanie to be i argea		(6)
Measuring Device ID#: Comments:				Sampler: Weather:	803°F partly	loud j	······································
Well Condition (General Condition:	Checklist	ls Repair	[circle approp	priate item(s); cro	s out if not applicab	le]	
Protective Steel: Well # Visible?: Well Cap: Evidence of rain water betw Evidence of ponding around Gopher-type holes around co	OK / Crack (Y4 N Good / Brok een steel and PV well?: ollar?:	ed / Leaking / E en / None C?: Y Y Y	sent / Loose	Russ O	Lock: Good t around cap?: Y-4 PVC Riser: Good Concrete collar: OK ther Evidence: Rode Curb Box: Y /	Broken [] Damaged Cracked] nts Insects/ Nkey is: Hex/	None eaking None Pent/Other)
Comments:				Curro	Dux Guskel: OK	, <u>ке</u> риан (Об	
Dureo Data							
r uige Data							
Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged:	12:10 12:25 15:51 4:29a].	<u>n</u>	(gpm) (gallons)	Purge Device Device type Comments Well Yield	Dedicated / N Bailer / Peristz High / Moder	ondedicated ltj2 / Submers ate / Low / I	sible / Bladder Dry
Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Sample Data	12:10 12:25 15:mt 4:29a[.	<u>n</u>	(gpm) (gallons)	Purge Device Device type Comments Well Yield	Dedicated / N Bailer / Peristz High / Moder Container	ondedicated ltj2 / Submers ate / Low / I Quantity	sible / Bladder Dry Preservative
Funge Data Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Sample Data Date: $\mathcal{P}/20/200$ Approx. sample depth: Sampling method: Bailer type:	12:10 12:25 15:15 4:2ga 22 Time: Bailer / Per SS 2" / SS	<u>12:25</u> _(ft) Weather: _istaltic / Bladde: 1.25" / SS Short	(gpm) (gallons) Sampler: t / PVC 2" /	Purge Device Device type Comments Well Yield	E Dedicated / N Bailer / Perista High / Moder Container VOA Vial Ambor Plastic	ondedicated ltiz / Submers ate / Low / I Quantity Z Z (sible / Bladder Dry Preservative H(1
Fuige Data Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Sample Data Date: $\mathcal{P}/20/200$ Approx. sample depth: Sampling method: Bailer type: Bailer Cord: Filtered in Field?: Method of Filtration: Pump ID # Field Decon: Appearance:	j2//0 j2/25 j5/m/ 15/m/ 4/l2gal % Bailer / Per SS 2" / SS Dedicated / No/ @Wa Pressure / ` Bailer / Tu	/2:25 _(ft) Weather:_ istaltic / Bladde: 1.25" / SS Short Nondedicated ell / @ Lab Vacuum / Syring] Filter: bing / Other	(gpm) (gallons) Sampler: t / PVC 2" / ge 10u / 0.45u	Purge Device Device type Comments Well Yield	E Dedicated / N Bailer / Perista Higb / Moder Container VOA Vid Ambor Plasta	ondedicated line / Submers ate / Low / I Quantity 2 2 (sible / Bladder Dry Preservative H/1
Fulge Data Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Sample Data Date: $\mathcal{P}/20/200$ Approx. sample depth: Sampling method: Bailer type: Bailer Cord: Filtered in Field?: Method of Filtration: Pump ID # Field Decon: Appearance:	j2//D /2/25 /5 m/ /15 m/ /2/25 /5 m/ /2/25 /2/25 /2/25 /2/27 /2/27 /2/27 /2/27 /2/27 /2/27 /2/27 /2/27 /2/25 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/26 /2/25 /2/2/2 /2/25 /2/25 /2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2/2 /2/2 /2/2/2 /2/2/2/2/2 /2/2/2 /2	/2:25 _(ft) Weather:_ istaltic / Bladde: 1.25" / SS Short Nondedicated ell / @ Lab Vacuum / Syring] Filter: bing / Other	(gpm) (gallons) Sampler: r / PVC 2" / ge 10u / 0.45u Note: SC cal	Purge Device Device type Comments Well Yield	E Dedicated / N Bailer / Perista High / Moder Container VOA Vial Ambor Plashic	ondedicated line / Submers ate / Low / I Quantity 2 2 (1	sible / Bladder Dry Preservative H/[]
Fulge Data Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Sample Data Date: $\mathcal{P}/20/200$ Approx. sample depth: Sampling method: Bailer Cord: Filtered in Field? Method of Filtration: Pump ID # Field Decon: Appearance: Field Parameters Instrument II	j2/p j2/25 j5/mt 15/mt 4.2ga 4.2ga Time: Bailer / Per SS 2" / SS Dedicated / No / @Wit Pressure / Tu Bailer / Tu	/12:25 (ft) Weather:_ isstaltic / Bladde: 1.25" / SS Short Nondedicated ell / @ Lab Vacuum / Syring Filter: bing / Other	(gpm) (gallons) Sampler: r / PVC 2" / ge 10u / 0.45u Note: SC cal	Purge Device Device type Comments Well Yield	E Dedicated / N Bailer / Peristz High / Moders Container VOA Vial Ambor- play 47 n (temp) at time of Su Instrumen	ondedicated ltiz / Submers ate / Low / I Quantity 2 2 (C measurement t ID#	sible / Bladder Dry Preservative H()
Fulge Data Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged: Sample Data Date: $\mathcal{P}/20/200$ Approx. sample depth: Sampling method: Bailer type: Bailer Cord: Filtered in Field?: Method of Filtration: Pump ID # Field Decon: Appearance: Field Parameters Instrument III	$\begin{array}{c c} & 12 \\ 12 \\ 12 \\ 15 \\ 15 \\ 15 \\ 15 \\ 15 \\$	/2:25 _(ft) Weather: _istaltic / Bladde: 1.25" / SS Short Nondedicated ell / @ Lab Vacuum / Syring] Filter: bing / Other Temp	(gpm) (gallons) Sampler: r / PVC 2" / ge 10u / 0.45u Note: SC cal	Purge Device Device type Comments Well Yield CLT Other culation based o	E Dedicated / N Bailer / Peristz Higb / Modern Container VOA Vid Ambor- plashic n (temp) at time of Su Instrumen	ondedicated ltiz / Submers ate / Low / I Quantity 2 2 (C measurement t ID# Spec. (sible / Bladder Dry Preservative H/1

C:\DOCUME~1\GTOOTH~1\LOCALS~1\Temp\monwellfielddat.dc Format Revised 1/26/07
Test Pit # <u>U</u>10 Location:

Project Name:	ACDutton	
Project Number:	20040764.A1N	
Date:	12/8/2005	
Time:	2:05 PM	
Sample Prefix:	767051208- / ACD-SS-	
Logged By:	LMG	

Contractor:	
Operator:	
Backfill:	



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DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 9,,			Asphalt		
J 8.			Concrete ul large gravel		
8" -1,5'			dark brown f-m Jand, little silt likely craanic (very dark) Vac gravel		
1,5' - 2,5'			14 brown /white sound, possible.		· .
2,5'-4,5'			hear by, pure sand, sit dk brown, f-m sand, little silt, some of ravel		
			(fine and large) same fill as		
4,5'-			GW, pit caving in		· · · · · ·
					· .
0-0,5	659	14,90			
0.5-3	060	14:35	• • •		
3-45'	061	14:30			

APPROS. SURFACE ELE. (FT-MSL)
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:

TEST PIT SKETCH:

.

				B	ORI	NGLOG		SITE ID:	V5		
	FUSS	&O'N	EILL	PROJECT:	ACD	utton		SHEET:	T NO:	<u>of</u> 2004076	4.A1N
	Disciplin	es to Delive	r	LOCATION	I: Pot	ighkeepsie, NY		WEATH	ER: 15 de	eg. clear	
CONTRA	CTOR:					W	VATER I	EVEL MI	EASUREM	ents	
F&O REF	PRESENTA	TIVE:				DATE	MS	. PT.	WATER	AT	TIME
SAMPLIN	IG METHO IG METHO	D:п DD:	nlp sleeve			-	-			•	
HAMMEI	R WT: LOCATIO	na ¹ N:	HAMMER	FALL (IN)	na				· _		•
GROUNI	D ELEVAT	ION: na					<u> </u>				
SAMPLE	PREFIX:	153051	308 EU01	M/ACD-SS	>	TIME AND DAT	te of c	OMPLETI	ION: <u>12/</u>	<u>/8/05 \</u>	0:46
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-0.2	ə. ^s /4.0	0-0,5	011/19	5(0-,5)	AA	phalt	•				
0.2-4.0		0.5-3.0	012/19	5(.5-3)	Fi	1, sand F-C	SOM	e gravel	_		
				10/30	'Irc	ice concret	é, th	jck,			
					Slo	ig, dry. ne	odor	- ·			·
		3.0-6.0	013/V	5(3-6)	1.5	1r 2/0					
4.0-5.0	2.8/4.0			10:40	Isc	ume as al	rove				
5.0-6.3		6.0-8.0	014 /V	5(6-8)	t	actured st	rale.	NJ			· · ·
70			r	10:40	gra	avel some	Silt	, moist	t	-	
10					n	, odor 10°	ye ar	IGM	• : • .		
6.5-1.0					P	actured s	shale	ND			
7.0-8,0) 				fre	actured sh	nale c	ind			
					SII	+, wet a	x7.7	2			
					sli	ght only	Small	(•			
:						• •	•			· ·	
8.0-8.4	0.4/4	80-8,4	015/1	5(8-8.4)	50	ume as all	oul s	strong		•	
				10.46	011	y smell N	4 we	ł		•	
8.4					r	epusal	• .				
BOF DIAM	UNG ETER	BORING	METHOD	DEPTH	REMAE Field Ins	<u>tKS</u> trument=	If refu	sal is encount	ered, describe	all efforts us	sed to confirm.
								• •			
					Field De	con: Yes / No / Dedic	ated Device	e		•	
PROPORTION Trace C	NS USED: to 10%	Some	20 to 35%		RACET		•		· · ·	÷ · ,	
EXAMPLE DE	ESCRIPTION:	лий 1	55 QJ CG 70%		Native M	faterial		To	•	See Moni	toring Well
SAND, F-C Moist. Loos	; Some F-C gra se. No odor.	vel; Little silt; T	race clay; (10R5	/4)	Sentonit Concrete	e Grout/Chips :/Asphalt	· · ·	To To		Completi	on Report
Reviewed by	y Staff:				Other	·	· · ·	To			

.

F	FUSS	&O'N	EILL	PROJECI	SOR	ING LOG		SITE ID:_ SHEET:_ PROJECT	<u> </u>	of 2004076	4.A1N	
	Disciplin	es to Delive	<i>r</i>	LOCATIO	DN: Po	ughkeepsie, NY		WEATHE	.R: 15 de	eg. clear	· . ·	
CONTRA OPERAT(.CTOR: OR:					W	ATER I	EVEL ME	ASUREMI	ENTS		_
F&O REP DRILLIN	RESENTA G METHO	TIVE: D:п	nlp			DATE	MS	. PT.	WATER	AT	TIME	_
SAMPLIN HAMMEI	IG METHO R WT:	DD: na	<u>sleeve</u> HAMMER	FALL (IN)	na		•				-	
BORING GROUNI	LOCATIO DELEVAT	N: ION: na								. •		
DATE ST. SAMPLE :	'arted: prefix: T	530512	07- / A	D-55-			TE OF C		ON 12	/7/05	6:15	
		SAMDI E								UTHO		
DEPTH (FT)	REC/ PEN	DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION	· · ·	STRATA CHANGE	LOGIC CODE	FIELD TESTING	
)-0,3	3.0/4.0	0-0.5	053/19	5(0-,5)	A	sphalt		•				
), 75- 4,D		n F-20	15:0	5(05-3)	Fi	11, prick, sa	nd,s	one				
		0,2,2,2	15:3	÷	S.	over, more	st at	2.8.	· .			
1.0-55	25/4.0	3.0-6.0	055/V9 15:39	5(3-6) 1	50	ame as all	we					
5-8.0		6.0-8.0	056/1	8(6-8)	5	nd F-C a	nd ar	oivel.				
			19:31	0.	11	He silt, wet	at 1	, 0, , ,			• •	
	101	8 1-120	or ha	(9-12)	N	odur 1041	24/2 5	W .	1		· · ·	· .
10-19-0	1.9/4.0	0.0 100	USI NO	(8,10)	50	ime as al	we.			· .		
2.0-15.0	13/4.0	12.0-15.0	058/15	6(12-15)	qv	avel (shale)	littl	R				
	7 1.0		15:44	١	5.1	it SW wet	no o	dor				•
5 n= 19.	H.D/	15.0-17.0	059 NS	8(15-17)	10	4124/2						
0,0 7 <u>0</u>			16:00	, >	Si	1t, tight we	* N	1CL				•
		17.0-P.C	060/19	s(17-P1)			•		· .			-
			16:19	\sim								
							•					
ROP	INIC		[BVC		· .].
DIAM	ETER	BORING	METHOD	DEPTH	Field In	strument=	If refu	sal is encounte	ered, describe	all efforts us	ed to confirm.	
					-	· ·	•			· · · · ·		
PROPORTION	IS USED:	******** ·			Field D	econ: Yes / No / Dedic	ated Devic	e		· · · .	· · · · · · · · · · · · · · · · · · ·	
Trace O Little 10	to 10% 0 to 20%	Some And	20 to 35% 35 to 50%		BACK	FILL	• .	Ϋ.		S	towns W/ II	
EXAMPLE DE SAND, F-C;	SCRIPTION: Some F-C graves	vel; Little silt; T	race clay; (10R5	/4)	Benton	ite Grout/Chips		To	· · · · · · · · · · · · · · · · · · ·	See Monit Completio	tonng Well on Report	
Reviewed by	Staff:				Other_	te/Asphalt		To To			. · ·	
							•				· .	

				B	ORI	NGLOG		SITE ID:	V9	6	
	FUSS	&O'N	EILL	PROJECT:	AC D	utton		SHEET: PROJEC	ľ no:	ot 200407	64.A1N
	Discipline	es to Deliver	r	LOCATION	N: Pot	ghkeepsie, NY		WEATH	ER:		
CONTRA	CTOR:					x	ATER	LEVEL MI	EASUREME	ENTS	
F&O REP	RESENTA	IIVE:	1			DATE	М	S. PT.	WATER	AT	TIME
SAMPLIN	G METHO	D: <u> </u>	sleeve								
HAMMER BORING	LWT: LOCATIOI	na N:	HAMMER F	ALL (IN)	na	-					.
GROUND) ELEVATI ARTED:	0N: na V21191	05								
SAMPLE I	PREFIX:	80405	1219- /	ACD-SS-		TIME AND DAT	E OF O	COMPLET	ION:		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE N	No. AND TIME		SAMPLE DESC	RIPTION		STRAT'A CHANGE	LITHO- LOGIC CODE	FIELD TESTING
	2.6/10		1		~0	,8-1.0 asph/	conc	rete			
0-0'3					br	f-m 51,1.1	t f-r	nmdqra	N		
0.213					61 50	stained SA me coal gog	1ge (out	v)			
1,3-2.6					10 510	f-m SA w/	grai iln a	pulu			
0-5'5	2.6/1.0	3-6	४०४८ <u>६</u> ।२ ४ः	19-v9(3-6 30) SP (5	1A(0-6,2)W(1,3-5,5)	lt at	- 1,3- 1,6)		
7.3-7.6	06/				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	concrete/h	uin (wh			
8-8,4	2.74.0				5A	A, mot					
8.410.5					511 511 815 50	shalochum tsand 14-m t Sat. 1005 1 bgs 13	ved a se so	cr grav fray f ot			
BOR DIAM	ING ETER	BORING	METHOD	DEPTH	REMA Field In:	<u>RKS</u> strument=	If re	fusal is encoun	tered, describe	all efforts	used to confirm.
					Field De	econ: Yes / No / Dedic	ated Dev	ce			
PROPORITION Trace 0 Little 10 EXAMPLE DE SAND, F-C; Moist. Loos Reviewed by	IS USED: to 10% 0 to 20% SCRIPTION: Some F-C grav e. No odor. Staff:	Some And vel; Little silt; T	20 to 35% 35 to 50% race clay; (10R5/	4)	BACKE Native I Bentoni Concret Other	ILL Material te Grout/Chips e/Asphalt		To To To To		See Mo Comple	nitoring Well tion Report

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PROS & O'NEILL Distribute to Deliver PROJECT: AC Dutton SHEET: ICATION: Poughlacepsie, NY SHEET: VEATHER: CONTRACTOR:				···	.]	BORI	NGLOG	5	SITE ID:	VIC)	
Discipline: to Deliver LOCATION: Poogblacepsie, NY WEATHER		FUSS	&O'NI	EILL	PROJEC	T: AC D	utton	S I	SHEET:_ PROIEC	ľ NO:	<u>of</u> 2004076	4.A1N
CONTRACTOR: WATER LEVEL MEASUREMENTS OPERATOR: DATE NS. PT. WATER AT TIME DATE NS. PT. WATER AT TIME DATURD METERD: Imp. Imp. Imp. DATE NS. PT. WATER AT TIME PORTOR SAMPLE PREPAR SAMPLE PREPAR SAMPLE PREPAR PORTOR SAMPLE PREPAR SAMPLE PREPAR SAMPLE PREPAR PORTOR SAMPLE PREPAR SAMPLE PREPAR SAMPLE PREPAR PTT TIME AND DATE OF COMPLETION STACE PREPAR OCALD SAMPLE PREPAR SAMPLE PREPAR SAMPLE PREPAR PTT TEC SAMPLE PREPAR SAMPLE PREPAR OCALD SAMPLE PREPAR SAMPLE PREPAR SAMPLE PREPAR PTT TACE SAMPLE PREPAR SAMPLE PREPAR INFORMATION SAMPLE PREPAR SAMPLE PREPAR SAMPLE PREPAR PSTAL SAMPLE PREPAR SAMPLE PREPAR </td <td></td> <td>Disciplin</td> <td>nes to Deliver</td> <td>•</td> <td>LOCATI</td> <td>ON: Poi</td> <td>ighkeepsie, NY</td> <td>, ,</td> <td>WEATHI</td> <td>ER:</td> <td></td> <td></td>		Disciplin	nes to Deliver	•	LOCATI	ON: Poi	ighkeepsie, NY	, ,	WEATHI	ER:		
FRO REPRESENTATIVE: DATE MS.PT: WATER AT TIME SAMPLING METHOD. sleve:	CONTRA OPERAT	CTOR:					. X	VATER LI	EVEL ME	EASUREMI	ents	
DALLING ME FRAD. Import DALLING ME FRAD. Decree HAMMER WT. Import DALLING ME TRAD. Secret GROUND ELEVATION. Import GROUND ELEVATION. Import SAMPLING ME TRAD. Secret DATE STARTED. Secret SAMPLING ME TRAD. Secret GROUND ELEVATION. Import GROUND ELEVATION. Secret SAMPLE REFIX. Secret SAMPLE PREFIX. Secret DO-9. to SAMPLE No. NOT ME O-9. to SAMPLE Secret O-10. SAMPLE Secret I.1013 SAMPLE Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. Secret I.11. <td< td=""><td>F&O REI</td><td>RESENTA</td><td>TIVE:</td><td>1</td><td></td><td></td><td>DATE</td><td>MS.</td><td>PT.</td><td>WATER</td><td>AT</td><td>TIME</td></td<>	F&O REI	RESENTA	TIVE:	1			DATE	MS.	PT.	WATER	AT	TIME
HAMMER WI: na HAMMER FALL (IN) na DENING LOCATION: CACATION: CACATION: CACATION: GROUND ELEVATION: CACATION: CACATION: CACATION: SAMPLE PREFIX: SMORE No. AND THE SMORE DESCRIPTION: Internet of Completence of Completenc	SAMPLIN	IG METHO IG METHO	D: <u> </u>	sleeve	· · · · · · · · · · · · · · · · · · ·							
CROUND ELEVATION Date SAMPLE PREPIX 804031219- JATE STARTED. DA 16 055 TIME AND DATE OF COMPLETION MECK 804031219- JATE STARTED. DA 16 055 SAMPLE No. AND TAKE MECK 804031219- JATE STARTED. DA 16 055 SAMPLE No. AND TAKE MECK SAMPLE No. AND TAKE OC-0. b PULLU CONC/ 0.4.0.01 O1.8 V. T. A. I.0-1.8 V. T. A. I.0-1.7 V. T. A. SAMPL Start, S. S. A. V. T.	BORING	R WT: LOCATIO	<u>na</u> N:	HAMMERI	FALL (IN)	na						· · · · ·
DATE DATE IN LINE IN THE PARTY OF CONSTRUCT TIME AND DATE OF COMPLETION: DEPTH REC IMMEE SAMPLE PRESUPTION IMMEE DO-Y I.SALA DEPTH SAMPLE PRESUPTION DEPTH REC IMMEE SAMPLE PRESUPTION DEPTH SAMPLE PRESUPTION O-Y I.SALA DEPTH SAMPLE PRESUPTION DEPTH REC IMMEE SAMPLE PRESUPTION DEPTH SAMPLE PRESUPTION O-Y I.SALA DEPTH SAMPLE PRESUPTION DEPTH REC IMMEE No AND THE SAMPLE PRESUPTION DEPTH REC IMMEE No AND THE SAMPLE PRESUPTION DEPTH DO-10 DA-10 SAA DEPTH SAA DEPTH SAA DEPTH SAA DEPTH SAA DEPTH Y SAA DEPTH SAA DEPTH SAA SAA DEPTH REMARKS DEPTH SAA BORING BORING METHOD DEPTH REMARKS If refusite reconstruct, describe all efforts used to confirm. BORING BORING BORING METHOD DEPTH REMARKS If refusite reconstruct, describe all efforts used to confirm. BORING BORING BORING METHOD DEPTH REMARE	GROUNI	DELEVAT	ION: na									-
Description BLC SAMPLE MEAN SAMPLE No. AND TIME SAMPLE DESCRIPTION STRATE UTPOC TELED 0 - 4 1.8,41,0 0 <t< td=""><td>SAMPLE</td><td>PREFIX:</td><td>80405</td><td>1219- /</td><td>ACD-SS-</td><td></td><td>TIME AND DAT</td><td>TE OF CC</td><td>MPLETI</td><td>ON:</td><td>·</td><td></td></t<>	SAMPLE	PREFIX:	80405	1219- /	ACD-SS-		TIME AND DAT	TE OF CC	MPLETI	ON:	·	
TOTO PERSON DEPTH (T) SAMPLE NR. AND TIME SAMPLE DESCRIPTION THE CODE (T) PERSON 0 - 4 1.8/41.0 0	DEDITI	BEC/	SAMPLE								LITHO	
0-4 1.8/4.0 0-0.0 0.0-1.0 1.0-1.8 SAA w Cr/pullu Shale 0.5-1.0 5.7 1.0-1.8 5.7 4.8 1.7/4.0 4-4.3 5.7 4.8-55 5.7 5.5-5.7 5.7 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-10 3.7/4.0 8-11 BORING BORING BORING METHOD DEPTH REMARKS Field Decore Yes /No / Dedicated Device PORTORTIONS USD. Same 20.000 Inter transition To See Monitoring Well Construct/Applat Construct/Applat To Construct/Applat To Construct/Applat To	(FT)	PEN	DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LOGIC	FIELD TESTING
0-0.0 pulse conc/ aAph 0.10 SAA w cripulu Shale 1.0-18 b F-m SA and grav Hr- lith coal, dog! brick 4-8 1.74.0 4-4.8 JAag loss, dry 4-4.8 SHA 4.8555 SHA color, plv Shale, Sand, grav 5557 5757 8-18 2.74.0 8-19 2.74.0 8-10 2.74.0 8-9 SAH 9-10.7 SAH BORING DEPTH BORING BORING METHOD DEPTH Field Instance If refusi is encountered, describe all efforts used to confirm. Field Decore: Yes/No/Dedicated Device PROPORTIONS USED: Sam 30.05% BORING: Sam 30.05% BORING: Sam 30.05% BORING: Sam 30.05% BORING: Sam 30.05% BEAMARKS If refusi is encountered, describe all efforts used to confirm. Field Decore: Yes/No/Dedicated Device PROPORTIONS USED: Sam 30.05% BEAMARKS To	0-4	1.8/4.0					· · ·					
ONO-110 INT/4.0 SAA W CRIPWU Shale INO-18 b F-m SAamd grav Hr- Init coal, dog! brick HAR INT/4.0 HAR SAA W S SAA W S Saamd grav Hr- Init coal, dog! brick HAR SAA W S Saamd grav Hr- Init coal, dog! brick HAR SAA SAA Saamd grav Hr- Init coal, dog! brick HAR Saamd grav SAA Saamd grav HAR Saamd grav SAA Saad SAA Saamd grav SAA Saamd grav SAA Saad SAA Saad <td>0-0.0</td> <td></td> <td></td> <td></td> <td></td> <td>pu</td> <td>to conc/as</td> <td>4ph</td> <td></td> <td></td> <td></td> <td></td>	0-0.0					pu	to conc/as	4ph				
1.0-18 b F-m SA and grav +tr- lit coal, sagl brick 4.8 1.7/4.0 4.8 5AA 4.8-55 SAA 0.10 SAA 1.8-55 SAA 0.10 SAA 1.8-55 SAA 0.11 SAA 1.8-55 SAA 0.11 SAA 1.10 SAA 1.10 SAA 1.10 SAA 1.10 SAA 1.10 SAA 1.11 SAA 1.12 SAA 1.13 SAA 1.14 SAA 1.15 SAA 1.10 SAA 1.11 SAA 1.11 </td <td>0,6-1,0</td> <td></td> <td></td> <td></td> <td></td> <td>S.A</td> <td>A W CRIDU</td> <td>iu sr</td> <td>all</td> <td></td> <td></td> <td></td>	0,6-1,0					S.A	A W CRIDU	iu sr	all			
HOP ING BORING METHOD DEPTH BORING BORING METHOD DEPTH BORING DIAMETER BORING METHOD DEPTH BORING DIAMETER BORING METHOD DEPTH BORONGTOON DATA State 20 a 3% BORONGTOON DATA State 20 a 3% BORONGTOON DATA Same 20 a 3% BACKELLL Native Maerial To See Monitoring Well Boronee Group Applak To Complexion Report Complexion Report Reviewed by Safe Other To Complexion Report	10-18							ul ava				
4-8 1.7/4.0 Imag loose, dry 4-4.3 Imag loose, dry 4.8-55 SHA 0.1 plv shali, sand, graw 1.7/4.0 4.8-55 0.5-5.7 8-13 8-13 8-13 8-14 8-19 9-10.7 BORING B	100.00					6	t-m 3700.	- yia	v tr-			
4-8 1.7/4.0 SHA 4-4.8 SHA 4.8-55 SHA CV plv Shali, Sound, Qhau, 1: H - tr sil+ wet - Sout ot 5.5-5:7 SAH 8-10. 2.7/4.0 8-7 SAH 9-10.7 SAH BORING BORING METHOD DIAMETER BORING METHOD PROPORTIONS USED. Sam SAND, PC, Some PC gravel, Linke sit, Trace clay, (10R5/4) Naive Material Naive Material To SAND, PC, Some PC gravel, Linke sit, Trace clay, (10R5/4) Converter Asphalt Naive Material To Beatonie Grout/Chips To Converter Asphalt To							an Imas id	Dri Diri			. •	
H-H-R J-HO SHA H-S-55 CV PIV Shale, SONd, Plan N-F-55 CV PIV Shale, SONd, Plan D5-57.7 SHA S-10 2.7(4,0) 8-13 2.7(4,0) 8-10 2.7(4,0) 8-10 2.7(4,0) 8-10 2.7(4,0) 8-10 SAHA 9-10.71 Cr Shale Chunks Sat OM d Si H V 100Se BORING DEPTH Field Instrument- If refusal is encountered, describe all efforts used to confirm. Field Decon: Yes / No / Dedicated Device PROPROCIDENTION: Same 2010 3% SAND, PC Sone PC gravel; Linke sit; Trace chy; (10R5/4) Native Material Moist. Lose: No odor. To See Monitoring Well Reviewed by Staff: Other	4-8	1.7/4.0				Ψ"	ug nuse, u					
H, 8-55 SAFF S, 5-5, 7 SAFA S, 5-5, 7 SAFA S, 0 bqs. SAFA SAFA Same 200 35% BORING DESCRIPTION: Same 200 35% BACKFILL Native Material BACKFILL To SAFE F. So other C. Gravel; Little site; Trace clay; (10R5/4) Native Material Reviewed by Staff; To	4-4.8	140				en					2	
BORING BORING METHOD DEPTH REMARKS BORING BORING METHOD DEPTH REMARKS SAPA V 10052 BORING BORING METHOD DEPTH BORING BORING METHOD DEPTH Field Instrument= If refusal is encountered, describe all efforts used to confirm. Field Decore: Yes / No / Dedicated Device PROPORTIONS USED: Same There Some Void 50% Same SAPU, F-Q Some F-C gravel, Little silt, Trace clay, (10R5/4) Most. Loose. No odor. Reviewed by Staff:	4.8-55						Iow shale.	sand	, grai	L		
BORING BORING METHOD DEPTH SAFA 9-10,7 SAFA Gr Shale Chunks 0 SAFA Gr Shale Shale 0 Shale Chunks Sat 0 Shale Chunks Sat 0 Shale Chunks Sat 0 Shale Chunks Sat 0 Same 20 to 35% Sto 50% EXAMPLE Descriptions See Monitoring Well Shale Sto 50% BACKFILL Native Material To Completion Report Concret/Asphat To Completion Report Other To To							+-trsil+	wet-s	atat		· .	
5:5-5.7 2.74.0 5AA w or shale 8-13 2.74.0 SAA 9-10.7 SAA SAA 0.10METER BORING METHOD DEPTH Remarks Field Instrument= If refusal is encountered, describe all efforts used to confirm. FROORTIONS USED, Same 2010 35% BAND, F.G. Some F-C gravel, Little silt; Trace clay; (10R5/4) Native Material To Moist. Losse. No odor: To Completion Report Reviewed by Staff: Other To Completion Report						5.	o bgs-					
8-19 2.74.0 SAFA 9-10,7 SAFA Gr Shale Chumks Sat 01 Shale Chumks Sat On d Si H V 100Se BORING BORING METHOD DEPTH REMARKS Field Decon: Yes / No / Dedicated Device PROPORTIONS USED Same 20 to 5% EXAMPLE DESCRIPTION: Same 20 to 5% BACKETILL Native Material To See Monitoring Well SAND, F-Q Same P-C gravel, Little silt, Trace clay, (10R5/4) Other Noist. Losse. No odor. To Reviewed by Staff: Other	5,5-5,7					БA	Awarsh	ale		· · .		•
BORING BORING METHOD DEPTH SAA BORING BORING METHOD DEPTH REMARKS Field Instrument= If refusal is encountered, describe all efforts used to confirm. Field Decon: Yes / No / Dedicated Device PROPORTIONS USED; Some 20 to 35% Latic 10 to 20% SAND, F-C gravel; Little silt; Trace clay; (10R5/4) BACKFILL Moist. Loose. No odor: To Completion Report Reviewed by Staff: Other To To	8-12	2.7/1.0										
0 1 SHIT 9-10,7 0 Shale Chumks Sat 0 SiH V 100SL 0 0 SiH V 100SL BORING BORING METHOD DEPTH REMARKS DIAMETER BORING METHOD DEPTH Field Instrument = If refusal is encountered, describe all efforts used to confirm. Field Decon: Yes / No / Dedicated Device PROPORTIONS USED. Some 20 to 35%. Late 100 20%. Some 20 to 35%. BACKFILL Native Material To SAND, F-Q source, Little silt; Trace clay; (10R5/4) Native Material Moist. Loose. No odor. To Reviewed by Staff: Other	4_9	/ 9(0							•_			•.
P-10,7 Or Shale Chumics Sat BORING BORING METHOD DEPTH BORING METHOD DEPTH Remarks Field Instrument = If refusal is encountered, describe all efforts used to confirm. Field Decon: Yes / No / Dedicated Device PROPORTIONS USED: Field Decon: Yes / No / Dedicated Device PROPORTIONS USED: Some 20 to 35% Linde 10 to 20% Some 20 to 35% And 35 to 50% BACKFIIL EXAMPLE DESCRIPTION: SAND, F-C; Some F-C gravel; Little silt; Trace clay; (10R5/4) Native Material To See Monitoring Well Bentonite Grout/Chips To Completion Report Completion Report Completion Report Reviewed by Staff: Other To To To	οι					121	-11-1	1.00	· · ·			
BORING DIAMETER BORING METHOD DEPTH REMARKS Field Instrument = If refusal is encountered, describe all efforts used to confirm. PROPORTIONS USED: Trace 0 to 10% And 35 to 50% Field Decon: Yes / No / Dedicated Device Field Decon: Yes / No / Dedicated Device PROPORTIONS USED: Trace 0 to 10% And 35 to 50% BACKFILL Native Material To See Monitoring Well EXAMPLE DESCRIPTION: SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Moist. Loose. No odor. Native Material To Completion Report Reviewed by Staff: Other To To Completion Report	9-10,7					5	shale chi	UNICS	Sat.	•		
BORING DIAMETER BORING METHOD DEPTH REMARKS Field Instrument = If refusal is encountered, describe all efforts used to confirm. Image: Control of the c						ov	IGZIH V	1009	د .			
BORING DIAMETER BORING METHOD DEPTH REMARKS Field Instrument = If refusal is encountered, describe all efforts used to confirm. Image: Control of the state of the sta												
BORING BORING METHOD DEPTH REMARKS DIAMETER BORING METHOD DEPTH Field Instrument= If refusal is encountered, describe all efforts used to confirm. Image: Construction of the second se		DIG										
PROPORTIONS USED: Field Decon: Yes / No / Dedicated Device Trace 0 to 10% Some 20 to 35% Little 10 to 20% And 35 to 50% BACKFILL Native Material To See Monitoring Well SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Native Material To See Monitoring Well Moist. Loose. No odor. Concrete/Asphalt To To Reviewed by Staff: Other To To	DIAM	ETER	BORING M	ETHOD	DEPTH	Field Inst	<u>KS</u> trument =	If refusa	l is encounte	ered, describe a	ll efforts us	ed to confirm.
PROPORTIONS USED: Field Decon: Yes / No / Dedicated Device Trace 0 to 10% Some 20 to 35% Little 10 to 20% And 35 to 50% BACKFILL EXAMPLE DESCRIPTION: Native Material To See Monitoring Well SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Bentonite Grout/Chips To Completion Report Moist. Loose. No odor. To To Completion Report Reviewed by Staff: Other To To						4				· · ·		
PROPORTIONS USED: Trace Describer 10% Trace 0 to 10% Little 10 to 20% And 35 to 50% BACKFILL EXAMPLE DESCRIPTION: SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Moist. Loose. No odor. Reviewed by Staff: Other						Field Dec	con: Yes / No / Dedica	ited Device				· · · ·
Little 10 to 20% And 35 to 50% BACKFILL EXAMPLE DESCRIPTION: SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Moist. Loose. No odor. Native Material To See Monitoring Well Bentonite Grout/Chips To Completion Report Reviewed by Staff: Other To	PROPORTION Trace 0	IS USED: to 10%	Some	20 to 35%			LOIZ TO / THO / LOCUCA	I/C ¥ILC	· · · · · · · · · · · · · · · · · · ·			
SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Bentonite Grout/Chips To Completion Report Moist. Loose. No odor. Concrete/Asphalt To To Reviewed by Staff: Other To To	Little 10) to 20%	And	35 to 50%		BACKFI	ILL laterial		То	·	See Monit	oring Well
Reviewed by Staff: To	SAND, F-C;	Some F-C grav	vel; Little silt; Tra	ce clay; (10R5/-	4)	Bentonite	e Grout/Chips		To		Completic	on Report
	Reviewed by	Staff:				Other_	/ Aspnait	·	то То			

				B	ORI	NGLOG		SITE ID:	W6		
	FUSS	&O'N	EILL	PROJECT:	ACD	utton		PROJEC	ſ' NO:	01 2004076	4.A1N
	Disciplin	es to Delive	r	LOCATION	N: Pou	ighkeepsie, NY		WEATHI	ER: <u>15 d</u>	eg. clear	
CONTRA	CTOR:					x	VATERI	EVEL MF	ASUREM	ents	
F&O REP	RESENTA	TIVE:				DATE	MS	.PT.	WATER	AT	TIME
SAMPLIN	G METHO IG METHO	D: <u> </u>	nlpsleeve								
HAMMEI		<u>na</u> NI.	_HAMMER I	FALL (IN)	na	· · · · · · · · · · · · · · · · · · ·		•	· · · ·		
GROUNI	D ELEVAT	ION: na									
DATE ST	ARTED: PREFIX: ``	1930513	07- /A	(D-55-		TIME AND DAT	LE OF C	OMPLETI	ON: 12	/7/05	5:08
		1	,								- <u></u>
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	CRIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-0,4	3.0/4.0	0-0.5	048 M	6(0-,5) D	ASI	shalt.					
0.4-4.0		09-20	049/Wb	(15-3)	Fr	11, sand F-C; 3	some	gravel			
		0.5 51~	15.02	, ,	tra	ace silt, coal	, roc	K flow	1	•	
	~ ~ /			12-12	S	y no o dor	IUYRU	112			
4.0-4.5	3.0/4.0	3,0-6,0	050 /W 0	(5-0) N	Sa	me as al	OUC.				
			051 JUL	110-8)		1	b o Ch	101971 4			
4.5-1.0		6.0-8.0	16:1		Sh	ale and	nga	ferrir			
10-80			15.0	, c	50	nd F-C and	2 gra	net.	· · ·		
1100		8.0-9.2	W/600	6(8-9,2)	Sin	ne silt. m	n išt r	ro odior			
			15:0	ĸ	5	N 104RU/2	. · ·			·· ·	· · ·
8.0.9.2	1.2/2							· .			
010	/(.5				50	une as ar	me.	mlaum			
					N	et at 8,5	per	DRUN			
					oq	or 544/1	•				
					r	fusal at	0'J.,	•			
							· .		ĺ.		
							•	•	• • •		
						•••	· · ·	:	•		
BOR	UNG	BORINGI	METHOD	DEPTH	REMAI	RKS		1 :	مناقد مندق المسا	-11 offersterr	
	LIEN				ricia Ins	ALTER .	II ren	ISAI IS CHCOUNT	eieu, uescrioe	an chons u	sea to continu
						· · ·	· ·	· · ·			· · ·
DRODODTIO	NC 1 12E TL				Field De	con: Yes / No / Dedic	ated Devic	e.	· · ·		
Trace 0 Little 1	хэ Озн.);) to 10% 0 to 20%	Some And	20 to 35% 35 to 50%		BACKF	<u>ILL</u>		:	•	•	
EXAMPLE DE	SCRIPTION:	val. Timla alle. T	mee class (10DE	(4)	Native M	Material	i	To To		See Mon Complet	itoring Well
Moist. Loos	se. No odor.	wei, Little Silt; I	race ciay; (IUNS)	ער	Concret	e/Asphalt		To		Junpat	
Reviewed by	7 Staff:				Other_	·		1o	` ,	•	

.

				B	ORI	NGLOG	SI	TE ID:	W8		· · · · · · · · · · · ·
	FUSS	&O'N]	EILL	PROJECT	ACD	utton		HEET:_ ROIEC	[NO:	<u>of</u> 2004076	54.A1N
	Disciplin	es to Deliver	٩	LOCATIO	N: Pot	ighkeepsie, NY	W	ÆĂTHI	ER: 15 de	eg. clear	
CONTRA	CTOR:					w	ATER LE	VEL ME	ASUREM	ENTS	
F&O REP	RESENTA	TIVE:	1		e.	DATE	MS. F	ΥТ.	WATER	AT	TIME
SAMPLIN	G METHO IG METHO	D: <u> </u>	sleeve								·
HAMMEI BORING	R WT: LOCATIO	<u>na</u> N:	HAMMERI	FALL (IN)	na		•				
GROUNI) ELEVAT	ION: na						<u>, </u>	• ••••••		<u> </u>
SAMPLE	PREFIX:	5305121	DT- 7A	CD-22-		TIME AND DAT	TE OF CO	MPLETI	ON: <u>12</u>	/7/05	<u>66.51</u>
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
D-0.3	3.0/4.0	0-0,5	041/W 1314	8(0-,5) 0	A	sphalt					
0.3-4.0		0,5-3,0	043/WR	5(5-3)	F	11. sand F-C	Some	grave	l		
			13:4	9	17	the brick, M	ickfl	Ĵ M			
		3.0-8.0	043/WS	8(3-8)	dr	y no odor	NЧ				
4.0-8.0	0.8/4.0		13,44	4	5	measaver	e dru	ino.			
					od	or, door re	covery	1			
8.0-8.3	2.9/4.0	8.0-10.0	044/W° 13:4	5(5-10) 4	50	me às abor	R.	•			
8,3-12.0		10.0-12.0	1045/w 13:45	(8(10-12) 8	gr Si W	avel (shale - 17 27 at 8.5' rong petrole	hud) r	little)		
12.0-15.D	3.0/4.0	12.0-14.0	046/W 13:5	0 8(17-14)	50. 57	me as all	ove	•			
15,0-16,0		14.0-16.0	047 /ws 13:58	8(14-16) S	চা ডা	17 574/1 ght odor, -	wet Hight.	•			
BOF DIAM	UNG ETER	BORING	IETHOD	DEPTH	<u>REMA</u> Field In:	<u>RKS</u> strument=	If refusal	l is encount	ered, describe	all efforts ı	ised to confirm.
						· •		•		-	•
					Field Do	econ: Yes / No / Dedic	ated Device	· .	· · ·		
PROPORTION Trace C Little 1 EXAMPLE DE SAND, F-C Moist. Loos Reviewed by	NS USED:) to 10% (0 to 20% ESCRIPTION: ; Some F-C gra se. No odor. y Staff:	Some And vel; Little silt; T	20 to 35% 35 to 50% race clay; (10R5	/4)	BACKE Native I Bentoni Concret Other	TILL Material te Grout/Chips e/Asphalt		To To To To		See Mor Complet	itoring Well ion Report

Fuss & O'Neill of New York P.C.

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MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

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GENERAL INFORMATION	
Project Name: <u>AC Dutton</u>	Site ID (Boring/Well ID): MW – WS
Project Location: POK, NY	Project No.: 200407(6441N
F&O Engineer/Geologist:CS	Ground Surface Elevation:
Date of Completion: 127	Permit #:
Boring Location: ACD - W8	E1 Top of Steel Casing:
Drilling Contractor: Todd Syska, Inc.	E1 Top of PVC Casing:
Drilling Method: <u>Geoprobe</u>	Measuring Point: TPS / EVC
WELL CONSTRUCTION	Well Cover (see codes):
Well Casing/Riser Sump (below screen)	Protective Casing
Diameter:in. Diameter:in.	Diameter: <u>N/A</u> in. Type:
Type: PVC Type:	Stick-up:ft Depth to Bottom:ft
Stick-up: <u>2.9'</u> ft. Length:in.	Seal Material:
Screen Intervals	
Screen Interval: $17^{\prime} - 7^{\prime}$ ft Diameter: 1	$\underline{\qquad}$ in. Slot Size: $\underline{\bigcirc}$ $\underline{\bigcirc}$ $\underline{\bigcirc}$ in.
Description: PVC/Other: PVC	
Type: Perforated / Slotted / Wire-Wrap / Other:	+ wet @ ~ 8.5' bgs
ANNULAR FILL	
Surface Seal (Approx	imate volumes if available)
Interval:ft. Tremied: Y / N	Volume:bags
Description: <u>Concrete</u> / Other: <u>bentonife</u>	·
Backfill	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / Fill / Other:	
Lower Seal	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite / Bentonite Pellets / Grout / Other:	
<u>Filter</u>	
Interval: $7-6$ ft. Tremied: Y / N	Volume:bags
Description: Sand Bilter (type:) / Other:)	
Lower Backfill	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / Fill / Other:	

Client/Project Name: Project Location:				PROJECT	Г #:		THICC o-	
Samplette T	KN70776	0-01		<u>Well I</u> W B	D		FU33 & V Disciplines to	J INEILL Deliver
$\frac{5 \text{ ample} \pi}{5}$								
Elevation Data	117	Time: //`			Well D	Nameter (inches)	:	
	Depth (feet)	+ Correction	= True D	epth				
Water Level PVC	1.06	+	=	1	Water Gal	Column Height: I/foot x 3 factor	x	(feet)
Water Level TPS		+	=					
Bottom of Well		+	=		Volum	ie to be Purged:		(gal)
Measuring Device ID#	:	·		Sampler:	GĄ	7		
Comments:	· · · · · · · · · · · · · · · · · · ·			Weather:	8Ps	of partly	(autor	
					•		ľ	
Well Cap: Evidence of rain water be Evidence of ponding arou Gopher-type holes around Comments:	Good P Brok tween steel and PV nd well?: collar?:	cen / None C?: } }		Cu	PVC Concrete Other Ed Cur the Box C	CRiser: Good- e collar: OK / vidence: Roden b Box: Y / Gasket: OK /	/ Damaged / / Cracked / Lo ts / Insects/X N (key is: Hex/ Replace / Oti	None eaking / <u>None</u> lone Pent/Other) her
Purge Data								
Start Time: Stop Time: Total Time Purged: Pump Rate: Volume Purged:	11: 20 11:55 35 min 5	· · · · · · · · · · · · · · · · · · ·	(gpm) (gallons)	Purge Devic Device typ Commen) Well Yie	ce: A pe: Y ts: ld: I	Dedicated / No Baller / Peristal	ndedicated fið / Submers	ible / Bladder Dry
Sample Data					Γ	Container	Quantity	Preservative
Date: 7/20/2	<u>99</u> 7 Time:	12',00	Sampler:	GAT		500nl Amber	2	
Approx. sample dept	h: d: Bailer / Da	<u>(ft)</u> Weather	f: ler			manul	3	Dri
Bailer typ	e: SS 2" / SS	1.25" / SS Sho	ert / PVC 2" /	Other		אוז חני	2	174
						150m / Mustic	1	
Bailer Cor Filtered in Field Method of Filtratio	d: Dedicated / l?: No/ @W n: Pressure /	/ Nondedicated ell / @ Lab Vacuum / Syri	nge					

-

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Note: SC calculation based on (temp) at time of SC measurement.

Instrument ID#

Spec. Cond.

472 MS/an

-

 pH
 Temp
 pl

 8:5
 15,97°C
 16

 C:\DOCUME~1\GTOOTH~1\LOCALS~1\Temp\monwellfielddat.doc
 Format Revised 1/26/07

pН

Temp 15,97°(

10.4

Pump ID # Filter: Field Decon: Bailer / Tubing / Other

Appearance:

ないないない

Field Parameters

Instrument ID#

Test Pit # 02 Location: WIV

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/1/2005
Time:	11:06
Sample Prefix:	804051201- (ACD-55-
Logged By:	MP





FUSS & O'NEILL Disciplines to Deliver

DEPTH	SAMPLE NUMBER	TIME	SOIL DESCRIBTION	USCS	FIELD
0 - 5"		Time	Asphilt		TESTING
5" - 24"			Trace organics and roots top 6" son C, + gravel, some com, hose, moist,	ſ	· · · ·
			Ibrown. trace prick pragments		
H			water		•
0 - 1'	003 202	10,55			
1 - 2'	004	11:05			
			· .		
				-	
_				· ·	

APPROS. SURFACE ELE. (FT-MSL)	
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: Very edge of pic # 4-5 RR Hes

TEST PIT SKETCH:

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

	. 		<u> </u>	B	ORI	NGLOG		SITE ID:	XT		
	FUSS	∾O'NF	III	PROJECT:	ACD	utton		SHEET:_	' NO:	<u>of</u> 2004076	64.A1N
	Discipline	s to Deliver		LOCATION	N: Pou	ighkeepsie, NY		WEATHE	ER:	· · · ·	
	CTOR.			<u> </u>		w	ATER	LEVEL ME	ASUREM	INIS	
OPERAT	OR:	· · ·						S PT	WATER	AT	TIME
F&O REP	RESENTAT G METHOI	IVE:): m	p	· · · · · · · · · · · · · · · · · · ·		DATE	141	3.11.			
SAMPLIN	IG METHO	D:	sleeve			· · · · · · · · · · · · · · · · · · ·					
BORING	LOCATION	na J:								·	
GROUNI) ELEVATIO	ON: <u>na</u>		<u></u>						<u> </u>	· · · · · ·
SAMPLE	PREFIX:	80405	1219- /	ACD-SS-		TIME AND DAT	EOF	COMPLETI	ON:		
DEPTH (FI)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No, AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
n-u'	2.41						•				
0 1	14,0						•	÷		1	
0-1.3					CI	I plu concr	UAR (asph	-		
1.3-2.4						1 arau	PIV	Slaa			
115 011					ע ב	I list bre	511+	dry			
>	264				$ \gamma\rangle$	vod loose	*	• •	-		
4-8'	0,12,0							•			
5-65									2		
4-5		6			5	AA			•		
5-65					5	z shale sh	ards	: Chunk	S		
		1			u	jith br F-m	n sa	Kilt si			
					n	nst at 5.0	100	SC.			· · ·
8~13,	19174.0										
8-9					b	r-101 f-C SF	ζp, f	an		•.	
					Ú	r shale the h	or o	trag			
bi in					S	ilt 1005l	, c	· · · · · ·			
[1-10					6	r/phy shale	$m + \cdot$	-111 JO Daiar<	~		
					1	the gravisit	upb	y macr	ofcore	2	
10-10,4	4					r shale she	wids	<u>chunk</u>	5		
BC DIA	DRING METER	BORING	METHOD	DEPTH	REM Field	ARKS Instrument - WH	5(1]	refusal is encou	ntered, descrit	all effort	sused to continu
						ut prod off	10W	diasol	M- 01	1.1010	m (Lin
						Decore Ves / No / Ded	licated D	evice			
PROPORTI	ONS USED:	<u> </u>			rield				<u></u>		
Trace Little	0 to 10% 10 to 20%	Some And	20 to 35% 35 to 50%		BAC Nativ	<u>KFILL</u> re Materia ¹		То	-	See M	lonitoring Well
EXAMPLE SAND, F	DESCRIPTION: -C, Some F-C gr	avel; Little silt;	Trace clay; (10R	5/4)	Bento	onite Grout/Chips		To			letion Report
Moist. Lo	oose. No odor.				Conc Othe	rete/Asphalt r		10 _ To _		- -	
Reviewed	by Staff:						· · ·	•		1.1.1	

Fuss & O'Neill of New York P.C.

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MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

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GENERAL INFORMATION	
Project Name: <u>AC</u> Dutton	Site ID (Boring/Well ID): MW - X7
Project Location:POIC, NY	Project No.: 2004676444(N
F&O Engineer/Geologist: <u>RST</u>	Ground Surface Elevation:
Date of Completion: 12 (19 05	Permit #:
Boring Location: $X7$ (ACD - $X7$)	E1 Top of Steel Casing:
Drilling Contractor: Todd Systen MC.	E1 Top of PVC Casing:
Drilling Method: Geoprobe	Measuring Point: TPS PVC
WELL CONSTRUCTION	Well Cover (see codes):
Well Casing/Riser Sump (below screen)	,Protective Casing
Diameter:in. Diameter:in.	Diameter: N/A in. Type: N/A
Type: Type:	Stick-up:ft Depth to Bottom: ft
Stick-up: 1.07' Length: NA in.	Seal Material:
Screen Intervals (Bedrock @ 13.9') "
Screen Interval: <u>8.9-13.9</u> (Hbg5) ft Diameter:	1 in. Slot Size: 0.010 in.
Description: PVC/Other:PVC	
Type: Perforated / Slotted / Wire-Wrap / Other: 50-60	······
ANNULAR FILL	
Surface Seal (Approx	imate volumes if available)
Interval: <u>7.0-Surface</u> ft. Tremied: Y / N	Volume:bags
Description: Concrete / Other: benton ten	
Backfill	
Interval: $6.9-7.0$ ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / (Fill) Other: 5and	
Lower Seal	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite / Bentonite Pellets / Grout / Other:	
Filter /	
Interval: $(6.9 - 13.9)$ ft. Tremied: Y / N	Volume:bags
Description: Sand Elter (type:) / Other:)	
Lower Backfill	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / Fill / Other:	

	FUSS Disciplin	& O'N es to Delive	EILL r	B PROJECT: LOCATIO	ORI AC Du N: Pou	NGLOG atton ghkeepsie, NY		SITE ID SHEET: PROJEC WEATH	:X {\} T NO: ER:15 d	of 2004076 eg. clear	54.A1N	
ONTRA	CTOR:					V	VATER I	EVEL M	EASUREM	ents		
)PERAT(&O REP	OR: RESENTA	TIVE:				DATE	MS	. PT.	WATER	AT	TIME	
ORILLIN AMPLIN	G METHO	D: <u> </u>	<u>lp</u> sleeve			***************************************					-	
ORING	CWI: LOCATIO	na N:	_HAMMER I	FALL (IN)	na				· · .			
AMPLE I	ARTED: PREFIX:	101N: na 1530512	HO7- //	10-55-		TIME AND DA	 TE OF C	OMPLET	ION: 12	/7/05	0:59	
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH	SAMPLE	No. AND TIME		SAMPLE DESC	CRIPTION		STRATA CHANGE	LITHO- LOGIC	FIELD TESTING	
-0,5	2.7/4.0	0-0.5	036/X	x (D-05)	- AS	shalt						
5-40		0.5-3.0	1055 037 / X9	ş (.5-3.0)	Fil	1 sand F-(2 an	d				
			[0:5	1	6V	ite, and che	rl Sla	B			•	
		30-6,2	035/21	s (3.0-6,2)) Jru	woder N	5	•				
0-6.2	2.0/4.0		1075)	Sa	me as alron	J. ٩	· · ·				
						•	•	· •				
					re	pusal at 1	0'9,		· .			. '
						· .		·				
								· · · · ·				
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						· · · · · · · · · · · · · · · · · · ·	· · ·					:
BOR DIAM	ING ETER	BORING	METHOD	DEPTH	<u>REMAR</u> Field Inst	KS rument=	If refu	sal is encoun	tered, describe	all efforts u	sed to confirm	•, :
						· ·				•		
ROPORTION race 0	IS USED: to 10%	Some	20 to 35%		Field Dec	on: Yes / No / Dedic	ated Devic	e .				
tle 10 KAMPLE DE AND, F-C:) to 20% SCRIPTION: Some F-C grav	And vel: Little silt: T	35 to 50% race clay: (10R5/	(4)	BACKFI Native M Bentonite	LL aterial Grout/Chips		To To		See Mon Completi	itoring Well ion Report	
oist. Loos	e. No odor.	1, L atin 3111, I.		·/	Concrete	Asphalt	•	To	,			

Test Pit # <u>7</u> Location:

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Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/12/2005
Time:	9:30
Sample Prefix: 0	804051212- / ACD-SS-X9
Logged By:	MP

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Cor	tractor:		
Ope	erator:		
Bac	kfill:		



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-J 0			Asphalt		
0 - Ц"			Angular gravel, trace day and sand		
4" - 5"			Angular gravel		
5" - 7"			silt dry mod. brown		
7"-9			West East		
		:	W. face = Coment red brick +		
			Wall, W. side= red trace fine hick brick+fine brick nicely layed		
-			trace sound + t combinited availed do alether		
9 -			botton - cement. no waser		
0 - 1'	001/6-1)	1046			

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

Mick/concrete building at Send of W Ы COMMENTS: ∿່) e DIC

Test Pit #	# 05
Location:	76

Project Name: AC Dutton 20040<u>764.</u>A1N Project Number: Date: 12/1/2005 13:00 Time: 804051201- /ACD -Sample Prefix: MΡ

Logged By:

Contractor:	
Operator:	
Backfill:	



.

DEPTH from to	SAMPLE NUMBER	TIME	S	OIL DESCRIPTION		USCS CODE	FIELD TESTING
03"			Asphalt				
0 -D.,			B. Sand C	+ angular	gravel,		
			Some gravel,	trace wood,	Wet		
19., -			bedrock				
				· ·			
0 - 1'	007 5516	13:20					
-	0005554				•		
-					•		
					· · ·		

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

COMMENTS: SE COMMENTS: SE COMMENTS: SE COMMENTS: SE COMMENTS: SE COMMENTS: S of Waster table just beneath a pic. # 18-21 building l 0

				B	ORI	NGLC	G		SITE ID:	76		
	FUSS	&O'N	EILL	PROJECT:	ACD	utton			SHEET:	1 NO	<u>of</u>	4 4 1 1
	Disciplin	es to Delive	r	LOCATIO	N: Pou	ghkeepsie,	NY		WEATHE	R: <u>15 d</u> e	<u>2004076</u> 2004076	9.AIN
CONTRA	CTOR:			I			V	VATER I	EVEL MÉ	ASUREMI	ENTS	
F&O REF	PRESENTA	TIVE:				DATI	 E	MS	. PT.	WATER	AT	TIME
DRILLIN	IG METHO	D: <u>n</u> רסנ	nlp									
HAMME	R WT:		_HAMMER F	ALL (IN)	na							
GROUNI	DELEVAT	N: <u> </u>								······		· · · · · · · · · · · · · · · · · · ·
DATE ST	ARTED:	<u>62611</u>	1=76 14	N-55-				<u> </u>			·	1
SAWIFLE		350314		<u>_0</u>		TIME AN		TE OF O	OMPLETI	ON: <u>12/</u>	7/05 1	<u>1.01</u>
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE N	Io. AND TIME		SAM	PLE DESC	CRIPTION	. •	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING
0-0.5	3.3/9.7	0-0.5	039/46	(05)	A5	phalt		•	·			
	Ű		11:05				-					
								•			•	н 1 — 1 — 1
16-7-		0.5-22	040/46	(5-2.2)	6	-0.2	12 8 1		IN			· .
()ାର ବାସ			11:07	,	Bu	ale ju		wor .	and			
					In	5 UQUI	NO					
								- · · ·			- ,	
					re	fusal ò	7.9.	9	· .			· .
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							•	· · ·		· · · .		
							•		· ·			
BOR	ING				REMAR	KS	<u> </u>			·	<u> </u>	
DIAM	ETER	BORING	ALE I HOD	DEFIH	Field Inst	rument=	• • • •	If refus	al is encounte	red, describe a	ll efforts us	ed to confirm.
							· · ·	•		. ,	•	
					Field Dec	on: Yes/No	/ Dedic:	ated Device				-
PROPORTION Trace 0	IS USED: to 10%	Some	20 to 35%		_ ~						<u> </u>	
Little 10	SCRIPTION	And	35 to 50%		BACKFI Native M	<u>LL</u> aterial		· .	_ To		See Moni	oring Well
SAND, F-C;	Some F-C grav	vel; Little silt; Ti	race clay; (10R5/4)	Bentonite	Grout/Chips		· · ·	To		Completio	on Report
Reviewed by	Staff.				Other	Asphalt			To To	· · ·		· .
Trevieweu by	Julii:						•	• • .				

Test Pit # _____ Location:_____ 17

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/12/2005
Time:	11:00
Sample Prefix:	804051212- / ACD-SS- \
Logged By:	MP

Operator:	
Backfill:	



FUSS & O'NEILL Disciplines to Deliver

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
~ , - 0			Apphalt		
0 - J"			gravel, c. sand trace clay wet, loose		
J" _10"			Clay frace gravel tight dry gray		
10" -16"			rock lawer		
16" - 291"			brick sand't trace gravel, I brown dry loose, trace plastic.		
291 - 3D''			sand, Mace clay + growel, black-wet,		
30" - 57"			clay r gravel dry tight 1. brown		· · ·
51"-			bedrock		
			•		
0 -0,9'	000/(0-0,5	1210		-	
0.5-3	003/653	1903			
3-6'	00/(3-6)	1207			

APPROS SURFACE FUE (ET.MSI)
ATTICO, SONTAGE LEG. (P.1-WDL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

in direction of 19 COMMENTS: ~10' 6 DIC # andwal e dar P 97/ Δ n d

Test Pit # _ 03

Location: 10

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/1/2005
Time:	1111
Sample Prefix:	804051201- ACD-SS-
Logged By:	

Contractor: Operator: Backfill:



DEPTH	SAMPLE NUMBER	TIMF	SOU DESCRIPTION	USCS	FIELD
0 - 3"			Asphalt		TESTING
3" - 6"			sand c., replayed some clay, loose so moist, gray		
6" - 9"			Apphalt		•
9" - 92"			yellow fine brick, nicely layed		
			N+E side wall - rest is layered w		
			clay gravel muxture crushed gray porous stone (51/2)		
			broke (~1') chunks of gray state		
92"-			bottom. nowater		
0 - 1'	005/55710	11:15			•
1 - 3,	0065540	12:12			

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	

TEST PIT SKETCH:

COMMENTS: Portion of northern wall is possib U. ound is very neatly layed and BU Nock. Sam 006 Took DIR som pik, no real visible sand in the TP - maybe 501 come βm top and ø n

pic # 6-14

Test Pit # 12

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	J: 35
Sample Prefix:	767051207- / ACD-SS-712-
Logged By:	LMG

Contractor:	
Operator:	
Backfill:	



DEPTH from to	SAMPLE NUMBER	TIME	SOIL DESCRIPTION	USCS CODE	FIELD TESTING
0 -9"			Asphalt, organics	•. •	
2"-0.5'			med brown, m-f sand, hitles It, organics, brick		
05' - 1'			die brown m-f sound. little silt. little organis: large (6"-1") Lillvoue		
1' -4'			med-1+ brown f send. silt, to buge		
41 -			GW		· · ·
				-	
0 - 0,5'	020	2:45			
0.5-4	(D)	2:50			
				-	
				•	

APPROS. SURFACE ELE, (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

.

COMMENTS: Foundation to the E. pit@ 3' bgs (RR side)

Test Pit # <u>7</u> Location:

-

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/15/2005
Time:	8:00
Sample Prefix:	768051215- / ACD-SS- 7-9
Logged By:	MP

-

Contractor:	
Operator:	
Backfill:	

-



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
-)''- 0			Asphalt		
0 -10"			gravel some day, hard (prosen) gravery + c. sand.		
10" -12"			E: concrete wall NHS: asphalt		
12" - 32"			brick, c. sand, gravel trace clay		
33"-54"			concrete fasting		
48" -			ach layer		
54" -	".		pipe		
54"-93"			clay some gravel. (sand, brick och		
- 93"			be drock dry.		
0.5-3'	001/(5-3)	\$:33			
3-6'	000/(3-6)	9:12			
6-8'	003,	9:19			
5-91	004/6-9	9:20			
APPROS. SURFAC	E ELE. (FT-MSL)		<u>TEST PIT SKETCH</u> :		
DIMENSIONS OF	PfT:				
DEPTH TO BEDR	007				
DEPTH TO MOTT					
DEPTH TO ROOT	S				
DEPTH TO WATE	R				
WERE PHOTOS T	AKEN?				
METHOD OF SAM	IPLE COLLECTI	ION			
comments: p	ic 15-15	z			
brick wa	U W	- NIV	nning N-S through TP.		
			0		

	FUSS	8r O'N	FILL	BROJECT		NG LOG		SITE ID:_ SHEET:_	210	of	·····		
	Disciplines to Deliver					PROJECT NO N: Poughkeepsie, NY WEATHER:					IO:		
CONTRA	CTOR:					V	VATER LI	EVEL ME.	ASUREM	ENTS			
OPERATO F&O REP	OR: RESENTA	TIVE:				DATE	MS.	PT.	WATER	AT	TIME		
SAMPLIN	G METHO	D: <u> </u>	<u>sleeve</u>			~							
BORING	LOCATIO	<u>na</u> N: ION: na	_HAMMER	FALL (IIN)	na		· ·				· · ·		
DATE ST	ARTED:	1014: <u>112</u> 16306	- 2061	LACD-SS-						(9/05 1	2.26		
									12/ 				
DEPTH (FT)	REC/ PEN	DEPTH (FT)	SAMPLI	E No. AND TIME		SAMPLE DESC	CRIPTION		STRATA CHANGE	LOGIC CODE	FIELD TESTING		
0-0.7	2.44.0				AS	phalt	• •						
0.1-1.0					Co	norete	•		-				
1.0-4.0		1.0-1.5	038/Z1	0(1-1.5) 13:2	o Fi	I, sand F-(L, Som	s gravel	- 				
		1,5-4.0	15/1900	0(1.5-4.0) dru	1. no o doi	ICK, C SYR	212					
4.0-20	ND			13:21	J RO	recovery							
8.0-8.4	2.8/4.0				50	me as all	0V9				• •		
8,4-9,0		8-10.0	0301211) <i>(</i> 8-10)		actured sho	rle, dr	yno					
				13:30) od	01					•		
9,0-12,0		10-12.0	031/ZI	0(10-12)	sa	nd F-Mei	ttle gy	avel		•••••••			
				13'.3	B [S	rale) trace	silt	wet					
					5	XR411:SV	J.						
2.0-13.1	0,3/1				50	ime as al	ove						
	/ / / /				13	1 refused	l						
							• • •						
POP					DEMAT		· ·						
DIAMI	ETER	BORING	AETHOD	DEPTH	Field Ins	trument-	If refus	l is encounter	red, describe :	all efforts us	ed to confirm.		
									· · · ·	. " 			
PROPORTION	S USED:	5	20 100		Field De	con: Yes / No / Dedic	ated Device	· · ·		·	· · ·		
Little 0 t	to 20%	Some And	20 to 35% 35 to 50%		<u>BACKF</u> Native M	I <u>I.I.</u> faterial	· · ·	_ To		See Monit	oring Well		
SAND, F-C, Moist. Loose	Some F-C grav e. No odor.	vel; Little silt; T	race clay; (10R5	/4)	Bentonit Concrete	e Grout/Chips /Asphalt	· · · ·	То То	•	Completio	m Report		
Reviewed by	Staff:				Other_	<u></u>	······	To	· · · · · · · · · · · · · · · · · · ·				

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Test Pit # 0Location: $2\sqrt{9}$

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Project Name:	ACDutton		
Project Number:	20040764.A1N		
Date:	12/1/2005		
Time:	10:35		
Sample Prefix:	804051201- / ACD-SS-		
Logged By:	MP		

-

Contractor:		
Operator:		
Backfill:		



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FUSS & O'NEILL Discipline: to Deliver

-

DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 3"			asphalt		
3" - 7"			loose gravel with f-c sand trace organics roots		
7" - 11"			crushed concrete		
11, -~			Jark Hown warse sands gravel		
~20" - 39"			blick + trace fine brick		
39" -			water		
0 -1'	00/212/0-1	10:30			
1-3	007/12(0-3)	10:35			
~					
-					
-					

APPROS. SURFACE ELE. (FT-MSL)
DIMENSIONS OF PIT:
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

TEST PIT SKETCH:

COMMENTS: SW COMOR	of Dite	odiacent	to loading dock
and haintrack	•	,	0
Pic # 1-3			
•			

FUSS & O'NEILL Discipline: to Deliver PROJECT: AC Dutton SHEET:	040764.A1N clear [S TIME
Discipline: to Deliver LOCATION: Poughkeepsie, NY PROJECT NO: CONTRACTOR:	INC. FIELD
CONTRACTOR: WATER LEVEL MEASUREMENT OPERATOR: DATE F&O REPRESENTATIVE: DATE MS. PT. WATER AT DRILLING METHOD: mlp SAMPLING METHOD: sleeve HAMMER WT: na BORING LOCATION: GROUND ELEVATION: GROUND ELEVATION: na DATE STARTED: SAMPLE PREFIX: SAMPLE PREFIX: TIME AND DATE OF COMPLETION: 12/7/C	IS TIME J J5 HO- FIELD FEELD
F&O REPRESENTATIVE: DATE MS. PT. WATER AT DRILLING METHOD: mlp SAMPLING METHOD: sleeve HAMMER WT: na HAMMER FALL (IN) BORING LOCATION: GROUND ELEVATION: na DATE STARTED: JATE STARTED: JATE STARTED: SAMPLE PREFIX: JATE SAMPLE SAMPLE NO. AND TIME	TIME TIME
DRILLING METHOD: mlp SAMPLING METHOD: sleeve HAMMER WT: na BORING LOCATION: GROUND ELEVATION: GROUND ELEVATION: na DATE STARTED: TIME AND DATE OF COMPLETION: SAMPLE PREFIX: 16 30 3 1 30 1 - /ACD -SS - TIME AND DATE OF COMPLETION: 12/7/C)5 HOFIELD XGCFIELD
Sateric HAMMER WI:)5 THO- XGC FIELD TESTING
BORING LOCATION:)5 THO- DGC FIELD TESTING
DATE STARTED: SAMPLE PREFIX: 153051201 - ACD -58- TIME AND DATE OF COMPLETION: 12/7/C DEPTH SAMPLE No. AND TIME SAMPLE DESCRIPTION STRATA)5 THO- DGC FIELD TESTING
DEPTH REC/ SAMPLE SAMPLE No. AND TIME SAMPLE DESCRIPTION STRATA LT	THO- JGIC TESTING
DEPTH REC/ SAMPLE SAMPLE No. AND TIME SAMPLE DESCRIPTION STRATA	THO- DGIC FIELD TESTING
(F1) PEN (FT) CHANGE O	ODE ILOTITU
0-0,3 3,7/4,0 0,0-0,5 033/AA8(05) Asphalt	
0.3-25 0.5-30 034/APS(.5-3) EILSOND F-C. Some	
10:08 payled trace sitt. Mick	
rick flour	
2260 036100813-61 Jan 100000 N55W	
D.S-4,2 1.91,0 gravel, some silt, shale	
pragments, moist GM	
10 Yr 5/4 Do odor	· · ·
4.2-5.0 shale dry no odor N3	
repused at 5.0'	· ·
BORING BORING METHOD DEPTH REMARKS	
DIAMETER Diametered, describe all eff	orts used to confirm.
Field Decon: Yes / No / Dedicated Device	
PROPORTIONS USED: Trace 0 to 10% Some 20 to 35% Linte 10 to 20% And 35 to 55%	
EXAMPLE DESCRIPTION: BACKFILL Native Material To Sec	Monitoring Well
SAND, F-C, Some F-C gravel; Little silt; Trace clay; (10R5/4) Bentonite Grout/Chips To Concrete/Asphalt Concrete/Asphalt	mpletion Report
Reviewed by Staff: To	

						BORING LOG SITE ID: AA 9							
	FUSS	&O'N	EILL	PROJECT:	ACD	utton		SHEET:_ PROIECI	Г NO:	<u>ot</u> 2004076	4.A1N	-	
	Disciplin	es to Delive	r	LOCATION	CATION: Poughkeepsie, NY WEATHE					ER:15 deg. clear			
CONTRA	CTOR:				WATER LEVEL MEASUREMENTS								
F&O REF	PRESENTA	TIVE:				DATE	MS	. PT.	WATER	AT	TIME		
DRILLIN	IG METHO JG METHO)D:n	alp					-	<u>.</u>	•	······		
HAMMEI	R WT:	<u>na</u>	_HAMMER F	ALL (IN)	na	· ·	1	· · · · ·	•		······	_	
GROUNI	DELEVAT	ЮN: ION:а	• • • • • • • • • • • • • • • • • • • •									÷	
DATE ST	ARTED:	1530GIS	108-100	N - 55 -								╡	
SAMELL						TIME AND DA	TE OF C	OMPLETI	ON: <u>12</u> /	<u>/8/05 </u>			
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No, AND TIME		SAMPLE DES	SCRIPTION	-	SIRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING		
0-0,3	25/4.0	0-0.5	046/AA	9(0-,5)	P	sphalt.	· · · · · · · · · · · ·						
1.3-4.0		0.5-3.0	PATIDAS	(.5-3)	7 Fi	11, sand =- (); stor e	-g Som	با	· · · ·			
			••••	16:03	3 gr	aviel (shall	e proc	})	-	, .			
				1.	$\neg \psi$	ace silt, sh	ag. M	uck,		· .			
		3,0-6.0	048/AFF	1(3-6)	dr	ynoodo	r	·					
4.0-5.0	3.44.0			10:01	Q		I MARIA		• - <u>-</u>				
				(L.S)	50	une us a	0000				-		
6. 90		6.0-8.0		1(6-0)			· . · .						
20-010				10:40	2 5	rale freg c	and si	14	•				
					ψ	ace sand.	NO OU	Jor.	• .		· ·	•	
6.0-11.0	3.0/	8,0-10,0	05U / APF	(01-B)F	Sc	ime as al	bove	wet					
01-1	79.0	-		0:00	' at	- 10.8	· · ·	÷.		•			
		10.0-11.7	OSILAA	(10-11, 1)						:			
11.0-11.7			,,,	ີ ແລະ	SV	ale prag. v	viet oc	lor NB	3				
				la ar			•			1.			
								\			•	•	
					20	fusar as	t, IN I	•				•	
1							1. 					· ·	
						•						•	
BOR	ING	ROBINICI		DEPTH	REMA	RKS		· · ·			<u> </u>	<u> </u>	
DIAM	ETER	DORING	METHOD	DEPIH	Field In:	strument=	If refu	isal is encount	ered, describe	all efforts u	ised to confirm.		
								· · ·	•	•			
					Field Do	econ: Yes / No / Ded	licated Devic	e .					
PROPORTION Trace 0	NS USED: to 10%	Some	20 to 35%						•	· · · ·	. :	_	
EXAMPLE DE	SCRIPTION:	And	35 to 50%		<u>BACKF</u> Native I	ALL. Material	•	To		See Mor	itoring Well		
SAND, F-C; Moist. Loos	Some F-C gra e. No odor.	vel; Little silt; T	race clay; (10R5/	(4)	Bentoni	te Grout/Chips		To 		Complet	ion Report		
Reviewed by	Staff:				Other_			To		· . '	- - -		
						•			•	•			

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	ELICO	۰ ۵- () ۲	TIL I	BORING LOG SITE ID: SHEET:			AA10 of					
	rU33 Disciplin	a U IN ies to Delive	EILL r		PROJECT: AC Dutton PROJECT LOCATION: Poughkeensie NY WEATHE				l' NO: <u>20040764.A1N</u> ER: 15 deg. clear			
CONTRA	CTOR:			LOCAIR	WATER I EVEL ME							
OPERATO ENO RED	OR:	31VE.		·		TATE	7.00	DT				
DRILLIN	G METHC	D: r	nlp			DAIE			WAILK			
HAMMEN	RWT:	<u></u>	HAMMER F	ALL (IN)	na							
GROUNI	LOCATIO DELEVAT	'N: <u>na</u> 'ION: <u>na</u>										
DATE ST SAMPLE	ARTED: PREFIX:	1530616	A - 100	(D-55-		TIME AND DAT	'E OF C	OMPLETI	ON: <u>12/</u>	/7/05	9:48	
DEPTH (FI)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE	No. AND TIME		SAMPLE DESC	RIPTION		STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING	
)-0.3	2.5/4.0	0-0,5	025/1791	(05)	R.	phalt						
),3-3,8		0,5-3.0	9:28 026/AA1(9:30)(5-3)	FI	1, sand F-C	and obic	, gravel kand				
	,	3.0-6.0	DELLEO)(3-6)	ash, no odor SW, N3dry							
,18-5.0	1.8/4.0	6.0-8.0	97.32 025/AA10)(6-8)	Br	(UL		_				
30-716			9,35		F	11 Sand F-C	and i	grovel				
		8.0-10.0	029/AA1 9:38	0 (8-10)	ar tv	ace silt, M In SN N3	ace V	vuuc ,				
1.6-9.8	2.514.0	10,0-12,0	0 030/AAIU(10-17) 9:40			nd F-M,301 Icesilt, NO	ne que	vavel,				
1.8-14.5	3.0/4.0	10,0-14.0	031/AA10 9:45	(12-14)	10. 10.	yr 5/4 dry awel (shale)	sw Vac	e silt				
		14.0-16.0	032/1941i 9:48)(14-16)	N Per Vic Vic	et at 11.51 to troleum ado sible production ingon top of	stron r N at 4, silt	32 GW 5ft byer		-		
4.5-16.0)				รา	t, tight, NS,	wet	CL				
BOR DIAM	ING ETER	BORING	METHOD	DEPTH	REMAR Field Ins	trument=	If refu	sal is encounte	red, describe a	l all efforts u	sed to confirm.	
					Field De	con: Yes / No / Dedica	ited Device					
PROPORTIONS USED: Trace 0 to 10% Some 20 to 35% Linle 10 to 20% And 35 to 50% EXAMPLE DESCRIPTION: SAND, F-C; Some F-C gravel; Little silt; Trace clay; (10R5/4) Moist. Loose. No odor. Reviewed by Staff:					BACKF Native M Bentonit Concrete Other	ILL laterial e Grout/Chips /Asphalt		To To To		See Moni Completi	toring Well on Report	

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Fuss & O'Neill of New York P.C.

MONITORING WELL COMPLETION REPORT GENERAL INFORMATION

GENERAL INFORMATION	
Project Name: <u>AC Dutton</u>	Site ID (Boring/Well ID): <u>MW - AAIO</u>
Project Location: Poughkeupsie NY	Project No.: 2004076441N
F&O Engineer/Geologist:C	Ground Surface Elevation:
Date of Completion: 12 7	Permit #:
Boring Location: <u>ACD - AAID</u>	E1 Top of Steel Casing: χ
Drilling Contractor: Todd Syska (nc.	E1 Top of PVC Casing:X
Drilling Method: <u>Geoprobe</u>	Measuring Point: TPS / PVC
WELL CONSTRUCTION	Well Cover (see codes): P P V C
Well Casing/Riser Sump (below screen)	Protective Casing
Diameter: in. Diameter: in.	Diameter: <u>None</u> in. Type:
Type: PVC Type: PVC	Stick-up:ft Depth to Bottom;ft
Stick-up:	Seal Material:
Screen Intervals	
Screen Interval: 17'-7' ft Diameter:	in. Slot Size: 0.010 in.
Description PVC Other: borng VISIBLY wet @	approx \$ 115 bgs
Type: Perforated / Slotted/ Wire-Wrap / Other:	
ANNULAR FILL	
Surface Seal (Approxi	imate volumes if available)
Interval: 6-Gurface (0) ft. Tremied: Y / N	Volume:bags
Description: Concrete / Other: benton i fe	
Backfill	
Interval:	Volume:bags
Description: Bentonite Grout / (Fill) / Other:	
Lower Seal	
Interval:ft. Tremied: Y / N	Volume: bags
Description: Hentonite Bentonite Pellets / Grout / Other:	
Filter	
Interval: $7-6$ ft. Tremied: Y / N	Volume: bags
Description: and Pilter (type:) / Other:)	O
Lower Backfill	
Interval:ft. Tremied: Y / N	Volume:bags
Description: Bentonite Grout / Fill / Other:	

				BC	BORING LOG SITE ID					». AAII			
U	FUSS	&O'N	EILL	PROJECT:	ACD	utton		SHEET: PROJEC	T NO:	<u>of</u> 2004076	64.A1N		
	Disciplin	es to Delive	r	LOCATION	TION: Poughkeepsie, NY WEATH					ER: <u>15 deg. clear</u>			
CONTRA	CTOR:	·				W	VATER I	EVEL M	EASUREMI	ents			
F&O REI	PRESENTA	TIVE:				DATE	MS	. PT.	WATER	AT	TIME		
SAMPLIN	IG METHO	D: <u> </u>	sleeve										
BORING	R WT: LOCATIO	<u>na</u> N:	_HAMMER F	ALL (IN)	na				•	·			
GROUNI) ELEVAT 'ARTED:	ION: <u>na</u>											
SAMPLE	PREFIX:	1930512	08-/AC	.D-55-		TIME AND DAT	TE OF C	OMPLET	ION: <u>12/</u>	<u>/8/05 </u>	4:30		
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLE 1	io. AND TIME		SAMPLE DESC	CRIPTION	•	STRATA CHANGE	LITHO- LOGIC CODE	FIELD TESTING		
0-0,4	ə,5/4,0	0-0.5	032/AA	11 (0- 5)	R	phalt							
0.4-8.0	08/40	0.5-3.0	033 / AA	11 (.5-3.0)	[Fi	11, sound F-	0,50	sme	-	· · ·			
		:		14:19	6/97	avel. trac	e br	uck,					
		3.0-8.0	034/AA1	(3.0-8.0)	SIG	zg coal. v	let a	+38,					
	381	80-100	035/001	(1912) (1 11-0.x)	"na) odor				•			
8.0-12.0	5.99.0	6.0 10.0	0.5 77 1177	M:25		II wet DO	Hrole	AM	<u> </u>				
		10.0-12.0	036/AA1	1(10.0-12.0	Jod	or							
10 0-13 0	39/.	120-120	037/44	1412 162.0-B.C)	me as alo	N.L.	•					
1210 010	19.0		00 91311	14:2	s a				•				
13.0-160	I.	14.0-16.0	038/AAI	1 (14,0-16,0)) Sili	t tight we	of CL	N'5					
				M.3					•				
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BOR	ING ETER	BORING	METHOD	DEPTH R	LEMAR	<u>KS</u>	Tf mater	sal-is encount	ered describe a	l efforts	ed to confirm		
		<u></u>		¹			in jeith	un a craobull	~~~~y w~~~110° s	ч спота U	~~ w winnin		
				·····	* 11-				· ·				
PROPORTION Trace	VS USED: to 10%	Some	20 to 35%	F	'ield Dec	con: Yes / No / Dedica	ated Device	•		· · .			
Little 10	0 to 20%	And	35 to 50%		ACKFI	<u>LL</u> aterial	• •	То		See Moni	toring Well		
SAND, F-C, Moist. Loos	Some F-C grav e. No odor.	vel; Little silt; Ti	race clay; (10R5/4) B	Sentonite	Grout/Chips	· · ·	To		Completi	on Report		
Reviewed by	Staff:				Other			To					
							• :						

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/7/2005
Time:	3:00
Sample Prefix:	767051207- / ACD-SS- PAD-
Logged By:	LMG

Contractor:	
Operator:	
Backfill:	



DEPTH	SAMPLE			USCS	FIELD
from to	NUMBER	TIME	SOIL DESCRIPTION	CODE	TESTING
0 - 9,,			Asphalt some organics		
J., - 1,			broken up concrete pieces (~2") Clearly used as fill on subtrace for road		
1, - 2,			f m dk brown sand. little organics some orushed brick little shale		
2'-5,5'			little form sand de brown, mostly Shale, little gavel, tei trace kiln slog	· · · · ·	
			at ~3.5'. trace brick		•
9,9-6,5			med brown f-m sand. little brick. GW.		· · ·
5.5-			GW fillshale		
					•
0-05	033	3:10			
0,9-3	073	3:15			
3-6	024	3'.20			
-					

DIMENSIONS OF PIT: TOTAL DEPTH
TOTAL DEPTH
DEPTH TO BEDROCK
DEPTH TO MOTTLING
DEPTH TO ROOTS
DEPTH TO WATER
WERE PHOTOS TAKEN?
METHOD OF SAMPLE COLLECTION

COMMENTS:

TEST PIT SKETCH:

Test Pit # _____AB____

Project Name:	ACDutton
Project Number:	20040764.A1N
Date:	12/15/2005
Time:	930
Sample Prefix:	768051215 / ACD-SS- AB9
Logged By:	MP

Contractor:	
Operator:	
Backfill:	



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DE	EPTH	SAMPLE	TRAT		•	USCS	FIELD
	<u></u>	NUMBER	ITAL	SOIL DESCRIPTION		CODE	TESTING
-'2^	- 0			Asphalt			
0	- 1"			angular growed.		-	
1"	- 42"			Claybots and & gravel tra	ce brick	• •	
42'				bedrock, no water			
0	-0.5	005/	9:50	· · · · · · · · · · · · · · · · · · ·			
1	- 41	006/1-4)	9:55				
					· .		
							· ·

APPROS. SURFACE ELE. (FT-MSL)	
DIMENSIONS OF PIT:	
TOTAL DEPTH	
DEPTH TO BEDROCK	
DEPTH TO MOTTLING	
DEPTH TO ROOTS	
DEPTH TO WATER	
WERE PHOTOS TAKEN?	
METHOD OF SAMPLE COLLECTION	
METHOD OF SAMPLE COLLECTION	

COMMENTS: DIC 19-20

TEST PIT SKETCH:

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

F	FUSS	&O'N	EILL	BOJECT:	ORI AC Di	NGLOG ntton	HD-1U of FNO: 20040764.A1N										
	Disciplin	es to Delive	r	LOCATION	N: Pou	ghkeepsie, NY	WEATHE	ER: 15 deg. clear									
CONTRA	CTOR:					V	WATER	LEVEL ME	ASUREME	INTS							
F&O REP	JR: RESENTA	TIVE:				DATE	M	S. PT.	WATER	AT	TIME						
DRILLIN	G METHO	D: <u>n</u> חרו	<u>nlp</u> sleeve								•						
HAMMER	WT:	na	_HAMMER	FALL (IN)	na	· · · · · · · · · · · · · · · · · · ·		·····	• •		• •						
GROUNE	ELEVAT	N: ION:a			<u>-</u>	·				•							
DATE ST. SAMPLE	ARTED: PREFIX:	530512	08-190	D-55-	<u>`</u>		TF OF (ON: 12/	8/05	5` <u>`</u> 30							
		1	, ,								· · · · · · · · · · · · · · · · · · ·						
DEPTH (FT)	REC/ PEN	SAMPLE DEPTH (FT)	SAMPLI	E No. AND TIME		SAMPLE DES	CRIPTION	•	STRATA CHANCE	LITHO- LOGIC CODE	FIELD TESTING						
2-0.4	2.8/4.1	08-1.5	0391/146	310(18-1.5)) As	phalt		· · · · · ·									
5.4-08	, , , ,]		1600	110	AND CONRA	a MOI	Jar.									
				· -)	4		wig	~~(·									
1.8-4.0	1454310	1.5-3.0	040/A	BID (15-3)		11. Sand F	-(: -	Some									
,				15:0		wel (Shall	groom		•								
		1 ort D	nulbr	0 3-61	511	+. Mace 1-	rice				· . ·						
		5.0 0.0		151.00	s mo	istat 3.8	noa	odor									
1040	2.0/	1080	OYZIA	BID & (6-8)	sa	me as abor	JR. W	et at	•								
1.0-0.0	- 79.0	6.0-0.0	0	19,19	odori												
20-95	2.3/4D	8.0-10.0	043/AF	510 (8-10)	<u> </u>	me as all	ove	•	• .								
	7 110	0 0-12 0	644/AE	30(10-12)		agmental.	shale	and									
1:0-12.0		10,0 12,0		15:25	Sil	+ strong a	tor f	rom	•		· · ·						
					10	15-13.5 W	let 5	44/1		· ·							
12.0-14.6		12.0-14.6	OUSIA	310 (12-14,6) 80	me as al	JOV-e	i	· · ·.								
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BOR DIAM	ING ETER	BORING	METHOD	DEPTH	RÉMAR Field Inst	<u>KS</u> rument=	If ref	usal is encounte	red, describe a	ll efforts us	ed to confirm.						
								•	• • •								
1999				· · · · · · · · · · · · · · · · · · ·	11.115		. 15 1		· · ·	• •							
PROPORTION	IS USED:	6	10 3501		rield Dec	on: 1es / No / Dedic	cated Devi	ce									
Little 10) to 20%	Some And	20 to 55% 35 to 50%		BACKFI	<u>LL</u> aterial		Ť~	• • • •	See Mart	oring Wall						
EXAMPLE DE SAND, F-C;	SCRIPTION: Some F-C gra	vel; Little silt; T	race clay; (10R	5/4)	Bentonite	Grout/Chips		To	·····	Completie	on Report						
Moist. Loos	e. No odor.				Concrete, Other	Asphalt		To	· · · · · · · · · · · · · · · · · · ·								
Keviewed by	Staff:									•							

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APPENDIX C

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT

LABORATORY ANALYTICAL RESULTS



A FULL SERVICE ENVIRONMENTAL LABORATORY

March 2, 2006

Mr. Noah Livingston Fuss & O'Neill, Inc 80 Washington St. Suite 301 Poughkeepsie, NY 12601

PROJECT AC DUTTON Submission #:R2629942

Dear Mr. Livingston

Enclosed are the analytical results of the analyses requested. A11 data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Michael Perry Laboratory Diffector

Enc.

* 5 Sediment Samples (metals, svoc,) * 3 Background Samples (metals)



1 Mustard ST. Suite 250 Rochester, NY 14609 (585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client	:	Fuss & O'Neill, Inc
Project Reference	::	AC DUTTON
Lab Submission #	1	R2629942
Project Manager	:	Michael Perry
Reported	:	03/02/06

Report Contains a total of <u>34</u> pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

1

CASE NARRATIVE

Company: Fuss & O'Neill, Inc. Project: AC Dutton Submission #: R2629942

Soil samples were collected on 1/20/06 and received at CAS on 1/21/06 in good condition at a cooler temperature of 2 °C. A NY DEC ASP-B report has been provided.

SEMIVOLATILE ORGANIC ANALYSIS - 8270

Five soil samples were analyzed for TCL list of SVOA by SW-846 method 8270C. Values detected between the PQL and the MDL have been reported flagged with a "J" as estimated.

These samples were analyzed at dilutions due to matrix interference in the sample extracts.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas and surrogate standard recoveries were within QC limits.

The surrogate standard recoveries were all with QC limits.

The Blank Spike (LCS) recoveries were all within QC limits. The matrix spike/matrix spike duplicate were not requested.

The Method Blanks associated with these samples are free of contamination.

No other analytical or QC problems were encountered.

METALS ANALYSIS

Eight soil samples were analyzed for the RCRA list of Total Metals plus Copper using SW-846 methods 6010B/7471A.

The initial and continuing calibration criteria were met for all analytes.

The Blank Spike (LCS) recoveries were all within QC limits. The matrix spike and duplicate analysis was not requested.

No other analytical or QC problems were encountered.

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

Michael K. Perry

Laboratory Manager

Date

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		REMARKS AMPLE CONDITIO																-					-			-			
	N	sorids %																							•				
	SED: 02/21/06 :.ASPB 4o.: PKG: Y	(SOLIDS)																											
	DATE REVIS DATE DUE: PROTOCOL SHIPPING N SUMMARY	RECEIVED	1/21/06	1/21/06	1/21/06	1/21/06	1/21/06	1/21/06	1/21/06	1/21/06		-									•					-			
		DATE	1/20/06	1/20/06	1/20/06	1/20/06	1/20/06	1/20/06	1/20/06	1/20/06																			
	OMPLETE: yes E REQUESTED: Y_x N /01/05 Y SEAL: PRESENT/ABSENT: - CUSTODY: PRESENT/ABSENT	REQUESTED PARAMETERS	RCRA 8 Metals + CU	RCRA 8 Metals + CU	RCRA 8 Metals + CU	RCRA 8 Metals + CU, 8270	RCRA 8 Metals + CU, 8270	RCRA 8 Metals + CU, 8270	RCRA 8 Metals + CU, 8270	RCRA 8 Metals + CU, 8270												-							
	BATCH C DISKETTE DATE: 11/ CUSTOD CHAIN OF	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL											-								
	ରଦାହର - ୦ଏ R2629942 Fuss & O'Neill,Inc Michael Perry AC DUTTON	CLIENT/EPA ID	379060120-01	379060120-02	379060120-03	379060120-04	379060120-05	379060120-06	379060120-07	379060120-08																			
	SDG#: 379 SUBMISSION SUBMISSION SUIENT CLIENT REP: PROJECT:	CAS JOB #	876715	876716	876717	876718	876719	876720	876721	876722																			

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

1/30/2006

876715

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ORGANIC QUALIFIERS

- U Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J. Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the MDL.
- N- Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The concentration is reported on the Form I and flagged with a "P".
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- X As specified in Case Narrative.
- This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032 Navy Facilities Engineering Service Center Approved Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

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INORGANIC QUALIFIERS

C (Concentration) qualifier -

- B if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). This qualifier may also be used to indicate that there was contamination above the reporting limit in the associated blank. See Narrative for details.
- U if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D Spike was diluted out
- E The reported value is estimated because the serial dilution did not meet criteria.
- J Estimated Value
- M Duplicate injection precision not met.
 - N Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Additions (MSA).
- W Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * Duplicate analysis not within control limits.
- + Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
 - "A" for Flame AA
 - "F" for Furnace AA
 - "PM" for ICP when Microwave Digestion is used
 - "AM" for Flame AA when Microwave Digestion is used
 - "FM" for Furnace M when Microwave Digestion is used
 - "CV" for Manual Cold Vapor AA
 - "AV" for Automated Cold Vapor AA
 - "CA" for Midi-Distillation Spectrophotometric
 - "AS" for Semi-Automated Spectrophotometric
 - "C" for Manual Spectrophotometric
 - "T" for Titrimetric
 - " " where no data has been entered
 - "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032 Navy Facilities Engineering Service Center Approved

Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

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ph pH 12 2 Residual Chlorine (+/-) 5-9** ES = All samples OK VO	Date : Date : le labels complete labels and tags ag containers used for Cassettes / Tubin ncies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Samuret, use NaOH and/or C Vial pH Verification Following Samples Exhibited pH > 2	yes wear yes wear yes lnta	3 00 nalysis th cust tests in ct NO	by:	.)? YES YES Zed Tedlar Reagent PC OK to ad	VIC NO NO Bags In V	nflated N/
poler Breakdown: Were all bott Did all bottle Were correct Air Samples: xplain any discrepa pH 12 2 2 Residual Chlorine (+/-) 5-9** ES = All samples OK 'If pH adjustment is req VO	Date : le labels complete labels and tags ag containers used for Cassettes / Tubin cies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Samuret, use NaOH and/or C Vial pH Verification Following Samples Exhibited pH > 2	yes wear yes wear yes watched by the tes of tes of t	3 00 nalysis th cust tests in ct NO	by:	.)? YES YES Zed Tedlar Reagent PC OK to ad	VL NO NO Bags In V	nflated N//
poler Breakdown: Were all bottle Did all bottle Were correct Air Samples: xplain any discrepa pH 12 2 2 Residual Chlorine (+/-) 5-9** ES = All samples OK Plf pH adjustment is req VO	Date : le labels complete labels and tags ag containers used for Cassettes / Tubin cies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Samuret, use NaOH and/or C Vial pH Verification Following Samples Exhibited pH > 2	yes wear the solution of the s	3 00 nalysis ith cust lests in ct NO	by:	.)? YES YES Zed Tedlar Reagent PC OK to ad	VL NO NO Bags In V	nflated N//

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EXTRACTABLE ORGANICS

METHOD 8270C SEMIVOLATILES Reported: 03/03/06

Fuss &	O'Neill, In	C			
Project	: Reference	:	AC	DUTTON	
Client	Sample ID	:	379	9060120	-04

Date	Sampled :	01/20/06	Order	#:	876718	Sample Matrix:	SOIL/SEDIMENT
Date	Received:	01/21/06	Submission a	#:	R2629942	Percent Solid:	34.2

ANALYTE	PQL	RESULT	UNITS	
DATE EXTRACTED : 01/25/06		· / / <u>/ / / / / / / / / / / / / / / / /</u>		
DATE ANALYZED : 02/1//06				
ANALYTICAL DILUTION: 3.00			Dry Weigh	ıt
ACENAPHTHENE	330	2900 U	UG/KG	
ACENAPHTHYLENE	330	2900 U	UG/KG	
ANTHRACENE	330	2900 U	UG/KG	1
BENZO (A) ANTHRACENE	330	470 J	UG/KG	
BENZO (A) PYRENE	330	490 J	UG/KG	
BENZO (B) FLUORANTHENE	330	410 J	UG/KG	
BENZO (G, H, I) PERYLENE	330	370 J	UG/KG	
BENZO (K) FLUORANTHENE	330	390 J	UG/KG	
BENZYL ALCOHOL	330	2900 U	UG/KG	
BUTYL BENZYL PHTHALATE	330	2900 U	UG/KG	
DI-N-BUTYLPHTHALATE	330	2900 U	UG/KG	
CARBAZOLE	330	2900 U	UG/KG	
INDENO(1,2,3-CD)PYRENE	330	320 J	UG/KG	
4-CHLOROANILINE	330	2900 U	UG/KG	
BIS (-2-CHLOROETHOXY) METHANE	330	2900 U	UG/KG	
BIS (2-CHLOROETHYL) ETHER	330	2900 U	UG/KG	
2-CHLORONAPHTHALENE	330	2900 U	UG/KG	
2-CHLOROPHENOL	330	2900 U	UG/KG	
2,2'-OXYBIS(1-CHLOROPROPANE)	330	2900 U	UG/KG	
CHRYSENE	330	660 J	UG/KG	
DIBENZO (A, H) ANTHRACENE	330	2900 U	UG/KG	
DIBENZOFURAN	330	2900 U	UG/KG	
1,3-DICHLOROBENZENE	330	2900 U	UG/KG	
1,2-DICHLOROBENZENE	330	2900 U	UG/KG	
1.4-DICHLOROBENZENE	330	2900 U		
3,3'-DICHLOROBENZIDINE	330	2900 U		
2,4-DICHLOROPHENOL	330	2900 U		
DIETHYLPHTHALATE	330	2900 U	UG/KG	
DIMETHYL PHTHALATE	330	2900 II		
2.4-DIMETHYLPHENOL	330	2900 11		
2.4-DINITROPHENOL	1700	15000 U		
2.4-DINITROTOLUENE	330	2900 11		
2.6-DINITROTOLUENE	330	2900 11		
BIS (2-ETHYLHEXYL) PHTHALATE	330	2000 U 400 J	UG/KG	
FLUORANTHENE	330	970 J		
FLUORENE	330	11 0000		
HEXACHLOPOBENZENE	330	2900 0		
HEXACHLOROBUTADIENE	330			
HEXACHLOROCUCLOPENTADIENE	330	2900 0		
HEYACHLOROFTHANE	220			
	220			0
	220	2200 0		8
	1700			
TA DENTING & UPERITALITATION	T 100	T 0000 0		

EXTRACTABLE ORGANICS METHOD 8270C SEMIVOLATILES Reported: 03/03/06

Fuss &	O'Neil]	L,Inc			
Project	: Refere	ence:	AC	DUTTON	
Client	Sample	ID :	379	9060120-	04

Date Sampled :	01/20/06	Order #:	876718 S	ample Matrix:	SOIL/SEDIMENT
Date Received:	01/21/06	Submission #:	R2629942 P	ercent Solid:	34.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/25/06	· · · · · · · · · · · · · · · · · · ·		
DATE ANALYZED : 02/17/06			· ·
ANALYTICAL DILUTION: 3.00			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	2900 U	UG/KG
2-METHYLPHENOL	330	2900 U	UG/KG
3+4-METHYLPHENOL	330	2900 U	UG/KG
NAPHTHALENE	330	2900 U	UG/KG
2-NITROANILINE	1700	15000 U	UG/KG
3-NITROANILINE	1700	15000 U	UG/KG
4-NITROANILINE	1700	15000 U	UG/KG
NITROBENZENE	330	2900 U	UG/KG
2-NITROPHENOL	330	2900 U	UG/KG
4-NITROPHENOL	1700	15000 U	UG/KG
N-NITROSODIMETHYLAMINE	330	2900 U	UG/KG
N-NITROSODIPHENYLAMINE	330	2900 U	UG/KG
DI-N-OCTYL PHTHALATE	330	2900 U	UG/KG
PENTACHLOROPHENOL	1700	15000 U	UG/KG
PHENANTHRENE	330	540 J	UG/KG
PHENOL	330	2900 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	2900 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	2900 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	2900 U	UG/KG
PYRENE	330	930 J	UG/KG
1,2,4-TRICHLOROBENZENE	330	2900 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	2900 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	2900 U	UG/KG
SURROGATE RECOVERIES QC LI	4ITS	· · ·	
TERPHENYL-d14 (48 -	131 8)	96	8
NTTROBENZENE-d5 (27 -	130 %)	81	00
PHENOL-d6 (10 -	133 %)	80	8
2 - FLIOROBIPHENYI (32 -	130 %)	95	8
2-FLUOROPHENOL (10 -	130 %)	68	00
2,4,6-TRIBROMOPHENOL (33 -	139 %)	86	8

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Fuss & O'Neill, Inc	
Project Reference:	AC DUTTON
Client Sample ID :	379060120-05

Date	Sampled :	01/20/06	Order #	: 876719	Sample Matrix:	SOIL/SEDIMENT
Date	Received:	01/21/06	Submission #	: R2629942	Percent Solid:	32.6

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/25/06			
DATE ANALYZED : 02/17/06			·
ANALYTICAL DILUTION: 3.00	· ·		Dry Weight
ACENAPHTHENE	330	3000 U	UG/KG
ACENAPHTHYLENE	330	3000 U	UG/KG
ANTHRACENE	330	520 J	UG/KG
BENZO (A) ANTHRACENE	330	1900 J	UG/KG`
BENZO (A) PYRENE	330	1800 J	UG/KG
BENZO (B) FLUORANTHENE	330	1500 J	UG/KG
BENZO (G, H, I) PERYLENE	330	1100 J	UG/KG
BENZO (K) FLUORANTHENE	330	1500 J	UG/KG
BENZYL ALCOHOL	330	3000 U	UG/KG
BUTYL BENZYL PHTHALATE	330	3000 U	UG/KG
DI-N-BUTYLPHTHALATE	330	3000 U	UG/KG
CARBAZOLE	330	3000 U	UG/KG
INDENO(1,2,3-CD) PYRENE	330	1000 J	UG/KG
4-CHLOROANILINE	330	3000 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	3000 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	3000 U	UG/KG
2-CHLORONAPHTHALENE	330	3000 U	UG/KG
2-CHLOROPHENOL	330	3000 U	UG/KG
2.2'-OXYBIS (1-CHLOROPROPANE)	330	3000 U	UG/KG
CHRYSENE	330	1900 J	UG/KG
DIBENZO (A, H) ANTHRACENE	330	400 J	UG/KG
DIBENZOFURAN	330	3000 U	UG/KG
1.3-DICHLOROBENZENE	330	3000 U	UG/KG
1.2-DICHLOROBENZENE	330	3000 U	UG/KG
1.4-DICHLOROBENZENE	330	3000 U	UG/KG
3.3'-DICHLOROBENZIDINE	330	3000 U	UG/KG
2.4-DICHLOROPHENOL	330	3000 U	UG/KG
DIETHYLPHTHALATE	330	3000 U	UG/KG
DIMETHYI, PHTHALATE	330	3000 U	UG/KG
2.4-DIMETHYLPHENOL	330	3000 U	UG/KG
2 4-DINTTROPHENOL	1700	16000 U	UG/KG
2.4-DINTTROTOLUENE	330	3000 U	UG/KG
2.6-DINTTROTOLUENE	330	3000 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	400 J	UG/KG
FILIORANTHENE	330	3600	UG/KG
FLIORENE	330	3000 U	UG/KG
HEXACHLOROBENZENE	330	3000 U	UG/KG
HEXACHLOROBLITADIENE	330	3000 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	3000 U	UG/KG
HEXACHLOROETHANE	330	3000 U	UG/KG
TSOPHORONE	330	3000 U	
2-METHYLNA PHTHALENE	330	3000 U	UG/KG LU
4,6-DINITRO-2-METHYLPHENOL	1700	16000 U	UG/KG
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EXTRACTABLE ORGANICS METHOD 8270C SEMIVOLATILES Reported: 03/03/06

Fuss & O'Neill,Inc Project Reference: AC DUTTON Client Sample ID : 379060120-05	•			
Date Sampled : 01/20/06 Orde: Date Received: 01/21/06 Submission	r #: n #:	876719 R2629942	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 32.6
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : 01/25/06			· · · · · · · · · · · · · · · · · · ·	
DATE ANALYZED : 02/17/06		•		
ANALYTICAL DILUTION: 3.00				Dry Weight
4-CHLORO-3-METHYLPHENOL		330	3000 U	UG/KG
2-METHYLPHENOL		330	3000 U	UG/KG
3+4-METHYLPHENOL		330	3000 U	UG/KG
NAPHTHALENE		330	3000 U	UG/KG
2-NITROANILINE		1700	16000 U	UG/KG
3-NITROANILINE		1700	16000 U	UG/KG
4-NITROANILINE		1700	16000 U	UG/KG
NITROBENZENE		330	3000 U	UG/KG
2-NITROPHENOL		330	3000 U	UG/KG
4-NITROPHENOL		1700	16000 U	UG/KG
N-NITROSODIMETHYLAMINE		330	3000 U	UG/KG
N-NITROSODIPHENYLAMINE		330	3000 U	UG/KG
DI-N-OCTYL PHTHALATE		330	3000 U	UG/KG
PENTACHLOROPHENOL		1700	16000 U	UG/KG
PHENANTHRENE		330	1700 J	UG/KG
PHENOL		330	3000 U	UG/KG
4-BROMOPHENYL-PHENYLETHER		330	3000 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER		330	3000 U	UG/KG
N-N1TROSO-DI-N-PROPYLAMINE		330	3000 U	UG/KG
		330	3300	UG/KG
1, 2, 4-TRICHLOROBENZENE	•	330	3000 U	UG/KG
2,4,6-TRICHLOROPHENOL		330	3000 U	UG/KG
2,4,5-TRICHLOROPHENOL		330	3000 U	UG/KG
SURROGATE RECOVERIES QC	LIMI	TS		
TERPHENYL-d14 (48	- 1	.31 %)	92	\$
NITROBENZENE-d5 (27	- 1	.30 %)	71	<u>o</u>
PHENOL-d6 (10	- 1	.33 %)	74	9 9
2-FLUOROBIPHENYL (32	- 1	.30 %)	85	<u>o</u>
2-FLUOROPHENOL (10	- 1	.30 %)	61	er er er er er er er er er er er er er e
2,4,6-TRIBROMOPHENOL (33	- 1	.39 %)	82	00

Client Sample ID : 379060120-06			· · · · · · · · · · · · · · · · · · ·	· .	
Date Sampled : 01/20/06OrderDate Received: 01/21/06Submission	#: #:	876720 R2629942	Sample M Percent	latrix: Solid:	SOIL/SEDIMENT 74.8
ANALYTE		PQL	RE	SULT	UNITS
DATE EXTRACTED : 01/25/06					
DATE ANALYZED : 02/17/06 ANALYTICAL DILUTION: 20.00			·		Dry Weight
ACENAPHTHENE		330	880	້ບັບ	UG/KG
ACENAPHTHYLENE		330	880	0 U	UG/KG
ANTHRACENE		330	880		
BENZO (A) ANTHRACENE		330	880	0 U	UG/KG
BENZO (A) DVPENE		330	880		UG/KG
DENZO (R) FLUORANTHENE		330	880		
DENZO (C U I) DEDVIENE		330	880		
DENZO(G, H, I) FERIDENE		330	900		
DENZU (K) FLOURANTHENE		330	000		
		220	000		
BUTIL BENZIL PHIRADALE		330	000		
DI-N-BUTYLPHTHALAIE		330	000		
CARBAZOLE		-330	880		
INDENO(1,2,3-CD) PYRENE		330	880		UG/KG
4-CHLOROANILINE		330	880		UG/KG
BIS (-2-CHLOROETHOXY) METHANE		330	880	0 0	UG/KG
BIS (2-CHLOROETHYL) ETHER		330	880	0 0	UG/KG
2-CHLORONAPHTHALENE		330	880	0 U	UG/KG
2-CHLOROPHENOL		330	880	0 U .	UG/KG
2,2'-OXYBIS (1-CHLOROPROPANE)		330	880	0 U	UG/KG
CHRYSENE		330	. 880	0 U_0	UG/KG
DIBENZO (A, H) ANTHRACENE		330	880	0 U -	UG/KG
DIBENZOFURAN		. 330	880	0 U 0	UG/KG
1,3-DICHLOROBENZENE		330	880	0 U	UG/KG
1,2-DICHLOROBENZENE		330	880	0 U	UG/KG
1,4-DICHLOROBENZENE		330	880	0 U -	UG/KG
3,3'-DICHLOROBENZIDINE		330	880	U 0	UG/KG
2,4-DICHLOROPHENOL		330	880	0 U	UG/KG
DIETHYLPHTHALATE		330	880	0 U	UG/KG
DIMETHYL PHTHALATE	•	330	880	0 ប	UG/KG
2.4-DIMETHYLPHENOL		330	880	0 U	UG/KG
2.4-DINITROPHENOL		1700	4500	0 0	UG/KG
2 4 - DINITROTOLIENE		330	880	0 U	UG/KG
2 6-DINITROTOLUENE		330		о <u>п</u>	UG/KG
RIG (2-FTHVI.HEXVI.) PHTHALATE	·	330	880	0 TT	
FILIODANTUFNE		330	120	ло .т	
L TOOICHI TITRITE		230			
L DOVUDNO NEXY CUI ODODENIZENIE		220			
HEAACHLURUDENAENE HEVACIII ADADIITANIENE		220	000		
HEAACHLOKOBU LADI ENE HERA GUI ODOUGI ODENEN DI ENE	'	VCC .			
HEXACHLOROCYCLOPENTADIENE		330	880		
HEXACHLOROETHANE		330	880		UG/KG
ISOPHORONE		330	880		$\frac{\text{UG/KG}}{12}$
2-METHYLNAPHTHALENE		330	880	0 U	UG/KG —
4,6-DINITRO-2-METHYLPHENOL		1700	4500	0 U -	UG/KG

EXTRACTABLE ORGANICS METHOD 8270C SEMIVOLATILES

Reported: 03/03/06

Fuss &	O'Neill	.,Inc			
Project	. Refere	ence:	AC	DUTTON	
Client	Sample	ID :	379	9060120	-06

Date	Sampled :	01/20/06	Order	#:	876720	Sample Matrix:	SOIL/SEDIMENT
Date	Received:	01/21/06	Submission	#:	R2629942	Percent Solid:	74.8

ANALYTE				PQL		RESULT	1	UNITS	-
DATE EXTRACTED	: 01/25/06			.*					- ¹ .
DATE ANALYZED	: 02/17/06						· .		
ANALYTICAL DILUTIO	N: 20.0	0.						Dry Weig	ht
4 CHIORO 2 METUVI DU	ENOT			220	i e e	0000 TT		110/20	· .
2 - METTUYI DUENOI	ENCL			330					
2 - MEINIEPRENOL				330			•		
NA DUTUA I ENIT				330		8800 U			-
2 NITROANTLINE		· · ·		1700		45000 U			
			-	1700		45000 0			
A-NTTROANTLINE				1700		45000 U			· · ·
NTTPORENZENE				330		8800 11			
2-NITTROPHENOL				330					
4-NITROPHENOL				1700		45000 U			
N-NITROSODIMETHYLAM	INE			330		8800 11			
N-NTTROSODTPHENYLAM	TNE			330	· ·	8800 11	· · ·		÷.,
DI-N-OCTYL PHTHALAT	 E			330		8800 11		UG/KG	
PENTACHLOROPHENOL				1700		45000 II		UG/KG	
PHENANTHRENE				330		т, 08e		UG/KG	
PHENOL	· .		÷	330		8800 U		UG/KG	
4-BROMOPHENYL-PHENY	LETHER			330		8800 U	•	UG/KG	4.15
4-CHLOROPHENYL-PHEN	YLETHER			330		8800 U		UG/KG	
N-NITROSO-DI-N-PROP	YLAMINE	·		330		8800 U		UG/KG	
PYRENE		. 1		330		1100 J		UG/KG	····
1,2,4-TRICHLOROBENZI	ENE			330		8800 U	.1	UG/KG	
2,4,6-TRICHLOROPHEN	DL ·		4	330		8800 U		UG/KG	
2,4,5-TRICHLOROPHEN				330		8800 U		UG/KG	
	•	÷						•	•
SURROGATE RECOVERIN	ES	QC	LIMITS					+ 1	
TERPHENYL-d14		48	- 131	<u>&</u>)		П		2	
NITROBENZENE-d5		27	- 130	8)		<u>ת</u> י		2	
PHENOL-d6		10	- 133	8)	· .	ם - <u>ה</u>		e,	
2-FLUOROBT PHENYL		32	- 130	8)		- ת		9 92	
2-FLUOROPHENOL		10	- 130	8)		ת ת		- Q	
2.4.6-TRIBROMOPHENOI	ц, (33	- 139	8)		ם. ת		8	
	· · ·			- /				•	

EXTRACTABLE ORGANICS

METHOD 8270C SEMIVOLATILES Reported: 03/03/06

Puss & O'Nell1, Inc Project Reference: AC DUTTON Client Sample ID : 379060120-07				
Date Sampled : 01/20/06 Order Date Received: 01/21/06 Submission	#: #:	876721 R2629942	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 39.2
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : 01/25/06				
DATE ANALYZED : 02/21/06 ANALYTICAL DILUTION: 5.00				Dry Weight
ACENAPHTHENE		330	4200 U	UG/KG
ACENAPHTHYLENE		330	650 J	UG/KG
ANTHRACENE		330	. 069	
BENZO (A) ANTHRACENE		330	1800 J	
BENZO (A) PYRENE	•	330	2100 J	
BENZO (B) FLUORANTHENE		330	1300 .T	
BENZO (G, H, T) PERYLENE		330	1400 T	
BENZO(K) FLIORANTHENE		330,	1500 D	
BENZYL ALCOHOL		330	4200 U	
BUTTYI, BENZYI, PHTHALATE		330	4200 0	
DT-N-BUTYI.DHTHALATE		220	4200 0	
CAPRAZOLE		330	4200 U	
INDENO(1, 2, 3-CD) PYRENE		220	4200 0	UG/KG
$A_{\rm CULODOANTLINE}$. 330	1100 0	UG/KG
TE (_2_CUI ODOETUOYV) METUANE		330	4200 U	UG/KG
DIG (2. CHIOROETHONI) WETHANE		330	4200 U	UG/KG
		330	4200 0	UG/KG
		330	4200 0	UG/KG
		330	4200 U	UG/KG
Z, Z'-UXIBIS (I-CHLOROPROPANE)		330	4200 U	UG/KG
		330	5T00 1	UG/KG
DIBENZO (A, H) ANTHRACENE		330	4200 U	UG/KG
DIBENZOFURAN		330	4200 U	UG/KG
1,3-DICHLOROBENZENE		330	4200 U	UG/KG
1,2-DICHLOROBENZENE		330	4200 U	UG/KG
1,4-DICHLOROBENZENE		330	4200 U	UG/KG
3, 3'-DICHLOROBENZIDINE		330	4200 U	UG/KG
2,4-DICHLOROPHENOL		330	4200 U	UG/KG
		-330	4200 U	UG/KG
DIMETHYL PHTHALATE		330	4200 U	UG/KG
2,4-DIMETHYLPHENOL		330	4200 U	UG/KG
2,4-DINITROPHENOL		1700	22000 U	UG/KG
2,4-DINITROTOLUENE		330	4200 U	UG/KG
2,6-DINITROTOLUENE		330	4200 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE		330	4200 U	UG/KG
FLUORANTHENE		330	3300 J	UG/KG
FLUORENE		330	4200 U	UG/KG
HEXACHLOROBENZENE		330	4200 U	UG/KG
HEXACHLOROBUTADIENE		330	4200 U	UG/KG
HEXACHLOROCYCLOPENTADIENE		330	4200 11	
HEXACHLOROETHANE		330	4200 11	
ISOPHORONE		220	4200 0	
2-METHYLNAPHTHALENE		220		
4,6-DINITRO-2-METHYLPHENOL		1700	22000 U	

Puss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : 379060120-07	
Date Sampled : 01/20/06 Order #: 876721 Date Received: 01/21/06 Submission #: R262994:	Sample Matrix: SOIL/SEDIMENT 2 Percent Solid: 39.2
ANALYTE PQL	RESULT UNITS
DATE EXTRACTED : 01/25/06	
DATE ANALYZED : 02/21/06 ANALYTICAL DILUTION: 5.00	Dry Weight
4-CHLORO-3-METHYLPHENOL 330	0 4200 U UG/KG
2-METHYLPHENOL 330	0 4200 U UG/KG
3+4-METHYLPHENOL 33(0 4200 U UG/KG
NAPHTHALENE 33(0 4200 U UG/KG
2-NITROANILINE 170(0 22000 U UG/KG
3-NITROANILINE 1700	0 22000 U UG/KG
4-NITROANILINE 1700) 22000 U UG/KG
NITROBENZENE 330	0 4200 U UG/KG
2-NITROPHENOL 330	0 4200 U UG/KG
4-NITROPHENOL 1700	22000 U UG/KG
N-NITROSODIMETHYLAMINE 330	4200 U UG/KG
N-NITROSODIPHENYLAMINE 33(4200 U UG/KG
DI-N-OCTYL PHTHALATE 330	0 4200 U UG/KG
PENTACHLOROPHENOL 1700	22000 U UG/KG
PHENANTHRENE 330	2000 J UG/KG
PHENOL 33(4200 U UG/KG
4-BROMOPHENYL-PHENYLETHER 33(4200 U UG/KG
4-CHLOROPHENYL-PHENYLETHER 33(4200 U UG/KG
N-NITROSO-DI-N-PROPYLAMINE 330	4200 U UG/KG
PYRENE 33(3400 J IIG/KG
1.2.4-TRICHLOROBENZENE 330	4200 U UG/KG
2.4.6-TRTCHLOROPHENOL 330	4200 U UG/KG
2,4,5-TRICHLOROPHENOL 330	0 4200 U UG/KG
SURROGATE RECOVERIES QC LIMITS	
TERPHENYL-d14 (48 - 131 %)	103 %
NITROBENZENE-d5 (27 - 130 %)	82 %
PHENOL-d6 $(10 - 133 \%)$	81 %
2-FLUOROBIPHENYL (32 - 130 %)	100 %
$2-FLUOROPHENOL \qquad (10 - 130 \%)$	71 0
	/1 5

Fuss & O'Neill,Inc Project Reference: AC DUTTON Client Sample ID : 379060120-08				
Date Sampled : 01/20/06 Order Date Received: 01/21/06 Submission	#: #:	876722 R2629942	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 41.4
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : 01/25/06		. ·	· · · · · · · · · · · · · · · · · · ·	
DATE ANALYZED : 02/21/06 ANALYTICAL DILUTION: 3.00				Dry Weight
ACENAPHTHENE		330	2400 U	UG/KG
ACENAPHTHYLENE		330	280 J	UG/KG
ANTHRACENE		330	360 J	UG/KG
BENZO (A) ANTHRACENE		330	1000 J	UG/KG
BENZO (A) PYRENE		330	960 J	UG/KG
BENZO (B) FLUORANTHENE		330	740 J	UG/KG
BENZO (G, H, I) PERYLENE		330	650 J	UG/KG
BENZO (K) FLUORANTHENE		330	840 J	
BENZYL ALCOHOL		330	2400 11	
BUTYL BENZYL PHTHALATE		330	2400 11	
DI -N-BUTYLPHTHALATE		330	2400 11	
CARBAZOLE		330	2400 11	
TNDENO(1, 2, 3-CD) PYRENE		330	2400 0 540 T	
4-CHLOROANTLINE		330		
BIS (-2-CHLOROETHOXY) METHANE		330		
BIG (2_CULODOETHVI.) ETHED		330	2400 U	UG/KG
		220	2400 0	UG/KG
		330	2400 0	UG/KG
		330	2400 0	UG/KG
Z, Z'-OXIBIS (I-CHLOROPROPANE)		- 330	2400 U	UG/KG
		330	1300 J	UG/KG
DIBENZO (A, H) ANTHRACENE		330	2400 Ŭ	UG/KG
DIBENZOFURAN		330	2400 U	UG/KG
1,3-DICHLOROBENZENE		330	2400 U	UG/KG
1,2-DICHLOROBENZENE		330	2400 U	UG/KG
1,4-DICHLOROBENZENE		330	2400 U	UG/KG
3,3'-DICHLOROBENZIDINE		330	2400 U	UG/KG
2,4-DICHLOROPHENOL		330	2400 U	UG/KG
DIETHYLPHTHALATE		330	2400 U	UG/KG
DIMETHYL PHTHALATE		330	2400 U	UG/KG
2,4-DIMETHYLPHENOL		330	2400 U	UG/KG
2,4-DINITROPHENOL		1700	12000 U	UG/KG
2,4-DINITROTOLUENE		330	2400 U	
2,6-DINITROTOLUENE		330	2400 11	
BIS (2-ETHYLHEXYL) PHTHALATE		330	310 .T	
FLUORANTHENE		330	2100 .T	
FLUORENE		330		
HEXACHLOROBENZENE		220		
HEXACHLOROBIUDADIENE		220		
		330	2400 U	UG/KG
HEAACHLORUCICLOPENIADIENE		330	2400 U	UG/KG
nearchlukuethane I godiodonie		330	2400 U	UG/KG 16
LSOPHORONE		330	2400 U	UG/KG IU
2-METHYLNAPHTHALENE		330	2400 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL		1700	12000 U	UG/KG

Fuss & O'Neil Project Refer Client Sample	Ll,Inc cence: AC D: 379	DUTTON 060120-08				
Date Sampled : Date Received:	01/20/06 01/21/06	Order Submission	#: #:	876722 R2629942	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 41.4
ANALYTE				PQL	RESULT	UNITS
DATE EXTRACTED DATE ANALYZED ANALYTICAL DIL) : 01, : 02, JUTION:	/25/06 /21/06 3.00				Dry Weight
4 - CHLORO - 3 - METH	IYLPHENOL			330	2400 U	UG/KG
2-METHYLPHENOL				330	2400 U	UG/KG
3+4-METHYLPHENO	Ъ			330	2400 II	
NAPHTHALENE				330	2400 II	
2-NITROANILINE				1700	12000 II	
3-NITROANILINE	· •			1700	12000 1	
4-NTTROANTLINE				1700	12000 11	
NTTROBENZENE				330	2400 11	
2-NTTROPHENOL				330		
4 - NTTROPHENOL				1700	12000 11	UG/KG
N-NITROSODIMETH	YLAMINE			330	2400 11	
N-NTTROSODI PHEN	VLAMINE			330	2400 0	
DI-N-OCTVI. PHTH	<u>አ፲.አጥ፫</u>			330	2400 0	
PENTACHLOROPHEN	OL	· · · · ·		1700		
DUFNANTUPFNE	U	1		1700	1500 1	
DUENOL					1500 U	UG/KG
A - BROMODUENVI D	<u>עראען</u> הערמד)		220	2400 U	
4 - CHLODODHENVI.	DUGNVI.GTUG	ביי		330	2400 0	UG/KG
	PHENILEINE DDODVI AMIN			330	2400 U	UG/KG
N-NIIKOSO-DIN DVBENE	FROFILAMIN				2400 0	UG/KG
PIRENE				330	2100 J	UG/KG
1, 2, 4 - TRICHLORO	BENZENE			330	2400 0	UG/KG
2,4,6-IRICHLORO	PHENOL			330	2400 U	UG/KG
2,4,5-TRICHLORO	PHENOL	· · ·		330	2400 U	UG/KG
SURROGATE RECOV	VERIES	QC I	IMI	TS		
TERPHENYL-d14		(48	- 1	.31 %)	88	26
NITROBENZENE-d5		(27	- 1	.30 응)	81	8
PHENOL-d6		(10	- 1	33 %)	75	2
2-FLUOROBIPHENYI	L ·	(32	- 1	30 %)	87	\$ \$
2 - FLUOROPHENOL	- · ·	(10	- 1	30 %)	64	9 9
2.4.6-TRIBROMOPH	HENOL	(33	- 1	39 %)	82	9

EXTRACTABLE ORGANICS METHOD 8270C SEMIVOLATILES Reported: 03/03/06

Project Reference: Client Sample ID : METHOD BLANK

Date Sampled : Date Received:	Order Submission	#: #:	877840	Sampl Perce	e Matrix: nt Solid:	SOIL/SEDIMENT 100
ANALYTE			PQL		RESULT	UNITS
DATE EXTRACTED : 01	/25/06			·····		
DATE ANALYZED : 01	/26/06					
ANALYTICAL DILUTION:	1.00		-			Dry Weight
ACENAPHTHENE			330		330 U	UG/KG
ACENAPHTHYLENE			330		330 U	UG/KG
ANTHRACENE	·		330		330 U	UG/KG
BENZO (A) ANTHRACENE			330	· -	330 U	UG/KG
BENZO (A) PYRENE			330		330 U	UG/KG
BENZO (B) FLUORANTHENE			330		330 U	UG/KG
BENZO(G, H, I) PERYLENE			330		330 U	UG/KG
BENZO (K) FLUORANTHENE			330.		330 U	UG/KG
BENZYL ALCOHOL			330	·	330 U	UG/KG
BUTYL BENZYL PHTHALATE			330		330 U	UG/KG
DI-N-BUTYLPHTHALATE	- 4 - *		330		330 U	UG/KG
CARBAZOLE			330		330 U	UG/KG
INDENO(1,2,3-CD)PYRENE					330 U	UG/KG
4-CHLOROANILINE			330		330 U	UG/KG
BIS (-2-CHLOROETHOXY) METH	ANE		330		330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER			330		330 U	UG/KG
2-CHLORONAPHTHALENE			330		330 U	UG/KG
2-CHLOROPHENOL			330		330 U	UG/KG
2,2'-OXYBIS (1-CHLOROPROPA	NE)		330		330 U	UG/KG
CHRYSENE			330		330 U	UG/KG
DIBENZO (A, H) ANTHRACENE			330		330 U	UG/KG
DIBENZOFURAN			330		330 U	UG/KG
1,3-DICHLOROBENZENE			330		330 U	UG/KG
1,2-DICHLOROBENZENE	· .		330		330 U	UG/KG
1,4-DICHLOROBENZENE			330		330 U	UG/KG
3,3'-DICHLOROBENZIDINE			330	· · ·	330 U	UG/KG
2.4-DICHLOROPHENOL			330		330 U	UG/KG
DIETHYLPHTHALATE			330		330 U	UG/KG
DIMETHYL PHTHALATE			330	. *	330 U	UG/KG
2.4-DIMETHYLPHENOL			330	1	330 U	UG/KG
2.4-DINITROPHENOL			1700	•	1700 U	UG/KG
2 4-DINITROTOLUENE	•		330		330 U	UG/KG
2 6-DINITROTOLUENE			330		330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALAT	Ϋ́E		330		330 U	UG/KG
ELUOPANTHENE			330	· .	330.11	
T LIOPENE	. **		330		330 11	UC/KC
UEVACUI ODODENZENE	· ·		330		330 11	
UEYACUI ODOBIUTADI ENE			220		330 11	
DEXACIDOROBOTADIENE DEXACIDOROBOTADIENE	3		220		330 11	
UDAYOUI ODOEMIANE UDAYOUI ODOEMIANE	.		220	· •. ·	330 11	
T CODUODONE			330		330 0	
			330	÷.,	0 0 CC	
2-METRIDNAPHIRADENE	λŦ		0.00		330 U	
4,6-DINITRO-2-METHYLPHENC	ц Ц		1,00		7700 U	UG/KG
4-CHLORO-3-METHYLPHENOL			055		330 U	UG/KG

Cirent Bampie 10 . Mainob BLANK			· · · · · · · · · · · · · · · · · · ·
Date Sampled : Order #: 8 Date Received: Submission #:	877840	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 100
ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/25/06			
DATE ANALYZED : 01/26/06			1997 a.
ANALYTICAL DILUTION: 1.00			Dry Weight
2-METHYLPHENOL	330	330 U	UG/KG
3+4-METHYLPHENOL	330	330 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	1700	1700 U	UG/KG
3-NITROANILINE	1700	1700 U	UG/KG
4-NITROANILINE	1700	1700 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	330	330 U	UG/KG
4-NITROPHENOL	1700	1700 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1700	1700 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	330	330 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4 - CHLOROPHENYL - PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	330 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	330 U	UG/KG
SURROGATE RECOVERIES QC LIMIT	rs		
TERPHENYL-d14 (48 - 13	31 %)	91	£
NITROBENZENE-d5 (27 - 13	30 8)	72	ક
PHENOL-d6 (10 - 13	33 %)	69	8
2-FLUOROBIPHENYL (32 - 13	30 웅)	81	8
2-FLUOROPHENOL (10 - 13	30 욱)	61	8
2.4.6-TRIBROMOPHENOL (33 - 13	39 %)	80	8

QUALITY CONTROL SUMMARY:

LABORATORY CONTROL SAMPLE SOIL/SEDIMENT

Spiked Order No. : 877841

Dup Spiked Order No. : 877843

Client ID:

Test: 8270C SEMIVOLATILES

Analytical Units: UG/KG

Run Number : 125747

BLANK SPIKE BLANK SPIKE DUP. QC LIMITS SPIKE SAMPLE ANALYTE ADDED CONCENT. FOUND * REC. FOUND |% REC. RPD | RPD | REC. ACENAPHTHENE 3300 | 0 2860 86 47 - 123 3040 91 6 130 2-CHLOROPHENOL 3300 n 2530 76 2720 1 ł 82 7 130 36 - 116 1,4-DICHLOROBENŻENE 3300 0 2420 73 2580 | 1 77 6 30 20 - 112 2,4-DINITROTOLUENE 3300 | ۵ 3090 93 3250 98 5 130 46 - 124 4-CHLORO-3-METHYLPHENO 3300 2920 0 88 3080 92 5 |30 40 - 125 4-NITROPHENOL 3300 | 0 2600 78 2620 79 |1 30 25 - 132 L PENTACHLOROPHENOL 3300 | 0 2750 83 2990 | 90 8 30 21 - 131 1 PHENOL 3300 ٥ 2500 75 1 2740 82 9 30 34 - 118 N-NITROSO-DI-N-PROPYLA 3300 | 0 2720 82 2960 45 - 117 89 8 30 1 PYRENE 3300 0 3170 95 3350 101 6 130 53 - 130 1 1,2,4-TRICHLOROBENZENE 3300 0 2570 77 2700 81 |5 30 42 - 130 1

u .	KAGE							
Contract: R2629942						No.:	379060:	120-0:
Lab Code:	· .	Case No.	:		SAS	No.:		
SOW No.: <u>SW846</u>	CLP-M	Client:	Fuss &	O'Neill,Inc				
	Sample No.			Lab Sample ID.				
	379060120-0 1			876715				
	379060120-02			876716				
	379060120-03	·		876717				
·	379060120-04			876718				· .
1	379060120-05		- 4 	876719				·
·	379060120-06			876720				н
	379060120-07			876721			•	
	379060120-08			876722			•	•

Were ICP interelement corrections applied?

Were ICP background corrections applied? If yes-were raw data generated before application of background corrections?

Comments: See Attached Case Narrative

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

Signature: Muluel K 3/3/01

Name:

Title:

Michael K. Perry Laboratory Monegor

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Yes/No YES

Yes/No YES

Yes/No NO

COVER PAGE - IN

Date:

METALS

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

				37	9060120-01
Contract:	R2629942		· · · · · · · · · · · · · · · · · · ·	Ĺ	
Lab Code:	. –	Case No.:	SAS No.:	SDG NO.:	379060120-01
Matrix (so	il/water):	SOIL/SEDIMENT	Lab Sample ID:	876715	
Level (low	/med): LO	W	Date Received:	01/21/06	· · · · · ·
% Solids:	72.6	•			

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	2	м
7440-38-2	Arsenic	25.9	 ·		P
7440-39-3	Barium	144		1.	P
7440-43-9	Cadmium	1.6		l	P
7440-47-3	Chromium	36.9	1	. .	₽
7440-50-8	Copper	45.7			P
7439-92-1	Lead	89.8			P
7439-97-6	Mercury	0.13	I		CV
7782-49-2	Selenium	2.8	1		P
7440-22-4	Silver	1.3	ע	1	P

Color Before:	BROWN	Clarity Before:		Texture:	MEDIUM
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:	
Comments:					

METALS

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INORGANIC ANALYSIS DATA SHEET	•	
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	INORGAN	IC ANALISIS DATA SHEET	SAMPLE NO.
Contract: R2629942			379060120-02
Lab Code:	Case No.:	SAS No.: SDG	NO.: 379060120-01
Matrix (soil/water):	SOIL/SEDIMENT	Lab Sample ID: 876716	
Level (low/med): LO	₩	Date Received: 01/21/	06
<pre>% Solids: 75.1</pre>			•

Concentration Units (ug/L or mg/kg dry weight): MG/KG

·				1 A	
CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	60.7			P
7440-39-3	Barium	91.6			P
7440-43-9	Cadmium	2.3			P
7440-47-3	Chromium	51.6	1		₽
7440-50-8	Copper	103			P
7439-92-1	Lead	293		1	P
7439-97-6	Mercury	0.13			CV
7782-49-2	Selenium	3.8			P
7440-22-4	Silver	1.3	ប		P

Color Before:	BLACK	Clarity Before:		 Texture:	MEDIUM
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:	
Comments:					

METALS -1-INODCANIC ANALVEIS DATA SUFET

	INORGANIC ANALYSIS DATA SHEET		E I	SAMPLE NO.
				379060120-03
Contract: R2629942			L	· · · · · · · · · · · · · · · · · · ·
Lab Code:	Case No.:	SAS No.:	SDG NO.	: 379060120-01
Matrix (soil/water):	SOIL/SEDIMENT	Lab Sample	ID: 876717	
Level (low/med): LO	W	Date Receiv	red: 01/21/06	
% Solids: 85.9	· · · · · · · · · · · · · · · · · · ·		. <u>.</u>	
				•

Concentration Units (ug/L or mg/kg dry weight): MG/KG

•					
CAS No.	Analyte	Concentration	С	Q	м
7440-38-2	Arsenic	18.2	Í		P
7440-39-3	Barium	57.4			P
7440-43-9	Cadmium	2.9		1	P
7440-47-3	Chromium	23.7	1		P
7440-50-8	Copper	99.1			P
7439-92-1	Lead	192	l	l	P
7439-97-6	Mercury	0.09		1	CV
7782-49-2	Selenium	2.4			P
7440-22-4	Silver	1.1	U		P

Color Before: BLACK Color After: YELLOW Comments:

Clarity Before:

Clarity After:

CLEAR

Texture: MEDIUM Artifacts:

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Form I - IN

METALS

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INORGANIC ANALYSIS DATA SHEET

	INORGAL	NIC ANALISIS DATA SHEET	SAL	APLE NO.
Contract: R2	629942		37	9060120-04
Lab Code:	Case No.:	SAS No.:	SDG NO.:	379060120-01
Matrix (soil/	water): SOIL/SEDIMENT	Lab Sample ID:	876718	
Level (low/me	ed): LOW	Date Received:	01/21/06	
% Solids: 34	.2		·	

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q 1	м
7440-38-2	Arsenic	9.8			P
7440-39-3	Barium	153			P
7440-43-9	Cadmium	1.8			P
7440-47-3	Chromium	40.7			₽
7440-50-8	Copper	49.3		ł .	P
7439-92-1	Lead	43.6		·	P
7439-97-6	Mercury	0.19			CV
7782-49-2	Selenium	2.9	υ	ĺ	P
7440-22-4	Silver	2.9	ט	ĺ	P

Color Before: BROWN Color After: YELLOW Comments: Clarity Before: Clarity After: Texture: FINE Artifacts:

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CLEAR

METALS

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INORGANIC ANALYSIS DATA SHEET

Contract: R2629942	379060120-05
Lab Code: Case No.:	SAS No.: SDG NO.: 379060120-01
Matrix (soil/water): SOIL/SEDIMENT	Lab Sample ID: 876719
Level (low/med): LOW	Date Received: 01/21/06
<pre>% Solids: 32.6</pre>	

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	9.4			P
7440-39-3	Barium	150			P
7440-43-9	Cadmium	1.7			P
7440-47-3	Chromium	39.8			P
7440-50-8	Copper	47.6	[P
7439-92-1	Lead	44.3			P.
7439-97-6	Mercury	0.19			CV
7782-49-2	Selenium	4.3		1	P
7440-22-4	Silver	3.0	ט		P

Color Before: BROWN Color After: YELLOW Comments:

Clarity Before: Clarity After:

CLEAR

Texture: FINE

SAMPLE NO.

Artifacts:

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METALS

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INORGANIC ANALYSIS DATA SHEET

Contract: R2629942			3	79060120-06	
Contract: R2629942 Lab Code: Case 1 Matrix (soil/water): SOIL/SE Level (low/med): LOW	Case No.:	SAS No.:	SDG NO.	379060120-01	
Matrix (soil/water):	SOIL/SEDIMENT	Lab Sample ID	: 876720		•
Level (low/med):	WC	Date Received	: 01/21/06		
% Solids: 74.8	•			· · · · ·	

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Concentration	¢	Q	М
Arsenic	10.4			P
Barium	39.4	1	.	P
Cadmium	1.6	1	1	P
Chromium	17.2	1	1 .	P
Copper	28.8			₽
Lead	47.3	İ	1	P
Mercury	0.04	U		cv
Selenium	2.1	<u> </u>	1	P
Silver	1.3	ע	1 .	P
	Analyte Arsenic Barium Cadmium Cadmium Copper Lead Mercury Selenium Silver	AnalyteConcentrationArsenic10.4Barium39.4Cadmium1.6Chromium17.2Copper28.8Lead47.3Mercury0.04Selenium2.1Silver1.3	AnalyteConcentrationCArsenic10.4Barium39.4Cadmium1.6Chromium17.2Copper28.8Lead47.3Mercury0.04Selenium2.1Silver1.3	AnalyteConcentrationCQArsenic10.41Barium39.41Cadmium1.61Chromium17.21Copper28.81Lead47.31Mercury0.04USelenium2.11Silver1.3U

Color Before:	BROWN	Clarity Before:		Texture: COARS
Color After:	YELLOW	Clarity After:	CLEAR	Artifacts:
Comments:				

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SAMPLE NO.

METALS

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INORGANI	IC ANALYSIS	DATA SHEET

	INUKGAI	NIC ANALYSIS DATA SHEET	۱ <u>s</u>	AMPLE NO.
			3	79060120-07
Contract: R2629942	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
Lab Code:	Case No.:	SAS No.:	SDG NO.	: 379060120-01
Matrix (soil/water)	SOIL/SEDIMENT	Lab Sample ID	876721	- · · · ·
Level (low/med):	LOW	Date Received	1: 01/21/06	· · ·
<pre>% Solids: 39.2</pre>				· · ·

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	м
7440-38-2	Arsenic	10.2			P
7440-39-3	Barium	119			P
7440-43-9	Cadmium	1.7			P
7440-47-3	Chromium	40.6			P
7440-50-8	Copper	46.6		· · ·	P
7439-92-1	Lead	57.5			P
7439-97-6	Mercury	0.18			CV
7782-49-2	Selenium	2.4	υ		₽
7440-22-4	Silver	2.4	U		P

Color	Before:	BROWN	
Color	After:	YELLOW	
Commer	nts:		

Clarity Before: Clarity After:

CLEAR

Texture: FINE

Artifacts:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Contract: B262	9942			379060120-08
Lab Code:	Case No.:	SAS No.:	SDG NO	.: 379060120-01
Matrix (soil/wa	ater): SOIL/SEDIMENT	Lab Sample ID:	876722	
Level (low/med)	LOW	Date Received:	01/21/06	
% Solids: 41.4			•	

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	M
7440-38-2	Arsenic	14.4	<u> </u>		P
7440-39-3	Barium	111		1	P
7440-43-9	Cadmium	1.8		l	P
7440-47-3	Chromium	30.4			P
7440-50-8	Copper	43.4		i	P
7439-92-1	Lead	41.6]		₽.
7439-97-6	Mercury	0.15	ł		CV
7782-49-2	Selenium	3.2]		P
7440-22-4	Silver	2.4	U		P

Color Before: BROWNClarity Before:Texture:Color After: YELLOWClarity After: CLEARArtifacts:Comments:Comments:Clarity After: CLEARClarity After: CLEAR

29

FINE

SAMPLE NO.

METALS -3-

BLANKS

Contract: R2629942

Lab Code:

SAS No.:

SDG NO.: 379060120-01

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Case No.:

	Initial Calib. Blank		Continuing Calibration Blank (ug/L)					Preparation Blank					
Analyte	(ug/L)	С	1	С	2	С	3	С		C	:		м
Arsenic	10.0	U	10.0	υ	10.0	U	10.0	U	1.000	t	J		P
Barium	20.0	U	20.0	U	20.0	ט ו	20.0	U	2.000	t	J	Ì	P
Cadmium	5.0	U	5.0	υ	5.0	ט [5.0	U	0.500	t	J	Ĩ	P
Chromium	10.0	U	10.0	υ	10.0	ט	10.0	U	1.000	t	ן ד	Ī	P
Copper	20.0	υ	20.0	υ	20.0	U	20.0	υ	2.000	lt	ĩ		P
Lead	50.0	U	50.0	U	50.0	ט ו	50.0	U	5.000	11	ז		₽
Mercury	0.20	U	0.20	U	0.20	<u></u>	0.20	U	0.033	t	ן נ		cv
Selenium	10.0	U	10.0	U	10.0	ש	10.0	U	1.000	J	J		P
Silver	10.0	υ	10.0	υ	10.0	ש	10.0	<u></u>	1.000	1	y		P

METALS

-3-

BLANKS

Contract: R2629942

Lab Code:

SAS No.:

SDG NO.: 379060120-01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Case No.:

	Initial Calib. Blank		Continuing Calibration Blank (ug/L)						Preparation Blank			
Analyte	(ug/L)	c	1	C	2	С	3	с		С		м
Arsenic	1		10.	0 0	10.0	ט	10.0	ט		ł	ΪÌ	P
Barium	<u> </u>		20.	ע 0	20.0	ט]	20.0	ט			ĪĪ	P
Cadmium	I		5.	0 0	5.0	ש	5.0	ט		1.	Ī	P
Chromium	1.		10.	0 0	10.0	ש	10.0	ט			Π	₽
Copper	1		20.	0 0	20.0	ט	20.0	ט			ĪĪ	P
Lead	1		50.	ם ש	50.0	ש	50.0	ט			ĪĪ	P
Mercury	Ϊ		0.2	0 0	0.20	U	0.20	ט		[Π	cv
Selenium	I		10.0	0 0	10.0	ש	10.0	ט			Π	P
Silver	1		10.	UU	10.0	ע]	10.0	ט		1	Π	P

METALS -3-

BLANKS

Contract: R2629942

Lab Code: Case No.: SAS No.: SDG NO.: 379060120-01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

-	Initial Calib. Blank		Continuing Calibration Blank (ug/L)						Preparation Blank			
Analyte	(ug/L)	c	1	Ċ	2	С	3	c		С	ŀ I	М
Arsenic			10.0	U	10.0	ש	10.0	ט				P
Barium	1	jj	20.0	ש	20.0	ט	20.0	U			İİ	P
Cadmium	I .		5.0	U	5.0	ש	5.0	U	<u> </u>		11	Р
Chromium	1		10.0	ש	10.0	ט	10.0	ט			İİ	₽
Copper	1		20.0	ש	20.0	ש	20.0	U			Ì.	P
Lead	1		50.0	ש	50.0	ט ו	50.0	U			İĹ	₽
Mercury]		0.20	ש	0.20	ט	0.20	ט			İ.İ.	cv
Selenium			10.0	U	10.0	U	10.0	U			ĪĪ	P
Silver			10.0	ש	10.0	U	10.0	ט	1	1	ÌÌ	P

METALS -3-

BLANKS

Contract: R2629942

Lab Code:

SAS No.:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Case No.:

		Initial Calib. Blank			Cont	tinuing Blank	Calibr (ug/L)	ation		Preparation Blank			
• •	Analyte	(ug/L)	С	1	С	2	C	3	c		С		м
	Selenium	10.	0 υ	10.	.0 U	10	.0 U	10.	0 0		[ii	P

SDG NO.: 379060120-01

METALS

-3-

BLANKS

5

Lab Code:		Case No.:	1	SAS No.:	SDG NO.: 379060120-01
	and the second second second second second second second second second second second second second second second				

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

		Initial Calib. Blank		-		Con	tinuing Blank (Calibr (ug/L)	ation		Preparation Blank		
• . •	Analyte	(ug/L)	С		1	С	2	С	3	с		c	м
•	Selenium				10	0 0	10.	0 0					Ρ

Mar-14-06 10:31 From-CAS-Rochester	. +2885380 T-852 P.()01
ServiceSinc.	Date: <u>March 14, 2006</u> Number of pages:	
1 Mustard St., Suite 250 Rochester, NY 14609		
То:	From:	
Mr. Noah Livingston (Rich Totino	Michael Perry	
BO Washington St. Suite 301		
Poughkeepsie, NY 12601	Phone: (585) 288-5380	
$\begin{array}{c} \text{Phone:} \underline{845-452-6801} \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ $	Fax: (585) 288-8475	

RUSH REPORT

Submission #: R2630201 Project Reference: AC DUTTON

Fax: CC:

preliminary results

thanks, mike

F-113

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T-852 P.002

F-113

COLUMBIA_ANALYTICAL_SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD55-Y6(0-0.05)

Client prace			SOIL/SEDIMENT				
Date Sampled : 02/03/06	Order #: 880055 Submission #: R2630201		Sample Matia. Solar				
Date Records		RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION		
ANALYTE	<u> </u>						
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	13.7 42.0 1.13 20.9 42.0 54.3 0.0600 U 3.00 U 2.23	Mg/Kg Mg/Kg Mg/Kg Mg/Kg Mg/Kg Mg/Kg Mg/Kg	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	83.4	ጜ	02/17/06	1.00		

F-113 T-852 P.003

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-Q8(0-1)

	Noteir, SOTL/SEDIME					
Date Sampled : 02/03/06 Date Received: 02/04/06	0 Submis	rder #: 880056 sion #: R2630201	Sample Matrix: SOID/ 3021			
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	$ \begin{array}{r} 1.00\\ 2.00\\ 0.500\\ 1.00\\ 2.00\\ 5.00\\ 0.0500\\ 2.50\\ 1.00\\ \end{array} $	800000080 (00000000 0-00000000 0-00000000 46.0 0.154 0.00000000 0.00000000 0.00000000 0.00000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0 0 0 03/09/06 02/10/06 0 0	0000000 0000000 0000000 0000000 5.00 1.00 0000000	
WET CHEMISTRY DEPCENT SOLIDS	1.0	85.9	\$	02/17/06	5 1.00	

Mar-14-06	10:32	From-CAS-Rochester
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T-852 P.004 F-113

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Froject Reference:AC DUTTON Client Sample ID :ACDSS-X9(0-0.5)

Client Sumple		SOTI SEDIMENT					
Date Sampled : 02/03/06 Date Received: 02/04/06	Ord Submissi	er #: 880057 on #: R2630201	Sample Matrix: Sold, Charles				
		result	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION		
ANALYTE	FQD						
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	28.4 45.5 0.543 U 19.4 24.8 34.7 0.0543 U 2.71 U 1.09 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	92.1	\$	02/17/06	1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-3HB6R(8-10.1)

cilenc panere at			Matrix: SOIL/SEDIMENT			
Date Sampled : 02/03/06 Date Received: 02/04/06	Ord Submissi	er #: 880058 on #: R2630201	S	ampte Macri		
	P OT.	RESULT	DRY WEIGHT UNITS	r date Analyzed	ANALYTICAL DILUTION	
ANALYTE	FQD					
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	$1.00 \\ 2.00 \\ 0.500 \\ 1.00 \\ 2.00 \\ 5.00 \\ 0.0500 \\ 2.50 \\ 1.00$	12.1 24.9 0.893 33.6 39.0 7.13 0.0571 U 2.86 U 2.32	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	87.5	¥	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID ;ACDSS-Z9(0.5-3)

-			Sumia Matrix: SOIL/SEDIMENT				
Date Sampled : 02/03/06	Order #: 880059 Submission #: R26302		Sample Matrix: 3013/5251				
Date Raccine	POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION		
ANALYTE							
METALS ARSENIC BARIUM CADMIUM CHROMIUM COFPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	65.4 63.0 0.603 29.5 50.2 67.1 0.0624 2.90 U 1.16 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	86.1	옿	02/17/06	1.00		
COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-L8(1-2)

.

			C.	mole Matr	ix: SOIL/SEDIMENT
Date Sampled : 02/03/06 Date Received: 02/04/06	Ord Subaissi	ier #: 880060 ion #: R2630201	Sample Macrim Core,		
	POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	22.1 77.3 0.805 14.0 47.6 76.0 0.557 3.11 U 1.38	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	80.5	禺	02/17/06	1.00

T-852 P.008

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-P3(0.5-3)

Date Sampled : 02/03/06 Date Received: 02/04/06	C Submis	order #: 880061 sion #: R2630201	Sample Matrix: SOIL/SEDIMENT		
ANALYTE	bÖr	RESULT	DRY WEIGHT DATE ANALYTIC UNITS ANALYZED DILUTION	AL: N	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	c.00000000 0.0000000 0.0000000 0.0000000 0.00000000 0.00000000 0.103 0.0000000 0.0000000	MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.000000 MG/KG 0.0000000 MG/KG 0.0000000 MG/KG 0.0000000		
WET CHEMISTRY PERCENT SOLIDS	1.0	85.9	¥ 02/17/06 1.00		

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-E8(3-3.5)

·	SOIL/SEDIMEN				
Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880062 Submission #: R2630201		Sample Matrix: SOID SED HERE		
	POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
ANALYTE					
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0:500 1.00 2.00 5.00 0.0500 2.50 1.00	36.3 62.9 1.23 29.6 47.7 97.1 0.174 2.74 U 2.62	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	91.2	¥	02/17/06	1.00

Mar-14-06 10	0:32	From-CAS-	Rochester
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T-852 P.010 F-113

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-05(0-0.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	(Submia	Order #: 880063 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 1.00 2.00 5.00 0.0500 2.50 1.00	\$	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0. 0. 0. 0. 02/10/06 0. 0.	0000000 0000000 0000000 0000000 1.00 0000000 0000000	
WET CHEMISTRY PERCENT SOLIDS	1.0	86.9	8	02/17/06	1.00	

F-113

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-35S13R(0-0.7)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880064 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	date Analyzed	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	19.6 54.2 2.00 24.1 108 64.2 0.0556 U 2.78 U 2.09	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	90.0	锋	02/17/06	1.00

T-852 P.012

F-113

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-Q3 (3-6)

Date Sampled : 02/03/06 Date Received: 02/04/06	C Submis	Order #: 880065 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	FQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	19.1 60.7 1.19 12.7 28.5 0 <u>.00000000</u> 0.0566 U 2.83 U 1.19	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 0000000 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	88.4	÷	02/17/06	1.00	

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-3SS14R(0-0.7)

Date Sampled : 02/03/06 Date Received: 02/04/06	Orc Submiss	Order #: 880066 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGH UNITS	it date Analyzed	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	31.9 68.9 0.846 29.1 34.2 70.0 0.0857 2.96 U 1.19 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	83.9	8	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fues & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-S2(1-3)

Date Sampled : 02/03/06 Date Received: 02/04/06	Ord Submiss	Order #: 880067 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	r date Analyzed	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	40.4 69.3 1.36 29.0 58.7 73.8 0.129 2.91 U 1.57	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	85.9	육	02/17/06	1.00	

Reported: 03/14/06

Fuse & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-V9(6-8)

Date Sampled : 02/03/06 Date Received: 02/04/06	(Submi:	Order #: 880068 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS A	DATE NALYZED	ANALYTICAL DILUTION	
				-		
METALS	1 00	11 3	MG/KG 0	3/07/06	1.00	
ARSENIC	7.00	45 2	MG/KG 0	3/07/06	1.00	
BARIUM	2.00	2 27	MG/KG C	3/07/06	1.00	
CADMIUM	1 00	21 5	MG/KG C	13/07/06	1.00	
CHRÔMIUM	1.00	43 0	MG/KG (3/07/06	L.00	
COPPER	2.00	17 3	MG/KG	3/09/06	1.00	
LEAD	9.00	0 0389	MG/KG (2/15/06	1.00	
MERCURY	0.0335		MG/KG	0 .	.0000000	
SELENIUM SILVER	1.00	3.19	MG/KG)3/07/06	1.00	
WET CHEMISTRY DERCENT SOLIDS	1.0	89.7	4	02/17/06	1.00	

Reported: 03/14/06

Fuse & O'Neill, Inc project Reference:AC DUTTON Client Sample ID :ACDSS-V8(1-3)

Secolo Matrix - SOIL/SEDIMENT					
Order #: 880069 Submission #: R2630201		Sample Matrix: Solly Commenter			
POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	21.8 65.8 1.70 15.6 27.8 40.9 0.0562 U 2.81 U 1.60	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
1.0	88.9	đ	02/17/06	1.00	
	Orde Submissio PQL 1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00 1.0	Order #: 880069 Submission #: R2630201 PQL RESULT 1.00 21.8 2.00 65.3 0.500 1.70 1.00 15.6 2.00 27.8 5.00 40.9 0.0500 0.0562 2.50 2.81 1.00 1.60 1.0 88.9	Order #: 880069 Same Submission #: R2630201 DRY WEIGHT PQL RESULT DRY WEIGHT 1.00 21.8 MG/KG 2.00 65.8 MG/KG 0.500 1.70 MG/KG 1.00 15.6 MG/KG 2.00 27.8 MG/KG 0.0500 0.0562 U MG/KG 2.50 2.81 U MG/KG 1.00 1.60 MG/KG 1.00 88.9 %	Order #: 880069 Submission #: R2630201 Sample Matr: DRY WEIGHT DATE UNITS ANALYZED PQL RESULT DRY WEIGHT DATE UNITS ANALYZED 1.00 21.8 MG/KG 03/07/06 2.00 65.8 MG/KG 03/07/06 0.500 1.70 MG/KG 03/07/06 1.00 15.6 MG/KG 03/07/06 2.00 27.8 MG/KG 03/07/06 5.00 40.9 MG/KG 03/07/06 5.00 2.81 U MG/KG 03/07/06 1.00 1.60 MG/KG 03/07/06 1.00 1.60 MG/KG 03/07/06 1.00 88.9 % 02/17/06	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-M2(2-5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880070 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	result	DRY WEIGHT UNITS	DATE ANALYTICAL ANALYZED DILUTION	
METALS ARSENIC HARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	0.00000000 0.00000000 0.00000000 0.000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0.0000000 0.0000000 0.0000000 0.0000000 03/09/06 10.0 02/10/06 1.00 0.0000000 0.0000000	
WET CHEMISTRY PERCENT SOLIDS	1.0	86.0	锋	02/17/06 1.00	·

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-M6(3-6)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE	Order #: 880071 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT DATI UNITS ANALY	E ANALYTICAL ZED DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 1.00 2.00 5.00 0.0500 2.50 1.00	0.0000000 0.0000000 0.0000000 0.0000000 0.0575 ↓ 0.0000000 0.0575 ↓ 0.0000000 0.0575 ↓	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0.0000000 0.0000000 0.0000000 0.0000000 0.000000	
WET CHEMISTRY PERCENT SOLIDS	1.0	87.0	¥ 02/1	7/05 1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-X7(1-3)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 890072 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	10.6 87.1 0.801 22.0 58.5 63.0 0.0743 2.84 U 1.95	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	88.1	윢	02/17/06	1.00

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-Q3(6-8)

Date Sampled : 02/03/06 Date Received: 02/04/06	C Submis	Order #: 880073 Submission #: 82630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	7.71 42.2 0.710 20.6 34.9 0.00000000 0.0596 U 2.98 U 1.82	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 0000000 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	83 9	*	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-E5(1-3)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880074 Submission #: 82630201		Sample Matrix: SOIL/SEDIMENT		:: SOIL/SEDIMENT
	IQS	RESULT	DRY WEIGHT UNITS	DATE A ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 1.00 2.00 5.00 0.0500 2.50 1.00	0.0000000 0.0000000 0.00000000 0.0000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	000000 000000 000000 000000 000000 1.00 000000 000000
WET CHEMISTRY PERCENT SOLIDS	1.0	83.4	સ્	02/17/06	1.00

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-Y7 (3-8)

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Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880075 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT			
	PQL	RESULT	DRY WEIGHT DATE ANA UNITS ANALYZED DI		ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0500 2.50 1.00	8.73 715 0.655 18.6 34.9 650 0.0561 U 2.81 U 1.57	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/10/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 10.0 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	89.1	锋	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuse & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-F2(8-10)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE	Order #: 880076 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	10.6 31.3 0.927 24.4 40.3 <u>0.00000000</u> 0.0512 2.96 U 2.27	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 0.000000 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	84.4	4. 1	02/17/06	1.00

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COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-T7(6-8)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880077 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT			
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
NETALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 0.500 1.00	24.4 54.8 0.701 20.3 321 61.4 0.0412 U 0.0000000 2.32	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 02/15/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	80.9	<u>भ</u>	02/17/06	1.00	

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Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-U6(3-6)

Date Sampled : 02/03/06 Date Received: 02/04/06	(Submi:	Order #: 880078 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYTICAL ANALYZED DILUTION		
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	0.00000000 0.00000000 0.00000000 0.000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0.0000000 0.0000000 0.0000000 0.0000000 03/09/06 5.00 02/15/06 1.00 0.0000000 0.0000000		
WET CHEMISTRY PERCENT SOLIDS	1.0	98.1	d, Q	02/17/06 1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-D4(0-0.5)

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Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880079 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	þÖr	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	70.0 54.1 1.06 70.6 83.6 42.5 0.117 2.74 U 1.58	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/15/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	91.1	÷	02/17/06	1.00

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-SS7R(0.8-1.4)

Date Sampled : 02/03/06 Date Received: 02/04/06	Submi	Order #: 880080 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	ÞQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
AD CENTC	1.00	0.00000000	MG/KG	0.	0000000	
RAPTIM	2.00	-0.00000000	MG/KG	α.	0000000	
CADMTIM	0.500	9 .00000000	MG/KG	0.	0000000	
CEROMITIM	1.00	0_00000000	MG/KG	0.	0000000	
COBBER	2.00	0-0000000	MG/KG	ο.	0000000	
TRAD	5.00	112 U	MG/KG	03/09/06	20,0	
MEDUIDA	0.0333	0.0373 U	MG/KG	02/15/06	1.00	
OFT.FNTIM	2.50	0.00000000	MG/KG	Q.	0000000	
SILVER	1.00	0 , 0000000 -	MG/KG	0.	0000000	
WET CHEMISTRY			a	00/10/00	1 00	
PERCENT SOLIDS	1_0	89.2	诸	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-A8(0-0.5)

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Date Sampled : 02/03/06 Date Received: 02/04/06	Orde Submissie	Order #: 880081 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT			
	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION		
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	24.2 123 0.811 25.4 46.2 44.2 0.323 2.92 U 1.24	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/15/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	85.7	£	02/17/06	1.00		

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-S10(0-1)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880062 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT			N T
	ÞÖF	RESULT	DRY WEIGH UNITS	C DATE ANALYZED	ANALYTICAL DILUTION	
METALS	-1 00	TA 9	MG/KG	03/07/06	1.00	
ARSENIC	1.00	14,4 60 9	MC/KC	03/07/06	1.00	
BARIUM	2.00	69.0	MG/KG	03/07/06	1.00	
CADMIUM	0.500	0.507	MG/NG MC/VC	03/07/06	1.00	
CHROMIUM	1.00			03/07/06	1 00	
COPPER	2.00	77-9	MG/ KG	03/07/00	1 00	
LEAD	5.00	27.1	MG/ KG	03/09/00	1,00	
MERCURY	0.0333	0.0788	MG/KG	02/15/06	* 00	
SELENIUM	2.50	2.82 U	MG/KG	03/07/06	1.00	
SILVER	1.00	1.24	MG/KG	03/07/06	1.00	
WET CHEMISTRY	1 0	99 R	\$	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-B2R(0.2-1.3)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE METALS ARSENIC BARIUM CADMIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	Submi	Order #: 880083 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS A	DATE NALYZED	ANALYTICAL DILUTION	
	1.00 2.00 1.00 2.00 5.00 0.0333 2.50 1.00	0.00000000 0.00000000 0.00000000 0.000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	0000000 0000000 0000000 0000000 30.0 1.00 0000000 0000000	
WET CHEMISTRY PERCENT SOLIDS	1.0	88.0	8	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-L4(0-0.5)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE METALS ARSENIC BARIUM CADMIUM CAROMIUM COPPER LEAD MERCURY SELENIUM SILVER	Submi	Order #: 880084 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYTICAL ANALYZED DILUTION		
	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	$\begin{array}{c} 0.00000000\\ 0.00000000\\ 0.00000000\\ 0.00000000$	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0.0000000 0.0000000 0.0000000 0.0000000 03/09/06 5.00 02/15/06 1.00 0.0000000 0.0000000		
WET CHEMISTRY PERCENT SOLIDS	1.0	89.1	8	02/17/06 1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-3HB6R(0.3-1.4)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880085 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT			
	ĐÕr	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	7.87 55.5 0.740 21.4 32.4 14.0 0.0346 U 2.60 U 1.89	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/09/06 02/15/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	96.3	Ł	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-3HB8R(0-0.7)

	SOTI SEDIMENT					
Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE	On Submiss	Order #: 880086 Sampl Submission #: R2630201		ampiè Matr	ole Matrix: SOID/SEDIPERA	
	POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	7.94 63.1 0.734 33.9 32.1 0.0359 U 2.70 U 1.59	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/07/06 03/07/06 03/07/06 03/07/06 03/07/06 02/15/06 03/07/06 03/07/06	1.00 1.00 1.00 1.00 1.00 0000000 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	92.7	£	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-X7(6-8)

Date Sampled : 02/03/06 Date Received: 02/04/06	Or Submiss	Order #: 880087 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date ANALYZED	ANALYTICAL DILUTION	
METALS	1 00	71 1	MG/KG	03/08/06	1.00	
ARSENIC	2.00	56 1	MG/KG	03/08/06	1.00	
BARIUM	2.00	1 27	MG/KG	03/08/06	00 د	
CADMIUM	V. 500	27 8	MG/KG	03/08/06	1.00	
CHROMIUM	2 00	63 7	MG/KG	03/08/06	1.00	
COPPER	2.00	35.2	MG/KG	03/09/06	1_00	
LEAD	2.UU 2.UU	0 0217	MG/KG	02/15/06	1.00	
MERCURY	2 50	2 78 11	MG/KG	03/08/06	1.00	
Selenium Silver	1.00	2.49	MG/KG	03/08/06	1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	89.9		02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-J2(0.5-3)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE	Order #: 880088 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 1.00 2.00 5.00 0.0333 2.50 1.00	0.0000000 0.00000000 0.00000000 0.00000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0. 0. 0. 03/09/06 02/15/06 0. 0.	0000000 0000000 0000000 0000000 20.0 1.00 0000000 0000000
WET CHEMISTRY PERCENT SOLIDS	1.0	84.1	ħ	02/17/06	1.00

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc project Reference:AC DUTTON Client Sample ID :ACDSS-L9(0.5-2.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880089 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		ix: SOIL/SEDIMENT	
	PQL	RESULT	DRY WEIGHT DATE ANALYT UNITS ANALYZED DILUT		ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	60000000 0.00000000 0.00000000 0.000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	0000000 0000000 0000000 0000000 0000000	
WET CHEMISTRY PERCENT SOLIDS	1.0	96.3	船	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-B8R(4-4.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880090 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
ANALYTE	PQL	RESULT	DRY. WEIGHT UNITS	r date Analyzed	ANALYTICAL DILUTION
Memat C					
Metals	1 00 .	0.0000000	MG/KG	0.0	000000
ARSENIC DADITM	2.00	0.0000000	MG/KG	0.0	000000
CATMITIM	0.500	0-80000000	MG/KG	0.0	0000000
CHEADIN	1.00	-0.0000000	MG/KG	0.0	000000
CODDER	2.00	0.00000000	MG/KG	0.0	0000000
LEAD	5.00	118 U	MG/KG	03/09/06	20.0
MERCHIRY	0.0333	0.121	MG/KG	02/15/06	1.,00
SELENIUM	2.50	0.0000000	MG/KG	0.0	0000000
SILVER	1.00	0 ~00000000	MG/KG	0.0	0000000
WET CHEMISTRY					
PERCENT SOLIDS	1.0	84.6	*	02/17/06	1.00

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COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACD55-L9(0-0.5)

			- COTI (CEDIMENT				
Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: \$80091 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT				
	PQL	RESULT	DRY WEIGHT DA UNITS ANA	ATE ANALYTICAL LYZED DILUTION			
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 -6 2.00 -6 0.500 -6 1.00 6 5.00 0.0333 2.50 4 1.00 6	1.00000000 .00000000 .00000000 .00000000	MG/KG MG/KG MG/KG MG/KG MG/KG 03/ MG/KG MG/KG MG/KG	0.0000000 0.0000000 0.0000000 0.0000000 0.000000			
WET CHEMISTRY PERCENT SOLIDS	1.0	85.1	¥ 02	/17/06 1.00			

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-SS7R(0-0.2)

Date Sampled : 02/03/06 Date Received: 02/04/06	Orc Submiss:	Order #: 880092 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT			
	PQL	RESULT	DRY WEIGH UNITS	I DATE ANALYZED	ANALYTICAL DILUTION		
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	212 52.7 0.571 171 109 11.8 0.0355 U 2.67 U 1.07 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/08/06 03/08/06 03/08/06 03/08/06 03/08/06 03/09/06 03/08/06 03/08/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	93.7	뚞	02/17/06	1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-N5(0.5-3)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880093 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT		
ANALYTE	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	0.0000000 0.0000000 0.00000000 0.0000000	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0. 0 0 03/09/06 02/15/06 0 0 0	0000000 0000000 0000000 .0000000 5.00 1.00 .0000000
WET CHEMISTRY PERCENT SOLIDS	1.0	88.7	锋	02/17/06	1.00

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-G6(0-0.5)

	SOLL/SEDIMENT					
Date Sampled : 02/03/06 Date Received: 02/04/06	C Submia	Order #: 880094 Submission #: R2630201		Sample Matrix: 501D/5521Ab.		
	POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM STLUEP	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	0 11.7 0.520 U 80.7 72.1 21.8 0.0346 U 2.60 U 1.04 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	0. 03/08/06 03/08/06 03/08/06 03/09/06 03/09/06 03/08/06 03/08/06 03/08/06	0000000 1.00 1.00 1.00 1.00 1.00 1.00 1	
WET CHEMISTRY PERCENT SOLIDS	1.0	96.2	붆	02/17/06	1.00	

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sampla ID : ACDSS-SS9R(4-5.3)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order Submission	#: 880095 #: R2630201 RESULT	Sample Matrix: SOIL/SEDIMENT		
	PQL		DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	14.6 23.3 0.540 U 28.3 52.2 14.6 0.0597 2.74 U 1.10 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
WET CHEMISTRY PERCENT SOLIDS	1.0	91.3	묷	02/17/06	1.00
COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-AAll(3-8)

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		SEDIM					
Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880096 Submission #: R2630201		Sample Matrix: SULL/SEDITINA				
		RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION		
ANALYTE	- <u> </u>						
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	21.2 695 1.78 17.7 47.2 431 0.865 3.08 U 1.23 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY DERCENT SOLIDS	1.0	81.3	둯	02/17/06	1.00		

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COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

	Comple Matrix SOTL/SEDIM						
Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880097 Submission #: R2630201		Sampte Matrix: SUID Submark				
	PQL	RESULT	DRY WEIGHT UNITS	date Analyzed	ANALYTICAL DILUTION		
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	10.5 88.1 0.539 U 16.3 39.3 17.3 0.100 2.69 U 1.08 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	92.8	ફ	02/17/06	1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

		SOTT /SET						
Date Sampled : 02/03/06 Date Received: 02/04/06	Ord Submissi	Order #: 880098 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT				
	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION			
METALS1.00ARSENIC2.00BARIUM0.500CADMIUM1.00COPPER2.00LEAD5.00MERCURY0.0333SELENIUM2.50SILVER1.00		20.2 27.1 0.535 U 24.1 21.1 9.88 0.0356 U 2.67 U 1.07 U	MG/KG 02/13/0 MG/KG 02/13/0 MG/KG 02/13/0 MG/KG 02/13/0 MG/KG 02/13/0 MG/KG 02/15/0 MG/KG 02/13/0 MG/KG 02/13/0		1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
WET CHEMISTRY PERCENT SOLIDS	1.0	93.5	, Ş	02/17/06	1.00			

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE	Order #: 880099 Submission #: R2630201		Sample Matrix: SOLL/SEDIMENT				
	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION		
metals			NO /WO	07/17/06	1 00		
ARSENIC	1.00	46.9	MG/ KG	02/13/06	1 00		
BARIUM	2.00	73.0	MG/KG	02/15/06	1.00		
CADMIUM	0.500	0.762	MG/KG	02/13/06	1.00		
CHROMIUM	1.00	20.8	MG/KG	02/13/06	1.00		
COPPER	2.00	32.5	MG/KG	02/13/06	1.00		
TIFAD	5.00	44.0	MG/KG	02/15/06	1.00		
MEDCIDV	0.0333	0.112	MG/KG	02/24/06	1,00		
CELENTIM	2.50	2.99 U	MG/KG	02/13/06	1.00		
SILVER	1.00	1.20 U	MG/KG	02/13/06	1.00		
WET CHEMISTRY		83 <i>C</i>	\$	02/17/06	1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-AB10(0.8-1.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880100 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT				
	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION		
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	20.5 117 0.543 U 19.2 45.5 140 0.130 2.71 U 1.09 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	92.1	8	02/17/06	1.00		

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-E8(0-0.5)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	Ord Submissi	Order #: 880101 Submission #: R2630201		Sample Matrix: SOIL/SEDIMENT				
	PQL RESULT		DRY WEIGHT UNITS	ANALYTICAL DILUTION				
	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	37.1 70.9 0.543 U 40.2 46.0 64.2 0.261 2.71 U 1.09 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
WET CHEMISTRY PERCENT SOLIDS	1.0	92.1	Ł	02/17/06	1.00			

COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neill, Inc Project Reference:AC DUTTON Client Sample ID :ACDSS-18(0-0.5)

			Sample Matrix: SOIL/SEDIMENT			
Date Sampled : 02/03/06 Date Received: 02/04/06	Order #: 880102 Submission #: R2630201		Sample Mattan Die,			
	POL	RESULT	DRY WEIGH UNITS	r date Analyzed	ANALYTICAL DILUTION	
ANALYTE						
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	$ \begin{array}{r} 1.00\\ 2.00\\ 0.500\\ 1.00\\ 2.00\\ 5.00\\ 0.0333\\ 2.50\\ 1.00 \end{array} $	8.32 32.4 0.518 U 16.7 36.5 23.8 0.0345 U 2.59 U 1.04 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	. 1.0	96.6	£	02/17/06	1.00	

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COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuse & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-08(0-3)

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		SOTL/SEDIM					
Date Sampled : 02/03/06	Order Submission	#: 880103 #: R2630201	Sample Matrix: SOLL/SECTION				
	POL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION		
ANALYTE							
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	59.3 117 11.7 U 23.4 U 46.8 U 117 U 0.0390 U 58.5 U 23.4 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/14/06 02/14/06 02/14/06 02/14/06 02/14/06 02/14/06 02/14/06 02/14/06 02/14/06	20.0 20.0 20.0 20.0 20.0 20.0 1.00 20.0 20.		
WET CHEMISTRY PERCENT SOLIDS	1.0	85.4	<u>څ</u>	02/17/06	1,00		

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COLUMBIA ANALYTICAL SERVICES

Reported: 03/14/06

Fuss & O'Neil	L,In	
Project Refere	nce	AC DUTTON
Client Sample	ID	:ACDSS-C6(0-0.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Ord Submissi	Order #: 880104 Submission #: R2630201		Sample Matrix: SOLL/SEDIMENT				
	BOP	RESULT	DRY WEIGH	r date Analyzed	ANALYTICAL DILUTION			
ANALYTE								
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	23.5 63.4 0.543 U 25.8 41.9 19.5 0.0362 U 2.71 U 1.09 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	02/13/06 02/13/06 02/13/06 02/13/06 02/13/06 02/15/06 02/24/06 02/13/06 02/13/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
WET CHEMISTRY PERCENT SOLIDS	1.0	92.1	ц. В	02/17/06	1.00			



1 Mustard ST. Suite 250 Rochester, NY 14609 (585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

	•
:	Fuss & O'Neill, Inc
::	A. C. DUTTON
:	R2630821
	Michael Perry
:	04/25/06

Report Contains a total of 13 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Multifier 1



A FULL SERVICE ENVIRONMENTAL LABORATORY

April 26, 2006

Mr. Richard Totino Fuss & O'Neill,Inc 24 Madison Ave. Extension Albany, NY 12203

PROJECT:A. C. DUTTON Submission #:R2630821

Dear Mr. Totino:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 04/05/06 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Michael Perrv Laboratory Dire

Enc.

Background #4,5

Project/Client_	Cooler Ro -USSt One(1)		And Pres	ervation Chec nission Numb	ck Form fer <u>f26308</u>	21	
Cooler received of	m <u>3-22-16</u> by:		COURI	ER: CAS U	JPS FEDEX	VELOC	ITY CLIENT
 Were cus Were cus Did all be Did all be Did any v Were Ice Where di Temperation 	tody seals on outside tody papers properly ottles arrive in good c VOA vials have signi or Ice packs present d the bottles originate ture of cooler(s) upon	of cool filled o ondition ficant a ? e? a receipt	er? ut (ink, si n (unbrok ir bubbles :: <u>4</u>	gned, etc.)? en)? s? o-	YES YES YES YES CAS/R	NO NO NO NO NO OC, CLI	N/A ENT
Is the ten	perature within 0° - (6° C?:	Yes	Yes	Yes	Yes	Yes
If No, E	plain Below		No	No	No	No	No
Date/Tim	e Temperatures Take	n:	3-20	3-06 C	9:38		
Thermon	neter ID: 161 or	IR GU	N Rea	ding From: 7	Temp Blank	or Sar	nple Bottle
PC Secondary R Cooler Breakdow 1. Were all 2. Did all b 3. Were con 4. Air Samp Explain any disc	with the second	22/0 3/2 e (i.e. an gree wi for the to bes Inta	$\frac{2}{2}$ $\alpha_{\rm o}$ nalysis, pr th custod ests indic ct Car	by: reservation, etc y papers? ated? nisters Pressuri	c.)? YES YES YES ized Tedlar(NO NO NO Bags In	flated N/A
		YES	NO S	ample I.D.	Reagent	Vo	I. Added
pH	Reagent			•			· · · · ·
12	NaOH						· _
2	HNO3		. <u> </u>				
2	H ₂ SO ₄						
Residual Chlorine	+/-) for TCN & Phenol						
5-9**	P/PCBs (608 only)	· •					· · · · · · · · · · · · · · · · · · ·
YES = All samples (**If pH adjustment is	DK NO = San required, use NaOH and/c	nples wer	e preserved	at lab as listed	PC OK to adjus	st pH	
	VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2	1		Other Comm	ents:	<u> </u>	

PC Secondary Review:

:

\\ROCHESTER1\GROUP\SMODOCS\Cooler Receipt v 2.doc

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INORGANIC BLANK SPIKE SUMMARY

CAS Submission #: R2630821 Client: Fuss & O'Neill,Inc A. C. DUTTON

BLANK SPIKES

	BLANK	FOUND	ADDED	% REC	SLIWIT	RUN	STINU	
ARSENIC	1.00 U	148	146	101	74 - 126	128267	MG/KG	
BARIUM	2.00 U	382	351	109	77 - 123	128267	MG/KG	
CADMIUM	0.500 U	91.6	91.9	100	77 - 123	128267	MG/KG	
CHROMIUM	1.00 U	182	176	103	80 - 120	128267	MG/KG	
COPPER	2.00 U	73.3	70.0	105	82 - 118	128267	MG/KG	
LEAD	5.00 U	70.0	68.1	103	76 - 124	128267	MG/KG	
SILVER	1.00 U	93.1	93.0	100	74 - 126	128267	MG/KG	
MERCURY	0.0333 U	1.64	1.77	92	57 - 142	128301	MG/KG	
SELENIUM	0.500 U	71.5	73.0	98	74 - 125	128306	MG/KG	

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Reported: 04/06/06

Date Sampled : Date Received:	03/20/06 03/22/06	08:10	Order Submission	#: 890509 #: R2630821	Sa	ample Matrix:	SOIL/SEDIMENT
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION
ARSENIC		6010B	1.00	32.5	MG/KG	04/03/06	1.0
BARIUM		6010B	2.00	160	MG/KG	04/03/06	1.0
CADMIUM		6010B	0.500	0.709 U	MG/KG	04/03/06	1.0
CHROMIUM		6010B	1.00	30.6	MG/KG	04/03/06	1.0
COPPER		6010B	2.00	67.7	MG/KG	04/03/06	1.0
LEAD		6010B	5.00	704	MG/KG	04/03/06	1.0
MERCURY		7471A	0.0333	1.34	MG/KG	04/04/06	1.0
SELENIUM		6010B	0.500	4.64	MG/KG	04/04/06	1.0
SILVER		6010B	1.00	1.42 U	MG/KG	04/03/06	1.0

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Reported: 04/06/06

Date Sampl Date Recei	ed : ved:	03/20/06 03/22/06	08:10	Order Submission	#: #:	890509 R2630821		Sa	mple Matr	ix: SOIL/	SEDIMENT
ANALYTE			METHOD	PQL		RESULT	DRY WI UNI	EIGHT TS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SO	LIDS		160.31	4 1.0		70.5	8		03/28/06	15:30	1.0
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Reported: 04/06/06

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Date Sampled : Date Received:	03/20/06 03/22/06	08:00	Order Submission	#: #:	890508 R2630821	8	ample Matrix:	SOIL/SEDIMENT
ANALYTE		METHOD	PQL		RESULT	DRY WEIGHT UNITS	T DATE ANALYZED	DILUTION
ARSENIC		6010B	1.00		23.4	MG/KG	04/03/06	1.0
BARIUM		6010B	2.00		45.2	MG/KG	04/03/06	1.0
CADMIUM		6010B	0.500		0.571 U	MG/KG	04/03/06	1.0
CHROMIUM		6010B	1.00		26.0	MG/KG	04/03/06	1.0
COPPER		6010B	2.00		45.8	MG/KG	04/03/06	1.0
LEAD		6010B	5.00		139	MG/KG	04/03/06	1.0
MERCURY		7471A	0.0333		0.0797	MG/KG	04/04/06	1.0
SELENIUM		6010B	0.500		2.19	MG/KG	04/04/06	1.0
SILVER		6010B	1.00		1.14 U	MG/KG	04/03/06	1.0

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Reported: 04/06/06

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Date Sampled : 03/20 Date Received: 03/22	/06 08:00	Order Submission	#: #:	890508 R2630821	Sa	mple Matr	ix: SOIL/	SEDIMENT
ANALYTE	METHO	D PQL		RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3	M 1.0		87.6	 %	03/28/06	15:30	1.0







INORGANIC QUALIFIERS

C (Concentration) qualifier -

- B if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). This qualifier may also be used to indicate that there was contamination above the reporting limit in the associated blank. See Narrative for details.
- U if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D Spike was diluted out
- E The reported value is estimated because the serial dilution did not meet criteria.
- J Estimated Value
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Additions (MSA).
- W Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- Duplicate analysis not within control limits.
- +- Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032 Navy Facilities Engineering Service Center Approved

Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292



CASE NARRATIVE

This report contains analytical results for the following samples: Submission #: R2630821

Lab ID	<u>Client ID</u>
890508	ACD-SS-BKGRD-4
890509	ACD-SS-BKGRD-5

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.



1 Mustard ST. Suite 250 Rochester, NY 14609 (585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client :	Fuss & O'Neill,Inc
Project Reference:	A. C. DUTTON
Lab Submission # :	R2630821
Project Manager :	Michael Perry
Reported :	04/06/06

Report Contains a total of 10 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.



A FULL SERVICE ENVIRONMENTAL LABORATORY

April 6, 2006

Mr. Richard Totino Fuss & O'Neill,Inc 24 Madison Ave. Extension Albany, NY 12203

PROJECT:A. C. DUTTON Submission #:R2630821

Dear Mr. Totino:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 04/05/06 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

ael(⊉err'y Mi Laboratory Director

Enc.



Mar-22-06 11:19 From-CAS-Rochester

4

COLUMBIA ANALYTICAL SERVICES

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T200000U

Reported: 03/22/06

Date Sampled : 02/03/06 Date Received: 02/04/06	Or Submiss	der #: 880094 ion #: R2630201	3	ample Matı	TIX: SOIL/SEDIMENT
ANALYTE .	PQL	RESULT	DRY WBIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	1.00	95.8	MG/KG	03/15/06	2.00
BARIUM	2.00	11.7	MG/KG	03/08/06	1.00
CADMIUM	0.500	0.520 U	MG/KG	03/08/06	1.00
CHROMIUM	1.00	80.7	MG/KG	03/08/06	1.00
Copper	2.00	72.1	MG/KG	03/08/06	1.00
LEAD	5.00	21.8	MG/KG	03/09/06	1,00
MERCURY	0.0333	0.0346 U	MG/KG	02/15/06	1.00
SELENIUM	2.50	2.60 U	MG/KG	03/08/06	1.00
SILVER	1.00	1.04 U	MG/KG	03/08/06	1.00
WET CHEMISTRY					
PERCENT SOLIDS	1.0	96.2	\$	02/17/06	1.00
	•				•

Mar-22-06 11:18 From-UAS-Rochester COLUMBIA ANALYTICAL SERVICES

Reported: 03/22/06

-949

T-VEETVEN

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-N5(0.5-3)

Data Sampled : 02/03/06 Date Received: 02/04/06	Or Submiss	der #: 880093 ion #: R2630201		Sample Mat:	ix: SOIL/SEDIMEN	т
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	it date Analyzed	ANALYTICAL DILUTION	
METALS						
ARSENIC	1 00	30 7	Malve	00 /1 # /0 C	5 00	
BARTIM	2 00	117	MG/ NG	03/15/06	5.00	
CADMIN	A 500	3 99 TT	MG/NG	03/15/06	5.00	
CHROMITIM	0.500		MG/ KG	03/15/06	5.00	
CORDER	1.00	10.6	MG/KG	03/15/06	5.00	
	2.00	29.4	MG/KG	03/15/06	5.00	
	5.00	1820	MG/XG	03/09/06	5.00	
MERCURY	0.0333	0.0628 '	MG/KG	02/15/06	1.00	
SELENIUM	2.50	14.1 U	MG/KG	03/15/06	5.00	
SILVER	1.00	5.64 U	MG/KG	03/15/06	5.00	
WET CHEMISTRY						
PERCENT SOLIDS	1.0	88.7	8	02/17/06	1.00	

72003300

COLUMBIA ANALYTICAL SERVICES

Reported: 03/22/06

Fuse & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-L9(0-0.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Or Submiss	der #: 880091 ion #: R2630201		Sample Matr	ix: SOIL/SEDIMENT
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION
METALS		· .			· · · · ·
ARSENIC	1.00	56.8	MG/KG	03/15/06	30.0
BARIUM	2.00	255	MG/KG	03/15/06	30.0
CADMIUM	0.500	17.6 U	MG/KG	03/15/06	30.0
CHROMIUM	1.00	35.3 U	MG/KG	03/15/06	30.0
COPPER	2.00	70.5 U	MG/KG	03/15/06	30-0
LEAD	5.00	176 U	MG/KG	03/09/06	30.0
MERCURY	0.0333	0.0391 U	MG/KG	02/15/06	1.00
SELENIUM .	2.50	88.1 U	MG/KG	03/15/06	30_0
SILVER	1.00	35.3 U	MG/KG	03/15/06	30.0
WET CHEMISTRY					
PERCENT SOLIDS	1.0	85.1	\$	02/17/06	1.00

7288038U

1-948 P.UZU/UZS F-254

Reported: 03/22/06

Fuss & O'Neill, Inc Project Referance: AC DUTTON Client Sample ID :ACDSS-B8R(4-4.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Or Submiss	der #: 880090 ion #: R2630201		Sample Matr	ix: SOIL/SEDIMENT
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	IT DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	1.00	105	MG/XG	03/15/06	20.0
BARIUM	2.00	189	MG/RG	D3/15/06	20.0
CADMIUM	0.500	11.8 11	MG/KG	03/15/06	20.0
CHROMIUM	1.00	69.7	MG/KG	03/15/06	20.0
COPPER	2.00	47.3 U	MC / KC	03/15/06	20.0
LEAD	5.00	118 U	MG/KG	03/09/06	20.0
MERCURY	0.0333	0.121	MG/KG	02/15/06	1.00
SELENIUM	2.50	59.1 U	MG/KG	03/15/05	20.0
SILVER	1.00	23.6 U	MG/KG	03/15/06	20.0
WET CHEMISTRY	•				
PERCENT SOLIDS	1.0	84.6	ş	02/17/06	1.00

COLUMBIA ANALYTICAL SERVICES

Reported: 03/22/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-L9(0.5-2.5)

Date Sampled : 02/03/0 Date Received: 02/04/0	6 Or 6 Submiss	der #: 880089 ion #: R2630201	Sample Matrix: SOIL/SEDIMENT									
ANALYTE	POL	RESULT	DRY WEIGHT DATE ANALYTICAL UNITS ANALYZED DILUTION									
METALS												
ARSENIC	1.00	15.9	MG/KG	03/15/06	2 00							
BARIUM	2.00	52.8	MG/KG	03/15/06	2 00							
CADMIUM	0.500	1.04 U	MG/KG	03/15/06	2.00							
CHROMIUM	1.00	12.7	MG/KG	03/15/06	2 00							
COPPER	2.00	15.8	MG/KG	03/15/06	2.00	-						
lead	5.00	26.6	MG/KG	03/10/06	5.00							
MERCURY	0.0333	0.117	MG/KG	02/15/06	1.00							
SELENIUM	2,50	5.19 U	MG/KG	03/15/06	2.00							
SILVER	1.00	2.08 0	MG/KG	03/15/06	2.00							
WET CHEMISTRY												
PERCENT SOLIDS	1.0	96.3	\$	02/17/06	1.00							

MAIT-22-00 11:18 FION-UAS-RECENSION COLUMBIA ANALYTICAL SERVICES +2885380

T-849 P.018/023 F-254

Reported: 03/22/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-J2(0.5-3)

Date Sampled : 02/03/06 Date Received: 02/04/06	O: Submis;	cder #: 880088 sion #: R2630201	Sample Matrix: SOIL/SEDIMENT							
ANALYTE	PQL	RESULT	DRY WEIG UNITS	ANALYTICAL DILUTION						
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00	48.0 184 11.9 U 23.8 U 47.6 U 119 U 0.0396 U 59.5 U 23.8 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	03/15/06 03/15/06 03/15/06 03/15/06 03/15/06 03/09/06 02/15/06 03/15/06	20.0 20.0 20.0 20.0 20.0 20.0 1.00 20.0 20.					
WET CHEMISTRY PERCENT SOLIDS	1.0	84.1	9. 5	02/17/06	1.00					

†200030U

Reported: 03/22/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample 1D :ACDSS-3HB8R(0-0.7)

Or Submiss	der #: 880086 ion #: R2630201	Sample Matrix: SOIL/SEDIMENT									
PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION							
			-								
1.00	7.94	MG/KG	03/07/06	1.00							
2.00	63.1	MG/KG	03/07/06	1.00							
0.500	0.734	MG/KG	03/07/06	1.00							
1.00	33.9	MG/KG	03/07/06	1.00							
2.00	32.1	MG/KG	03/07/06	1.00							
5.00	16.8	MG/KG	03/10/06	1.00							
0.0333	0.0359 1	MG/KG	02/15/06	1.00							
2.50	2.70 U	MG/KG	03/07/06	1.00							
1.00	1.59	MG/KG	03/07/06	1.00							
1.0	.92.7	\$	02/17/06	1.00							
	Or Submiss PQL 1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.50 1.00 1.0	Order #: 880036 Submission #: R2630201 PQL RESULT 1.00 7.94 2.00 63.1 0.500 0.734 1.00 33.9 2.00 32.1 5.00 16.8 0.0333 0.0359 U 2.50 2.70 V 1.00 1.59 1.0 92.7	Order #: 880086 Submission #: R2630201 PQL RESULT DRY WEIGH 1.00 7.94 MG/KG 2.00 63.1 MG/KG 0.500 0.734 MG/KG 1.00 33.9 MG/KG 2.00 62.1 MG/KG 0.500 0.734 MG/KG 1.00 32.1 MG/KG 5.00 16.8 MG/KG 0.0333 0.0359 U MG/KG 1.00 1.59 MG/KG 1.00 1.59 MG/KG 1.00 1.59 MG/KG	Order #: 880086 Sample Matr Submission #: R2630201 DRY WEIGHT DATE PQL RESULT DRY WEIGHT DATE 1.00 7.94 MG/KG 03/07/06 2.00 63.1 MG/KG 03/07/06 0.500 0.734 MG/KG 03/07/06 1.00 33.9 MG/KG 03/07/06 2.00 63.1 MG/KG 03/07/06 0.500 0.734 MG/KG 03/07/06 1.00 33.9 MG/KG 03/07/06 2.00 32.1 MG/KG 03/07/06 5.00 16.8 MG/KG 03/10/06 0.0333 0.0359 U MG/KG 02/15/06 2.50 2.70 U MG/KG 03/07/06 1.00 1.59 MG/KG 03/07/06 1.00 1.59 MG/KG 03/07/06 1.0 92.7 % 02/17/06							

Mal "66"VV

+2883380

1-949 P.015/023 F-254

COLUMBIA ANALYTICAL SERVICES

Reported: 03/22/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACDSS-L4(0-0.5)

Date Sampled : 02/03/06 Date Received: 02/04/06	Or Submiss	der #: 880084 ion #: R2630201	Sample Matrix: SOIL/SEDIMENT									
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION							
METALS												
ARSENIC	1.00	33.1	MG/KG	03/35/06	5 00							
BARIUM	2.00	88.4	MG/KG	03/15/06	5.00							
CADMIUM	0.500	2.81 U	MG/KG	03/15/06	5.00							
CHROMIUM	1.00	17.6	MG/KG	03/15/06	5.00							
COPPER	2.00	54.2	MG/KG	03/15/06	5 00							
LEAD	5.00	28.2	MG/KG	03/09/06	5.00							
MERCURY	0.0333	0.0374 U	MG/KG	02/15/06	1.00							
SELENIUM	2.50	14.0 U	MG/KG	03/15/06	5.00							
SILVER	1.00	5.61 U	MG/KG	03/15/06	5.00							
WET CHEMISTRY			-									
PERCENT SOLIDS	1.0	89.1	5	02/17/06	1.00							

COLUMBIA ANALYTICAL SERVICES

Reported: 03/22/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-B2R(0.2-1.3)

Date Sampled : 02/03/06 Date Received: 02/04/06	Orde Submissic	x #: 880083 m #: R2630201	Sample Matrix: SOIL/SEDIMENT								
ANALYTE	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION						
METALS				·							
ARSENIC	1.00	77.4	MG/KG	03/15/06	30.0						
BARIUM	2.00	224	MG/KG	03/15/06	30.0						
CADMIUM	0.500	17.0 U	MG/KG	03/15/06	30.0						
CHROMIUM	1.00	34.1 U	MG/KG	03/15/06	30.0						
Copper	2.00	68.2 U	MG/KG	03/15/06	30.0						
LEAD	5.00	170 U	MG/KG	03/09/06	30.0						
MERCURY	0.0333	0.0378 U	MG/KG	02/15/06	1.00						
SELENIUM	2.50	85.2 U	MG/KG	03/15/06	30.0						
SILVER	1.00	34.1 U	MG/KG	03/15/06	30.0						
WET CHEMISTRY											
PERCENT SOLIDS	1.0	88.0	%	02/17/06	1.00						



A FULL SERVICE ENVIRONMENTAL LABORATORY

January 24, 2006

Mr. Noah Livingston Fuss & O'Neill,Inc 80 Washington St. Suite 301 Poughkeepsie, NY 12601

PROJECT:AC DUTTON Submission #:R2529204

Dear Mr. Livingston

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Michael Perry Laboratory Director

Enc.

* Organics for US UG AAID AAII



1 Mustard ST. Suite 250 Rochester, NY 14609 (585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client	:	Fuss & O'Neill, Ind
Project Reference	:	AC DUTTON
Lab Submission #	:	R2529204
Project Manager	:	Michael Perry
Reported	:	01/24/06

Report Contains a total of <u>33</u> pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

1

CASE NARRATIVE .

Company: Fuss & O'Neill, Inc. Project: AC Dutton Submission #: R2529204

Soil samples were collected on 12/09/05 and received at CAS on 12/10/05 in good condition at a cooler temperature of 4 °C. A NY DEC ASP-B report has been provided.

VOLATILE ORGANICS - 8260

Four soil samples were analyzed for a TCL list and/or TCL/STARs list of Volatile Organics by method 8260B from SW-846. Any analyte detected between the PQL and MDL has been flagged with a "J" as estimated.

All Tuning criteria for BFB were and Internal Standard Areas within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas were within acceptance limits for all samples.

The surrogate standard recoveries were all with QC limits.

The Blank Spike (LCS) recoveries were all within QC limits. The matrix spike/matrix spike duplicate analysis was performed on sample ACD-SL-AA11 (12-13'). All Matrix Spike Recoveries were within QC limits of 75 – 125 %. The RPD from the duplicate analyses were all within QC limits.

Sample ACD-SL-AA10 (12-14') was analyzed at a 1/5 dilution due to the level of target/non-target analytes present.

The Method Blanks associated with these samples were free of contamination.

No other analytical or QC problems were encountered.

SEMIVOLATILE ORGANIC ANALYSIS - 8270

Four soil samples were analyzed for STARs list of SVOA by SW-846 method 8270C. Values detected between the PQL and the MDL have been reported flagged with a "J" as estimated.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas and surrogate standard recoveries were within QC limits.

The surrogate standard recoveries were all with QC limits.

Job specific QC was not requested. The Blank Spike (Reference Check) recoveries were acceptable.

The Method Blanks associated with these samples are free of contamination.

No other analytical or QC problems were encountered.

Company: Fuss & O'Neill, Inc. Project: AC Dutton Submission #: R2529204 Page 2

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

Michael K. Perry

Laboratory Manager

25/06 Date

					REMARKS																			
	0/05		: :	z	% SOLIDS																			
	SED: 12/2 1/09/06	.ASPB	40.: 21/0. /	۲KG: ۲	PH (SOLIDS)								 											
• • * *********************************	DATE REVI DATE DUE:	PROTOCOL	SHIPPING	SUIVINARY	DATE RECEIVED	12/10/05	12/10/05	12/10/05	12/10/05														 	
					DATE SAMPLED	12/9/05	12/9/05	12/9/05	12/9/05													 		
	:OMPLETE: yes E REQUESTED: Y × N	2/20/05	Y SEAL: ABSENT	F CUSTODY: PRESENT	REQUESTED PARAMETERS	8260B-TCL/STARS,8270C-STARS	8260BTCL/STARS/8270C-STARS	8260B-STARS,8270C-STARS	8260B-STARS,8270C-STARS															
	BATCH C DISKETT	DATE: 12	CUSTOD	CHAIN C	MATRIX	SOIL	SOIL	SOIL	SOIL															
	-SL NR R2529204	Fuss & O'Neill, Inc	P: Michael Perry	AC DUITON	# CLIENT/EPA ID	ACD-SL-AA11 (12-13')	ACD-SL-AA10 (12-14')	ACD-SL-U5 (4-8')	ACD-SL-U6 (6-8')															
	SDG#:ACD SUBMISSIC	CLIENT:	CLIENT RE		CAS JOB	866486	866487	866488	866489					-										

ראס אסרוררי באו נחוועה רטמווו ו בטפווא סאבבו

12/20/2005






ORGANIC QUALIFIERS

- U Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the MDL.
- N- Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The concentration is reported on the Form I and flagged with a "P".
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- X As specified in Case Narrative.
- This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032 Navy Facilities Engineering Service Center Approved

Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

H:\FORMS\QUALIF_O.DOC

5







INORGANIC QUALIFIERS

C (Concentration) qualifier -

- B if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). This qualifier may also be used to indicate that there was contamination above the reporting limit in the associated blank. See Narrative for details.
- U if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D Spike was diluted out
- E The reported value is estimated because the serial dilution did not meet criteria.
- J Estimated Value
- M Duplicate injection precision not met.
- N- Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Additions (MSA).
- W Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- Duplicate analysis not within control limits.
- Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier;

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032 Navy Facilities Engineering Service Center Approved

Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

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ر) م) م)		동 č	SFER NUMBEI & CHECK 2 3 4						 						TIME	930			
5	ватову	F≖Landfill t=River/Strei T=Septic Ta	TRANS						 			 	-04 1		DATE	Izloos			
FUSS & O'NEILL, INC. 146 HARTFORD ROAD MANCHESTER, CT 06040 (860) 646-2469	LABO CAS	L=Lake/Pond/Ocean L PW-Potable Water R SG=Sludge S	COMMENTS	Asp.B	, , ,	A5P.B		ASP-B	ASP-B				T=Sodium Thiosulfate [Na ₂ S		ACCEPTED BY	D Nacin Ch	. 0		
MCUN 1007	PROJECT NUMBER 2 004 0764.AIN	urca Codas: B=Bottom Sadiment W=Monitor Wall O=Outfall O=Run Off S=Soil •Treatment Facility W=Well • Other, Specify	ANALYSIS REQUIRED	ULL. 8270 STARS		FULL, 8270 STARS		STARS 8270 STARS	STARS 8270 STARS				T=Teflon Lid B=Bacteria Bottle afurci T S=Sordium Hudroxida [NaOH ¹	orbic Acid [C ₆ H ₈ O ₆] X=Other, Specify	TRANSFERS RELINQUISHED BY	WO			
OF-CUSTODY I	r location 20, 1) Y	S N N N N N N N N N N N N N		1 8260 F		1 8260		1 8260	1 82.60				A=Amber Glass U-U-U-dochloric Act		TRANSFER ITEM NUMBER NUMBER		2	3	-
CHAIN-	Prughkepsi	oughkrepser, NY 1	CONTAINER CONTAINER	1 A 402.		1 A 4.2.	· · · · · · · · · · · · · · · · · · ·	1 A 4 oz.	1 A 402	······			C=Cube G=Glass	N=Nitric Acid [HNU3]	Date Time	12/9/2005	ASE RETURN	OLER W/ 1CE	lemp.
Strong and Services		Linnesstan astrugetan 24. (ER SOURCE	(12-13) S		(12-141) S	-	S (.3-1	S ('8'				V=VOA Vial	F≝Flitered n Bisulfate [NaHSO4.	Affiliation	Hussdolvau	PLE	J.	- -
Fuss consi	PROJECT NAME C Duffor	атто: <u>Naulu</u> зето: <u>80 M</u> u 19.4 : <i>8</i> .4 с	SAMPLE NUMBE	ACD-SL-AAII (ACD-SL-AA10(40-22- US (4	ACD-51-06/6				iner Code : P=Plastic	ntive Code: 1=lced B=Sodium	Signature	al hoton	IAL COMMENTS:	4~0~2	
	A.	REPOF	ITEM NUMBER	-		2		3	 3-				Conta	Preserva	Sampler's	10 N	ADDITION	7	<u> </u>

	Cooler Rea	ceipt A	na Pro	eservation Check F	01 m			
Project/Client <u>Fus</u>	s . O'Neill		Sı	ubmission Number_	Ra-2921	04		•
Cooler received on	licks by	(<u>pr_</u>)	COUR	NIER: CAS UPS	FEDEX	VELOC	ITY CL	IENT
 Were custody Were custody Did all bottle Did any VOA Were Ice or I Where did th Temperature 	y seals on outside of papers properly f s arrive in good co vials have signif ce packs present? e bottles originate of cooler(s) upon	of cool filled on ondition icant ai ? ? receipt	er? ut (ink, n (unbr ir bubb	, signed, etc.)? oken)? les?	YES YES YES YES CAS/R	NO NO NO NO OC, CLI	Do Reling.	signature.
Is the temper	ature within 0° - 6	° C?:	6	(es) Yes	Yes	Yes	Yes	•
lf No, Expla	in Below		ľ	lo No	No	No	No	•
Date/Time T	emperatures Taker	n:		12/10/05 102	0			- <u>.</u>
Thermometer	1D: 161 or	IRGU	IN F	Reading From: Ten	np Blank	or Sa	mple Bott	le,
PC Secondary Revie Cooler Breakdown:	w: //// Date : /2-	12/11/0 -12-1	28 28 55	by:	KE	•		
 Were all both Did all both Were correct Air Samples: Explain any discrepa 	le labels complete labels and tags ag containers used for Cassettes / Tub uncies:	ti.e. an gree wi or the t es Intac	halysis th cust ests ind ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized	d Tedlar	NO NO NO ® Bags Ir	oflated	NIA
 Were all both Did all both Were correct Air Samples: Explain any discrepa 	le labels complete labels and tags ag containers used for Cassettes / Tub incies:	(<i>i.e.</i> an gree will or the the solution of th	halysis th cust ests inc ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlard	NO NO Bags Ir	offated	
 Were all both Did all both Were correct Air Samples: Explain any discrepa 	Reagent	yree wi or the to es Intac	halysis th cust ests ind ct (NO	, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlar Reagent	NO NO ® Bags Ir	offated	
 Were all both Did all both Were correct Air Samples: Explain any discrepa 	Reagent NaOH	yree wi or the to es Intac	nalysis th cust ests ind ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlar Reagent	NO NO ® Bags Ir	offated	
1. Were all both 2. Did all both 3. Were correct 4. Air Samples: Explain any discrepa pH 12 2	Reagent NaOH HNO3	YES	nalysis th cust ests ind ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlar Reagent	NO NO ® Bags Ir	offated	
 Were all both Did all both Were correct Air Samples: Explain any discrepa pH 12 2 2 	Reagent NaOH HNO ₃ H ₂ SO ₄	YES	nalysis th cust ests ind ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlar Reagent	NO NO ® Bags Ir	offated	N/A
 Were all both Did all both Were correct Air Samples: Explain any discrepa pH 12 2 Residual Chlorine (+/-) 	le labels complete labels and tags ag containers used fo Cassettes / Tub- incies: Reagent NaOH HNO ₃ H ₂ SO ₄ for TCN & Phenol	YES	nalysis th cust ests ind ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlard Reagent	NO NO ® Bags Ir	offated	
 Were all both Did all both Were correct Air Samples: Explain any discrepa pH 12 2 Residual Chlorine (+/-) 5-9** 	le labels complete labels and tags ag containers used fo Cassettes / Tub- incies: Reagent NaOH HNO ₃ H ₂ SO ₄ for TCN & Phenol P/PCBs (608 only)	YES	nalysis th cust ests inc ct (, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlard	NO NO ® Bags Ir	offated	N/A
 I. Were all both 2. Did all both 3. Were correct 4. Air Samples: Explain any discrepa pH 12 2 Residual Chlorine (+/-) 5-9** YES = All samples OK **If pH adjustment is recommended 	le labels complete labels and tags ag containers used fo Cassettes / Tub- incies: Reagent NaOH HNO ₃ H ₂ SO ₄ for TCN & Phenol P/PCBs (608 only) NO = Sam uired, use NaOH and/o	YES	nalysis th cust ests inc ct (NO	, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D.	d Tedlard Reagent PC OK to adju	NO NO ® Bags Ir Va U	oflated	
 I. Were all both 2. Did all both 3. Were correct 4. Air Samples: Explain any discrepa pH 12 2 2 Residual Chlorine (+/-) 5-9** YES = All samples OK **lf pH adjustment is req VC 	Ie labels complete labels and tags ag containers used for Cassettes / Tub- incies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Sam uired, use NaOH and/o C Vial pH Verification Fested after Analysis) Following Samples Exhibited pH > 2	YES	nalysis th cust ests ind ct (NO	, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D. Sample 1.D.	d Tedlard Reagent PC OK to adju	NO NO ® Bags Ir Vo	offated (
1. Were all both 2. Did all both 3. Were correct 4. Air Samples Explain any discrepa pH 12 2 Residual Chlorine (+/-) 5-9** YES = All samples OK **If pH adjustment is req VC	le labels complete labels and tags ag containers used fo Cassettes / Tub- incies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Sam uired, use NaOH and/o IC Vial pH Verification Following Samples Exhibited pH > 2	YES	nalysis th cust ests ind ct (NO	, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D. Sample 1.D.	d Tedlard Reagent PC OK to adju	NO NO ® Bags Ir Vo	offated (
1. Were all both 2. Did all both 3. Were correct 4. Air Samples Explain any discrepa pH 12 2 Residual Chlorine (+/-) 5-9** YES = All samples OK **If pH adjustment is req VC	le labels complete labels and tags ag containers used fe Cassettes / Tub- incies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Sam uired, use NaOH and/o DC Vial pH Verification Tested after Analysis) Following Samples Exhibited pH > 2	YES	nalysis th cust ests ind ct (NO e preser	, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D. Sample 1.D.	d Tedlard Reagent PC OK to adju	NO NO ® Bags Ir Vo	offated (
I. Were all both 2. Did all both 3. Were correct 4. Air Samples Explain any discrepa pH 12 2 Residual Chlorine (+/-) 5-9** YES = All samples OK **If pH adjustment is req VC	le labels complete labels and tags ag containers used fe Cassettes / Tub- incies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = Sam uired, use NaOH and/o DC Vial pH Verification Tested after Analysis) Following Samples Exhibited pH > 2	YES	nalysis th cust ests ind ct (NO e preser	, preservation, etc.)? ody papers? dicated? Canisters Pressurized Sample 1.D. Sample 1.D. Ved at lab as listed	d Tedlard Reagent PC OK to adju	NO NO ® Bags Ir Vo	offated (

PC Secondary Review: ____

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VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/24/06

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Fuss & O'Neill,Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA11 (12-1	3')		
Date Sampled : 12/09/05 Order #: Date Received: 12/10/05 Submission #:	866486 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 84.1
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/19/05 ANALYTICAL DILUTION: 1.00	·····		Dry Weight
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) SEC-BUTYLBENZENE N-BUTYLBENZENE TERT-BUTYLBENZENE CARBON ISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROBENZENE CHLOROFORM CHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE METHYL-TERT-BUTYL-ETHER ETHYLBENZENE 2-HEXANONE ISOPROPYL BENZENE P-ISOPROPYL DENZENE P-ISOPROPYL DENZENE STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE 1,1,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,4-TRIMETHYLBENZENE 1,2,4-TRIMETHYLBENZENE	$\begin{array}{c} 20\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.$	$\begin{array}{c} 5.7 \ J\\ 0.90 \ J\\ 5.9 \ U\ 5.9 \ U\\ 5.9 \ U\ 5.9 $	UG/KG UG/KG
VINYL CHLORIDE O-XYLENE	5.0 5.0	5.9 U 5.9 U	UG/KG J UG/KG

VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/24/06

Fuss & O'Neill, Inc	
Project Reference:	AC DUTTON
Client Sample ID :	ACD-SL-AA11 (12-13')

Date Sampled : 12/09/05 Order #: 866486 Sample Matrix: SOIL/SEDIMENT Date Received: 12/10/05 Submission #: R2529204 Percent Solid: 84.1

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : ANALYTICAL DILUTION:	12/19/05 1.00	· · ·		Dry Weight
M+P-XYLENE	•	5.0	5.9 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS	B .		
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(65 - 129 (75 - 128 (62 - 133	- - - - - - - - - - - - - -	90 98 92	ହ ୧ ୧

			VOLATII METHOD Reporte	NI CS TCL/TANK 24/06	ζ		
Fuss & O'Neill,Inc Project Reference: AC I Client Sample ID : ACD-	DUTTON -SL-AA10 (12	2-14	L')	• .		· · · · · · · · · · · · · · · · · · ·	•
Date Sampled : 12/09/05 Date Received: 12/10/05	Order Submission	#: #:	866487 R2529204	Sample Percer	Matrix: t Solid:	SOIL/SEDI 90.6	MENT
ANALYTE			PQL		RESULT	UNITS	
DATE ANALYZED : 12, ANALYTICAL DILUTION:	/16/05 5.00					Dry Weig	Int
ACETONE			20		32 J	UG/KG	
BENZENE			5.0		36		
BROMODICHLOROMETHANE			5.0		28 U	UG/KG	
BROMOFORM			5.0	•	28 U	UG/KG	
BROMOMETHANE			5.0		28 U	UG/KG	
2-BUTANONE (MEK)			10		55 U	UG/KG	
SEC-BUTYLBENZENE			5.0		28 U	UG/KG	•
N-BUTYLBENZENE			5.0		28 U	UG/KG	
TERT-BUTYLBENZENE		•	5.0		28 U	UG/KG	
CARBON DISULFIDE			10		4.2 J	UG/KG	
CARBON TETRACHLORIDE			5.0		28 U	UG/KG	
CHLOROBENZENE			5.0		28 U	UG/KG	· ·
CHLOROETHANE			5.0		28 U	UG/KG	•
CHLOROFORM	· ·	•	5.0		28 U	UG/KG	. •
CHLOROMETHANE			5.0		28 U	UG/KG	
DIBROMOCHLOROMETHANE			5.0		28 U	UG/KG	
1,1-DICHLOROETHANE			5.0		28 U	UG/KG	
1,2-DICHLOROETHANE			5.0		28 U	UG/KG	
1, 1-DICHLOROETHENE			5.0		28 U	UG/KG	
CIS-1, 2-DICHLOROETHENE			5.0		28 U	UG/KG	-
TRANS-1, 2-DICHLOROETHENE		•	5.0		28 U	UG/KG	
1,2-DICHLOROPROPANE	•		5.0		28 0	UG/KG	
CIS-1, 3-DICHLOROPROPENE			5.0		28 0	UG/KG	
METUVI TEDT DUGVI ETUPD	E .		5.0	· .	28 U	UG/KG	
THUT DENZEND			5.0		28 0		·
2-HEXVNONE			5.0	-			
ISOPROPYL BENZENE			, <u> </u>		25 0		
P-ISOPROPYLTOLIENE			5.0		28 0		÷
METHYLENE CHLORIDE			5.0		110		
NAPHTHALENE	-		· 5.0		28 11		
4-METHYL-2-PENTANONE (MT	BK)		10	•	55 11		
N-PROPYLBENZENE	211,		5.0		28 U		•
STYRENE			5.0		28 11		
1,1,2,2-TETRACHLOROETHAN	E		-5.0		28 U		
TETRACHLOROETHENE			5.0		28 U	UG/KG	
TOLUENE			5.0	4	1.8 J	UG/KG	
1,1,1-TRICHLOROETHANE			5.0		28 U	UG/KG	
1,1,2-TRICHLOROETHANE			5.0		28 U	UG/KG	•
TRICHLOROETHENE			5.0		28 U	UG/KG	
1,3,5-TRIMETHYLBENZENE			5.0	•	28 U	UG/KG	
1,2,4-TRIMETHYLBENZENE	•	•	5.0		28 U	UG/KG	
VINYL CHLORIDE			5.0		28 U	UG/KG	11
O-XYLENE			5.0		28 U	UG/KG	

VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (12-14')

Date Sampled : 12/09/05 Order #: 866487 Sample Matrix: SOIL/SEDIMENT Date Received: 12/10/05 Submission #: R2529204 Percent Solid: 90.6

ANALYTE			PQL	RESULT	UNITS	
DATE ANALYZED : ANALYTICAL DILUTION:	12/16/05 5.00		•		Dry Weight	
M+P-XYLENE			5.0	28 U	UG/KG	
SURROGATE RECOVERIES	QC	LIMITS				
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(65 (75 (62	- 129 - 128 - 133	웅) 웅) 웅)	95 99 93	90 95 95	

COLUMBIA ANALYTICAL SE	RVICES	VOLATI METHOD Report	LE ORGANICS 8260B TANK LIS ed: 01/24/06	C
Fuss & O'Neill,Inc Project Reference: AC Client Sample ID : ACD	DUTTON -SL-U5 (4-8')		· · ·	
Date Sampled : 12/09/05 Date Received: 12/10/05	Order #: Submission #:	866488 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 86.5
ANALYTE	· · · · · · · · · · · · · · · · · · ·	PQL	RESULT	UNITS
DATE ANALYZED : 12 ANALYTICAL DILUTION:	/19/05 1.00	· · ·	· · ·	Dry Weight
BENZENE N-BUTYLBENZENE SEC-BUTYLBENZENE TERT-BUTYLBENZENE METHYL-TERT-BUTYL-ETHER ETHYLBENZENE ISOPROPYL BENZENE P-ISOPROPYLTOLUENE NAPHTHALENE N-PROPYLBENZENE TOLUENE 1,2,4-TRIMETHYLBENZENE 1,3,5-TRIMETHYLBENZENE O-XYLENE M+P-XYLENE SURROGATE RECOVERIES	QC LIMI	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	5.8 U 5.8 U	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(65 - 1 (75 - 1 (62 - 1	L29 %) 128 %) 133 %)	94 97 90	00 00 00

COLUMBIA ANALYTICAL SE	RVICES					
		VOLATILE ORGANICS METHOD 8260B TANK LIST Reported: 01/24/06				
Fuss & O'Neill,Inc Project Reference: AC Client Sample ID : ACD	DUTTON -SL-U6 (6-8	י)			· .	
Date Sampled : 12/09/05 Date Received: 12/10/05	Order Submission	#: #:	866489 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 80.3	
ANALYTE			PQL	RESULT	UNITS	
DATE ANALYZED : 12 ANALYTICAL DILUTION:	/19/05 1.00				Dry Weight	
BENZENE N-BUTYLBENZENE SEC-BUTYLBENZENE TERT-BUTYLBENZENE METHYL-TERT-BUTYL-ETHER ETHYLBENZENE ISOPROPYL BENZENE P-ISOPROPYLBENZENE NAPHTHALENE N-PROPYLBENZENE TOLUENE 1,2,4-TRIMETHYLBENZENE 1,3,5-TRIMETHYLBENZENE O-XYLENE M+P-XYLENE	· · · · · · · · · · · · · · · · · · ·		5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG	
SURROGATE RECOVERIES	QC	LIM	ITS			
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(65 (75 (62	-	129 %) 128 %) 133 %)	95 98 91	ato ato ato	

Date Sampled : Date Received:	Order Submission	#: #:	8705	77	Sampl Perce	e Matrix: nt Solid:	SOIL/SEDIMENT 100
ANALYTE				PQL		RESULT	UNITS
DATE ANALYZED : 1	2/15/05						
ANALYTICAL DILUTION:	1.00				-		Dry Weight
ACETONE	•			20		20 U	UG/KG
BENZENE				5.0		5.0 U	UG/KG
BROMODICHLOROMETHANE			•	5.0		5.0 U	
BROMOFORM	· · · · · ·			5.0		5 0 11	
BROMOMETHANE				5.0		5 0 11	
2-BUTANONE (MEK)	• •			10			
SEC-BUTYLBENZENE	•			έ.Ο			
N-BUTYLBENZENE				5 0	• •		
TERT-BUTYLBENZENE				5.0		5.00	
CARBON DISULFIDE				10		3.0 0	
CARBON TETRACHLORIDE	х.			E 0.	· .	10 0	UG/KG
CHLOROBENZENE				5.0		5.00	UG/KG
CHLOROETHANE	· .			5.0		5.0.0	UG/KG
CHLOROFORM				5.0		5.0 0	UG/KG
CHLOROMETHANE				5.0	•	5.0 U	UG/KG
	· ·			5.0		5.0 U	UG/KG
				5.0	` ,	5.0 U	UG/KG
1 2 DICHLOROEINANE				5.0		5.0 U	UG/KG
1,2-DICHLOROETHANE				5.0		5.0 U	UG/KG
I, I-DICHLOROETHENE	· · ·			5.0		5.0 U	UG/KG
CIS-I, 2-DICHLOROETHENE	····			5.0		5.0 U	UG/KG
TRANS-1, 2-DICHLOROETHEN	E .	•		5.0		5.0 U	UG/KG
1, 2-DICHLOROPROPANE	. •			5.0		5.0 U	UG/KG
CIS-1, 3-DICHLOROPROPENE				5.0	· .	5.0 U	UG/KG
TRANS-1, 3-DICHLOROPROPE	NE	· •	•	5.0		5.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER			•	5.0		5.0 U	UG/KG
ETHYLBENZENE				5.0		5.0 U	UG/KG
2-HEXANONE				10	•	10 U	UG/KG
ISOPROPYL BENZENE	· · · · · ·		•	5.0		5.0 U	UG/KG
P-ISOPROPYLTOLUENE	· .		• .	5.0		5.0 U	UG/KG
METHYLENE CHLORIDE	1.4			5.0		0.35 .	
NAPHTHALENE	· ·			5.0	· . *	5 0 11	
4-METHYL-2-PENTANONE (M	IBK)	•		10		10 11	
N-PROPYLBENZENE				5 0	•	5017	
STYRENE				5.0			UG/KG
1,1,2,2-TETRACHLOROETHA	NE		•	5.0		5.0 0	UG/KG
TETRACHLOROETHENE	~ • • • •			5.0		5.00	UG/KG
TOLIENE			•	5.0		5.0 0	UG/KG
	· ·			5.0		5.0 0	UG/KG
				5.0		5.0 U	UG/KG
	-			5.0		5.0 U	UG/KG
				5.0		5.0 U	UG/KG
1, 3, 3 - IRIMETHYLBENZENE				5.0		5.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE				5.0		5.0 U	UG/KG
VINYL CHLORIDE				5.0	1. A. A. A. A. A. A. A. A. A. A. A. A. A.	5.0 U	UG/KG
O-XYLENE	· .			5.0		5.0 U	UG/KG 15
M+P-XYLENE	• •			5.0		5.0 U	UG/KG

Date Sampled : Date Received:	0 Submis	rder #: 870 sion #:	577	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 100
ANALYTE	· · ·		PQL	RESULT	UNITS
DATE ANALYZED : ANALYTICAL DILUTION:	12/15/05 1.0	0			Dry Weight
SURROGATE RECOVERIES		QC LIMITS	• •	· · · · · · · · · · · · · · · · · · ·	· · · ·
4 - BROMOFLUOROBENZENE TOLUENE - D8 DIBROMOFLUOROMETHANE		(65 - 129 (75 - 128 (62 - 133	રુ) ૨) ૨)	96 98 95	२ २ २
			· . ·		

Project Reference: Client Sample ID : METHOD BLANK		· · ·	
Date Sampled : Order # Date Received: Submission #	: 870584 :	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 100
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/19/05			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
SEC-BUTYLBENZENE	5.0	5.0 U	UG/KG
N-BUTYLBENZENE	5.0	5.0 U	UG/KG
TERT-BUTYLBENZENE	5.0	5.0 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5,0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5,0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
ISOPROPYL BENZENE	5.0	5.0 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
NAPHTHALENE	5.0	5.0 U	UG / KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
N-PROPYLBENZENE	5.0	5.0 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0) 5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 Ŭ	UG/KG
TRICHLOROETHENE	5.0	5.0 17	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 11	UG/KG
O-XYLENE	5.0	5.0 11	UG/KG 17
M+P-XYLENE	5.0	5.0 U	UG/KG

Date Sampled : Date Received:	(Submis	Order #: ssion #:	870584	1	Samp: Perce	le Matrix ent Solid	: SOIL/SEDIMEN: : 100
ANALYTE			ΡÇ	ΩL	• •	RESULT	UNITS
DATE ANALYZED : ANALYTICAL DILUTION:	12/19/05 1.0	00	· · · · ·		<u>.</u>		Dry Weight
SURROGATE RECOVERIES	· ·	QC LIMI	TS	•			
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE		(65 - 1 (75 - 1 (62 - 1	29 %) 28 %) 33 %)	•	•	96 97 91	90 90 90
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a da anti-arresta da anti- arresta da anti-arresta da anti- arresta da anti-arresta da anti-arresta da anti-arresta da anti-arresta da anti- arresta da anti-arresta da anti-arresta da anti-arresta da anti-arresta da anti-arresta da anti-arresta da anti-	• •				· · ·	· · · · · · · · · · · · · · · · · · ·	
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QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL/SEDIMENT

Spiked Order No. : 866486 Fuss & O'Neill, Inc

Client ID: ACD-SL-AA11 (12-13')

Test: 8260B TCL/TANK

Analytical Units: UG/KG

Run Number : 124577

Percent Solid : 84.1

SPIKE MATRIX SPIKE 1 ŧ MATRIX SPIKE DUP. QC LIMITS ADDED CONCENT. ł ANALYTE I SAMPLE FOUND * REC. FOUND * REC. RPD RPD REC. BENZENE 59.5 0.904 52.3 | 86 54.7 90 4 130 70 - 130 CHLOROBENZENE 59.5 0 46.4 78 47.6 | 70 - 130 80 3 30 1 1 1,1-DICHLOROETHENE 59.5 0 55.9 94 57.1 96 2 130 70 - 130 1 TOLUENE 59.5 | 0 52.3 88 52.3 88 0 30 1 70 - 130 I TRICHLOROETHENE 59.5 0 47.6 80 49.9 84 5 30 70 - 130

VOLATILE ORGANICS METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORD	ER #	: 870582		ANALYTICAL R	UN #	:	124577	•

	· .	. · ·	
ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 12/15/05			· · · · · · · · · · · · · · · · · · ·
ANALYTICAL DILUTION: 1.0	•.		
	,		•
ACETONE	20.0	117	50 - 150
BENZENE	20.0	94	70 - 130
BROMODICHLOROMETHANE	20.0	92	70 - 130
BROMOFORM	20.0	95	70 - 130
BROMOMETHANE	20.0	94	50 ~ 150
2-BUTANONE (MEK)	20.0	89	50 - 150
SEC-BUTYLBENZENE	20.0	76	70 - 130
N-BUTYLBENZENE	20.0	76	70 - 130
TERT-BUTYLBENZENE	20.0	87	70 - 130
CARBON DISULFIDE	20.0	106	70 - 130
CARBON TETRACHLORIDE	20.0	87	70 - 130
CHLOROBENZENE	20.0	89	70 - 130
CHLOROETHANE	20.0	90	70 - 130
CHLOROFORM	20.0	92	70 - 130
CHLOROMETHANE	20.0	86	70 - 130
DIBROMOCHLOROMETHANE	20.0	95	70 - 130
1 1-DICHLOROETHANE	20.0	93	70 - 130
1,2-DICHLOROETHANE	20.0	97	70 - 130
1 1-DICHLOROETHENE	20.0	97	70 - 130
CIS-1 2-DICHLOROETHENE	20.0	07.	70 - 130
TRANS-1 2-DICHLOROETHENE	20.0		70 - 130
1 2-DICHLORODRODANE	20.0	67	70 130
CIS-1 3-DICHLOROPROPENE	20.0	23 01	70 - 130
TRANS-1 3-DICHLOROPROPENE	20.0	91 01	70 - 130
METHVI. TEDT DICHLOROFROPHIL	20.0	00°	70 - 130
FTUVI DENGEND	20.0	24	70 - 130
2-HEXYNONE	20.0	60 00	70 - 130
Z-HEAMUNE TCODDODVI DENZENE	20.0	92 05	70 - 130
	20.0	60	70 - 130
METUVI ENE OULODIDE	20.0	83	70 - 130
	20.0	100	70 - 130
A MERINAL O DENERNONE (MIDK)	20.0	89	50 - 150
4-MEIRIL-2-PENIANONE (MIBK)	20.0	96	70 - 130
N-PROPILBENZENE	20.0	80	70 - 130
STYRENE	20.0	88	70 - 130
1, 1, 2, 2 - TETRACHLOROETHANE	20.0	88	70 - 130
TETRACHLOROETHENE	20.0	85	70 - 130
TOLUENE	20.0	91	70 - 130
1,1,1-TRICHLOROETHANE	20.0	89	70 - 130
1,1,2-TRICHLOROETHANE	20.0	93	70 - 130
TRICHLOROETHENE	20.0	91	70 - 130
1,3,5-TRIMETHYLBENZENE	20.0	84	70 - 13020

VOLATILE ORGANICS METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 870582

ANALYTICAL RUN # : 124577

ANALYTE	TRUE VALUE % REC	OVERY	QC LIMITS
DATE ANALYZED : 12/15/05 ANALYTICAL DILUTION: 1.0		<u> </u>	
1,2,4-TRIMETHYLBENZENE VINYL CHLORIDE O-XYLENE M+P-XYLENE	20.0 20.0 20.0 40.0	87 87 88 87	70 - 130 70 - 130 70 - 130 70 - 130 70 - 130

VOLATILE ORGANICS METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 870585		ANALY	TICAL	RUN # :	124577
ANALYTE	TRUE	VALUE	· 9	RECOVERY	QC LIMITS
DATE ANALYZED : 12/19/05					
ANALYTICAL DILUTION: 1.0		•		· _ ·	
ACETONE			•		
BENZENE	·	20.0		135	50 - 150
BROMODICHLOROMETHANE		20.0		99	70 - 130
BROMOFORM		20.0		101	70 - 130
BROMOMETHANE		20.0		110	50 - 150
2-BUTANONE (MEK)		20.0		98	50 - 150
SEC-BUTYLBENZENE		20.0	* ,	91	70 - 130
N-BUTYLBENZENE		20.0		96	70 - 130
TERT-BUTYLBENZENE		20.0		99	70 - 130
CARBON DISULFIDE		20.0		104	70 - 130
CARBON TETRACHLORIDE	-	20.0	•	97	70 - 130
CHLOROBENZENE		20.0		101	70 - 130
CHLOROETHANE		20.0		96	70 - 130
CHLOROFORM		20.0		100	70 - 130
CHLOROMETHANE		20.0		89	70 - 130
DIBROMOCHLOROMETHANE		20.0		100	70 - 130
1,1-DICHLOROETHANE		20.0		98	70 - 130
1,2-DICHLOROETHANE	· .	20.0		95	70 - 130
1,1-DICHLOROETHENE		20.0		109	70 - 130
CIS-1, 2-DICHLOROETHENE	. •	20.0		101	70 - 130
TRANS-1, 2-DICHLOROETHENE		20.0		98	70 - 130
1,2-DICHLOROPROPANE		20.0		95	70 - 130
TRANG 1 2 DICHLOROPROPENE		20.0		97	70 - 130
METUNI TEDT DUTNI DTUDD		20.0		94	70 - 130
MEINID-IERI-BUIIL-BINER ETUVI DENZENE	· ·	20.0		98	70 - 130
CITILDENZENE 2 - HEXNNONE	* .	20.0		100	70 - 130
Z-HEARNONE I CODODVI, DENZENE		20.0		98	70 - 130
P-ISOPROPUTOLIENE		20.0		. 95	70 - 130
METHYLENE CHLORIDE		20.0		100	70 - 130
NAPHTHALENE		20.0		104	70 - 130
4 - METHYL, -2 - PENTANONE (MTBK)		20.0		109	50 150
N-PROPYLBENZENE		20.0		102	70 - 130
STYRENE		20.0		90	70 - 130
1.1.2.2-TETRACHLOROETHANE		20.0		27 102	70 - 130
TETRACHLOROETHENE		20.0	•	102	70 - 130 70 - 120
TOLUENE	•	20.0	-	100	70 - 130 70 - 120
1.1.1-TRICHLOROETHANE		20.0	· · ·		70 - 130
1,1,2-TRICHLOROETHANE	•	20.0		103	70 - 120
TRICHLOROETHENE		20.0		90	70 - 130 70 - 130
1,3,5-TRIMETHYLBENZENE		20.0		99	70 - 13 0 0

REFERENCE-3

VOLATILE ORGANICS METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #:	870585		ANALYTICAL RUN # :	124577
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ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 12/19/05 ANALYTICAL DILUTION: 1.0			
1,2,4-TRIMETHYLBENZENE VINYL CHLORIDE O-XYLENE M+P-XYLENE	20.0 20.0 20.0 40.0	99 97 102 99	70 - 130 70 - 130 70 - 130 70 - 130 70 - 130

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC Client Sample ID : ACD	DUTTON -SL-AA11 (1:	2-13')	•		
Date Sampled : 12/09/05 Date Received: 12/10/05	Order Submission	#: 860 #: R2	5486 529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 84.1
ANALYTE			PQL	RESULT	UNITS
DATE EXTRACTED : 12 DATE ANALYZED : 01 ANALYTICAL DILUTION:	/22/05 /14/06 2.00		•		Dry Weight
ACENAPHTHENE ANTHRACENE BENZO (A) ANTHRACENE BENZO (A) PYRENE BENZO (B) FLUORANTHENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE DIDENZO (I, 2, 3 - CD) PYRENE CHRYSENE DIBENZO (A, H) ANTHRACENE FLUORANTHENE FLUORENE NAPHTHALENE PHENANTHRENE PYRENE			330 330 330 330 330 330 330 330 330 330	780 U 780 U 200 J 210 J 180 J 170 J 220 J 160 J 200 J 780 U 230 J 780 U 480 U 130 J 200 J	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
SURROGATE RECOVERIES	QC	LIMITS			007100
TERPHENYL-d14 NITROBENZENE-d5 2-FLUOROBIPHENYL	(48 (27 (32	- 131 - 130 - 130	୫) ୫) ୫)	87 72 80	00 00 06

COLUMBIA ANALYTICAL SEN	VICES			
		EXTRAC METHOI Report	CTABLE ORGANICS 0 8270C STARS LIS ced: 01/24/06	ST SEMIVOLATIL
Fuss & O'Neill,Inc Project Reference: AC I Client Sample ID : ACD	OUTTON -SL-AA10 (12-	14')	· · ·	
Date Sampled : 12/09/05 Date Received: 12/10/05	Order # Submission #	: 866487 : R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 90.6
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : 12 DATE ANALYZED : 01 ANALYTICAL DILUTION:	/22/05 /14/06 1.00			Dry Weight
ACENAPHTHENE ANTHRACENE BENZO (A) ANTHRACENE BENZO (A) PYRENE BENZO (B) FLUORANTHENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (K) FLUORANTHENE INDENO (1, 2, 3 - CD) PYRENE CHRYSENE DIBENZO (A, H) ANTHRACENE FLUORANTHENE FLUORENE NAPHTHALENE PHENANTHRENE PYRENE		330 330 330 330 330 330 330 330 330 330	360 U 360 U 280 J 260 J 160 J 160 J 160 J 92 J 240 J 37 J 400 360 U 150 J 360 U 990	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
SURROGATE RECOVERIES TERPHENYL-d14 NITROBENZENE-d5 2-FLUOROBIPHENYL	QC LI (48 - (27 - (32 -	MITS 131 %) 130 %) 130 %)	90 77 82	90 90 90

COLUMBIA ANALYTICAL SERVICES								
				EXTRAC	CTABLE	ORGANICS		. '
				METHOI	2 82700	STARS LI	ST SEMIVOLATI	۲ī
				Report	ted: 01	/24/06	•	
Fuss & O'Neill, Inc								
Project Reference: AC DUTTON								
Client Sample ID : ACD-SL-U5 (4-	-81))						
Date Sampled : 12/09/05 Orde	er i	#:	866	488	Sampl	e Matrix.	SOTT / SEDIME	 זידי
Date Received: 12/10/05 Submissio	on i	#:	R25	29204	Perce	ent Solid:	86.5	ЧĻ
ANALYTE				PQL		RESULT	UNITS	· .
DATE EXTRACTED : 12/22/05	•				•		·	<u> </u>
DATE ANALYZED : 01/14/06	•						· .	
ANALYTICAL DILUTION: 1.00				÷.			Dry Weight	
ACENAPHTHENE				330		290 11		
ANTHRACENE				220		380 11	UG/KG	
BENZO (A) ANTHRACENE				330	·	380 11		
BENZO (A) PYRENE				330		380 11		
BENZO (B) FLUORANTHENE				330		380 11		
BENZO (G, H, I) PERYLENE				330		380 11		
BENZO (K) FLUORANTHENE				330		380 11		-
INDENO (1,2,3-CD) PYRENE				330		380 U		
CHRYSENE				330		380 11		
DIBENZO (A, H) ANTHRACENE				330	·: .	380 11		
FLUORANTHENE				330		380 11		
FLUORENE	•			330	: .	380 11		
NAPHTHALENE				200		160 J		
PHENANTHRENE	•	•		330		380 11		
PYRENE				330		380 U	UG/KG	
SURROGATE RECOVERIES QC	сг	IM	ITS		•			
TEPDHENVI dia				· • •			•	•
$\frac{1}{1} \frac{1}{1} 5	-	131	そ) の)		95	2	•	
2 - FLIOROBI DHENVI. (2)	/ >	-	130	そ) 9.)		69		-
* THOOLODILIUMIU (3)	4	-	130	3 1		76	2	

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC Client Sample ID : ACI	DUTTON D-SL-U6 (6-8	·)			
Date Sampled : 12/09/05 Date Received: 12/10/05	Order Submission	#: 866 #: R25	489 29204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 80.3
ANALYTE			PQL	RESULT	UNITS
DATE EXTRACTED : 12 DATE ANALYZED : 02 ANALYTICAL DILUTION:	2/22/05 1/14/06 1.00		- -		Dry Weight
ACENAPHTHENE			330	410 U	UG/KG
ANTHRACENE			330	410 U	UG/KG
BENZO (A) ANTHRACENE			330	410 U	UG/KG
BENZO (A) PYRENE			330	410 U	UG/KG
BENZO (B) FLUORANTHENE			330	410 U	UG/KG
BENZO (G, H, I) PERYLENE	· ·		330	410 U	UG/KG
BENZO (K) FLUORANTHENE			330	410 U	UG/KG
INDENO(1,2,3-CD)PYRENE	1.		330	410 U	UG/KG
CHRYSENE			330	410 U	UG/KG
DIBENZO (A, H) ANTHRACENE			330	410 U	UG/KG
FLUORANTHENE			330	72 J	UG/KG
FLUORENE	·		330	410 U	UG/KG
NAPHTHALENE		•	200	250 U	UG/KG
PHENANTHRENE			330	140 J	UG/KG
PYRENE			330	120 J	UG/KG
SURROGATE RECOVERIES	QC	LIMITS		· · · ·	
TERPHENYL-d14	(48	- 131	응)	104	욯
NITROBENZENE-d5	(27	- 130	્રે)	89	8
2-FLUOROBIPHENYL	(32	- 130	ક)	100	8

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/24/06

Date Sampled : Date Received:	Order Submission	#: #:	874614	Sample Matrix Percent Solid	: SOIL/SEDIMENT : 100
ANALYTE			PQL	RESULT	UNITS
DATE EXTRACTED : 12	/22/05		•		······································
DALE ANALIZED : UI	/13/06				
ANALYTICAL DILUTION:	1.00				Dry Weight
ACENAPHTHENE	· ·		330	11 056	UC /VC
ANTHRACENE			330	330 11	
BENZO (A) ANTHRACENE	· · · ·		330	330 0	
BENZO (A) PYRENE			330	330.0	
BENZO (B) FLUORANTHENE			330	220 11	
BENZO (G.H.I) PERYLENE	. · ·		330	330 U	
BENZO (K) FLUORANTHENE			330 -	330 0	
INDENO (1,2,3-CD) PYRENE	· ·		220	330 0	
CHRYSENE	, ··		220	330 0	UG/KG
DIBENZO (A.H) ANTHRACENE			220	330 0	UG/KG
FLUORANTHENE			220	330 0	UG/KG
FLUORENE			330	330 0	UG/KG
NAPHTHALENE			330 .	330 0	UG/KG
PHENANTHRENE			200	200 0	UG/KG
PYRENE			330	330 U	UG/KG
TINDAL	· · · ·		330	330 U	UG/KG
SURROGATE RECOVERIES	QC I	IMI	TS		
TERPHENYL-d14	(48	- 1		00	0,
NITROBENZENE-d5	(27	- 1	30 8)	03 61	б. 0.
2-FLUOROBIPHENYL	.(32	_ 1	30 8)	01	6
		਼ –	50 61	65	ř

QUALITY CONTROL SUMMARY: LABORATORY CONTROL SAMPLE SOIL/SEDIMENT

Spiked Order No. : 874615

Dup Spiked Order No. : 874616

Client ID:

Test: 8270C STARS LIST SEMIVOLATILES

Analytical Units: UG/KG

Run Number : 125208

•			BLANK S	PIKE	BLANK SPIKE DU	₽.	QC LIMITS
I ANALYTE	ADDED	CONCENT.	FOUND	* REC.	FOUND REC.	RPD RP	D REC.
ACENAPHTHENE	3300		2940	88	3300 99	12 19	47 - 123
ANTHRACENE	3300	1 0	3070	92	3320 100	8 30	44 - 125
BENZO (A) ANTHRACENE	3300	0	3070	92	3430 103	111 130) 48 - 122
BENZO (A) PYRENE	3300	0	3060	92	3340 100-	19 130) 49 - 126
BENZO (B) FLUORANTHENE	3300	0	3170	95	3540 106	111 30) 42 - 128
BENZO (G, H, I) PERYLENE	3300	0	3040	91	3440 103	112 130) 42 - 126
BENZO (K) FLUORANTHENE	3300	0	3260	98	3540 106	18 130) 48 - 124
INDENO (1,2,3-CD) PYRENE	3300	0 .	3030	91	3360 101	110 130) 41 - 127
CHRYSENE	3300	0		92	3420 1 103	111 130	49 - 122
DIBENZO (A, H) ANTHRACENE	3300	0	3290	99	3630 109	110 130) 23 - 140
FLUORANTHENE	3300	0	3210	96	3420 103	16 130	1 42 - 124
FLUORENE	3300		, 3060	92	3220 1 97	15 130	36 - 128
NAPHTHALENE	3300	1 0	2600	1 78	2880 86	110 130	38 - 116
PHENANTHRENE	3300	0	3130	94	3450 1 104	110 [30	48 - 130
PYRENE	3300	0	3080	92	3410 102	10 36	5 53 - 130

Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA11 (12-13')

Date Sampled : Date Received:	12/09/05 12/10/05	Order #:	866486	Sample Matrix:	SOIL/SEDIMENT
Date Mecetved.	12/10/05	SUDWISSION #:	R2529204	· ·	

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.0	84.1	£	12/29/05	12:30	1.0
			• • • •	• • •	· · ·	·.	
		· · · · ·		• •			
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							30
			-		•		· .

Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (12-14')

Date Sampled : 12/09, Date Received: 12/10,	/05 /05 S1	Order # ubmission #	: 866487 : R2529204	Sa	mple Matrix: SOII	L/SEDIMENT
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE TIME ANALYZED ANALYZE	D DILUTION
PERCENT SOLIDS	160.3M	1.0	90.6	8	12/29/05 12:30	1.0
			•			
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				· · · ·	•	31

Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U5 (4-8')

Date Sampled : 12/09/05 Date Received: 12/10/05	Sul	Order #: bmission #:	866488 R2529204	Sa	mple Matrix: SOIL/	SEDIMENT
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE TIME ANALYZED ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.0	86.5	ક	12/29/05 12:30	. 1.0
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Reported: 01/24/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U6 (6-8')

Date Sampled : 12/09/05OrderDate Received: 12/10/05Submission			#: 866489 #: R2529204	866489 Sample Matrix: SOIL/ R2529204			
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.0	80.3	¥	12/29/05	12:30	1.0
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1 Mustard St., Suite 250 Rochester, NY 14609 Date: <u>January 25, 2006</u> Number of pages: <u>76</u>

To:	From:
Mr. Rich Totino Fuss & O'Neill,Inc 80 Washington St. Suite 301 Poughkeepsie, NY 12601	<u>Michael Perry</u>
Phone: 845-452-6801	Phone: (585) 288-5380
Fax: <u>845-452-5186</u>	Fax: (585) 288-8475
CC:	

RUSH REPORT

Submission #: R2629759 Reference: AC DUTTON TCLP(RURAS Wetals) roiect RIG 1(3-6 E5 (3-٧q TIO (.5-3 10 B3 B3(0 p2(6 54 D2 AA 10 (8-10) AAIO Z9(3

IMPORTANT NOTICE:

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : E4 (3-6')

Date Sampled : 01/06/06 Date Received: 01/07/06	Ora Submiss:	Order #: 873205 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION		
METALS							
ARSENIC	1.00	44.2	MG/KG	01/23/06	10.0		
BARIUM	2.00	106	MG/KG	01/23/06	10.0		
CADMIUM	0.500	6.14 U	MG/KG	01/23/06	10.0		
CHROMIUM	1.00	19.7	MG/KG	01/23/06	10.0		
COPPER	2.00	24.6 U	MG/KG	01/23/06	10.0		
LEAD	5.00	77.1	MG/KG	01/23/06	10.0		
MERCURY	0.0333	0.0409 U	MG/KG	01/13/06	1.00		
SELENIUM	2.00	24.6 U	MG/KG	01/23/06	10.0		
SILVER	1.00	12.3 U	MG/KG	01/23/06	10.0		
WET CHEMISTRY		. ·					
PERCENT SOLIDS	1.0	81.4	8	01/11/06	1.00		

Reported: 01/25/05

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID (83) (0.5-3') G2 (LMA)									
Date Sampled : 01/06/06 Date Received: 01/07/06	Or Submiss	Order #: 873206 Submission #: R2629759		Sample Matr	ix: SOIL/SEDIMENT				
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION				
MRTALS					·				
ARSENTC	1.00	911	MG/KG	01/23/06	70.0				
BARTUM	2.00	23.9	MG/KG	01/23/06	1 00				
CADMIUM	0.500	0.878	MG/KG	01/23/06	1 00				
CHROMIUM	1.00	469	MG/KG	01/19/06	1.00				
COPPER	2.00	876	MG/KG	01/23/06	10.0				
LEAD	5.00	30.5	MG/KG	01/19/06	1.00				
MERCURY	0.0333	0.126	MG/KG	01/13/06	1.00				
SELENIUM	2.00	2.23 U	MG/KG	01/19/06	1.00				
SILVER	1.00	1.12 U	MG/KG	01/19/06	1.00				
WET CHEMISTRY									
PERCENT SOLIDS	1.0	89.5	. <u>*</u>	01/11/06	1.00				

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :T10 (0.5-3')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873207 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION	
METALS						
ARSENIC	1.00	36.1	MG/KG	01/23/06	2 00	
BARIUM	2.00	121	MG/KG	01/23/06	2.00	
CADMIUM	0.500	1.37 U	MG/KG	01/23/06	2.00	
CHROMIUM	1.00	9.23	MG/KG	01/23/06	2.00	
COPPER	2.00	33.7	MG/KG	01/23/06	2.00	
LEAD	5.00	40.3	MG/KG	01/23/06	2.00	
MERCURY	0.0333	0.184	MG/KG	01/13/06	1.00	
SELENIUM	2.00	5.46 U	MG/KG	01/23/06	2.00	
SILVER	1.00	2.73 U	MG/KG	01/23/06	2.00	
WET CHEMISTRY	·					
PERCENT SOLIDS	1.0	73.2	* *	01/11/06	1.00	

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :B3 (0-0.5')

Date Sampled : 01/06/06 Date Received: 01/07/06	Or Submiss	Order #: 873208 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	IT DATE ANALYZED	ANALYTICAL DILUTION		
METALC							
ARSENTC	1 00	10 7	MC /VC	01/22/06			
BARTIM	2 00	£3 0	MG/KG	01/23/06	2.00		
CADMTIM	0.500	1 12 11	MG/KG	01/23/06	2.00		
CHROMTIM	1 00	13 9	MG/KG	01/23/06	2.00		
COPPER	2 00	20.3	MG/KG	01/23/00	2.00		
LEAD	5 00	19 6	MG/KG	01/23/00	2.00		
MERCURY	0.0333	0.0488	MG/KG	01/13/06	1 00		
SELENIUM	2.00	4.48 1	MG/KG	01/23/06	2 00		
SILVER	1.00	2.24 U	MG/KG	01/23/06	2.00		
WET CHEMISTRY							
PERCENT SOLIDS	1.0	89.2	· · · · · · · · · · · · · · · · · · ·	01/11/06	1.00		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : D2 (6-8')

Date Sampled : 01/06/06 Date Received: 01/07/06 ANALYTE	Orc Submiss:	Order #: 873209 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
	PQL	RESULT	DRY WEIGH UNITS	f date Analyzed	ANALYTICAL DILUTION		
METALS							
ARSENIC	1.00	6.04	MG/KG	01/19/06	1.00		
BARIUM	2.00	22.2	MG/KG	01/23/06	1.00		
CADMIUM	0.500	1,35	MG/KG	01/23/06	1.00		
CHROMIUM	1,00	15.9	MG/KG	01/19/06	1.00		
COPPER	2.00	33.2	MG/KG	01/19/06	1.00		
LEAD	5.00	13.8	MG/KG	01/19/06	1.00		
MERCURY	0.0333	0.0386 U	MG/KG	01/13/06	1.00		
SELENIUM	2.00	2.32 U	MG/KG	01/19/06	1.00		
SILVER	1.00	1.16 U	MG/KG	01/19/06	1.00		
WET CHEMISTRY PERCENT SOLIDS	1.0	86.2	£	01/11/06	1.00		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :AA10 (8-10')

Date Sampled : 01/06/06 Date Received: 01/07/06 ANALYTE	Order #: 873210 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION
METALS		•			
ARSENIC	1.00	7.10	MG/KG	01/19/06	1 00
BARIUM	2.00	45.5	MG/KG	01/23/06	1 00
CADMIUM	0.500	1.50	MG/KG	01/23/06	1.00
CHROMIUM	1.00	20.4	MG/KG	01/19/06	1.00
COPPER	2.00	44.2	MG/KG	01/19/06	1.00
LEAD	5.00	18.4	MG/KG	01/19/06	1.00
MERCURY	0.0333	0.0595	MG/KG	01/13/06	1.00
SELENIUM	2.00	2.30 U	MG/KG	01/19/06	1.00
SILVER	1.00	1.15 U	MG/KG	01/19/06	1.00
WET CHEMISTRY					
PERCENT SOLIDS	1.0	87.1	9	01/11/06	1.00
Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :C4 (0.5-3')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873211 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION	
METALS						
ARSENIC	1.00	7.79	MG/KG	01/19/06	1.00	
BARIUM	2.00	32.8	MG/KG	01/23/06	1.00	
CADMIUM	0.500	1.13	MG/KG	01/23/06	1.00	
CHROMIUM	1.00	8.47	MG/KG	01/19/06	1.00	
COPPER	2.00	50.2	MG/KG	01/19/06	1.00	
LEAD	5.00	33.0	MG/KG	01/19/06	1.00	
MERCURY	0.0333	0.123	MG/KG	01/13/06	1.00	
SELENIUM	2.00	2.18 U	MG/KG	01/19/06	1.00	
SILVER	1.00	1.09 U	MG/KG	01/19/06	1.00	
WET CHEMISTRY						
PERCENT SOLIDS	1.0	91.7	S	01/11/06	1.00	

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :L4 (0.5-3')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873212 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION	
METALS						
ARSENIC	1.00	21.5	MG/KG	03/24/06	5 00	
BARIUM	2.00	93.0	MG/KG	01/24/06	5.00	
CADMIUM	0.500	2.82 U	MG/KG	01/24/06	5.00	
CHROMIUM	1.00	12.8	MG/KG	01/24/06	5.00	
COPPER	2.00	44.2	MG/KG	01/24/06	5.00	
LEAD	5.00	55.1	MG/KG	01/24/06	5.00	
MERCURY	0.0333	0.0443	MG/KG	01/13/06	1.00	
SELENIUM	1.00	5.65 U	MG/KG	01/24/06	5.00	
SILVER	1.00	5.65 U	MG/KG	01/24/06	5.00	
WET CHEMISTRY		· .				
PERCENT SOLIDS	1.0	88.5	4 73	01/11/06	1.00	

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :E5 (3-6')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873213 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION	
METALS						
ARSENIC	1.00	121 11	Malka	01/22/06	100	
BARIUM	2.00	181	MG/KG	01/23/06	100	
CADMIUM	0.500	60.5 11	MG/KG	01/23/06	100	
CHROMIUM	1.00	121 1	MG/KG	01/23/06	100	
COPPER	2.00	242 11	MG/KG	01/23/06	100	
LEAD	5.00	605 Ŭ	MG/KG	01/23/06	100	
MERCURY	0.0333	0.0403 U	MG/KG	01/13/06	1 00	
SELENIUM	2.00	242 U	MG/KG	01/23/06	100	
SILVER	1.00	121 U	MG/KG	01/23/06	100	
WET CHEMISTRY						
PERCENT SOLIDS	1.0	82.6	Po Po	01/11/06	1.00	

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : V9 (3-6')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873214 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION	
METALS					-	
ARSENIC	1.00	<u>б 15</u>	MC (YC	01/10/00	1 00	
BARIUM	2.00	34 0	MG/KG	01/13/06	1.00	
CADMIUM	0,500	5.02	MG/KG	01/23/06	1.00	
CHROMIUM	1.00	9.87	MG/KG	01/10/04	1.00	
COPPER	2.00	46.8	MG/KG	01/19/06	1.00	
LEAD	5.00	26 5	MG/RG	01/10/05	1.00	
MERCURY	0.0333	0.0392	MG/KG	01/13/06	1.00	
SELENIUM	2.00	2-24 11	MG/KC	01/10/06	1.00	
SILVER	1.00	1.23	MG/KG	01/19/06	1.00	
WET CHEMISTRY						
PERCENT SOLIDS	1.0	89.1	ŧ	01/11/06	1.00	

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : G4 (10-11')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873215 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	t date Analyzed	ANALYTICAL DILUTION	
METALS					· .	
ARSENIC	1.00	9.16	MG/KG	01/19/06	1.00	
BARIUM	2.00	87.2	MG/KG	01/23/06	1.00	
CADMIUM	0.500	1.15	MG/KG	01/23/06	1.00	
CHROMIUM	1.00	21.2	MG/KG	01/19/06	1.00	
COPPER	2.00	30.6	MG/KG	01/19/06	1.00	
LEAD	5.00	78.6	MG/KG	01/19/06	1.00	
MERCURY	0.0333	0.659	MG/KG	01/13/06	1.00	
SELENIUM	2.00	2.76 U	MG/KG	01/19/06	1.00	
SILVER	1.00	1.38 U	MG/KG	01/19/06	1.00	
WET CHEMISTRY						
PERCENT SOLIDS	1.0	72.5	*	01/11/06	1.00	

Reported: 01/25/06

Fuss &	O'Neil]	l,In	C	
Project	: Refere	ence	AC	DUTTON
Client	Sample	ID	:S4	(2-31)

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873216 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	IT DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM COPPER LEAD MERCURY SELENIUM SILVER	1.00 2.00 0.500 1.00 2.00 5.00 0.0333 2.00 1.00	11.0 22.1 1.87 20.3 56.3 19.1 0.0840 2.25 U 1.13 U	MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG MG/KG	01/20/06 01/23/06 01/23/06 01/20/06 01/20/06 01/20/06 01/13/06 01/20/06 01/20/06	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
WET CHEMISTRY PERCENT SOLIDS	1.0	88.8	٠ ۴	01/11/06	1.00	

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :H7 (0.5-3')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873217 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	IT DATE ANALYZED	ANALYTICAL DILUTION	
METALS					· .	
ARSENIC	1.00	19.5	MG/KG	01/23/06	10.0	
BARTUM	2.00	59.0	MG/KG	01/23/06	10.0	
CADMIUM	0.500	5.56 U	MG/KG	01/23/06	10.0	
CHROMIUM	1.00	16.7	MG/KG	01/23/06	10.0	
COPPER	2.00	28.7	MG/KG	01/23/06	10.0	
LEAD	5.00	55.6 U	MG/KG	01/23/06	10.0	
MERCURY	0.0333	0.121	MG/KG	01/13/06	1.00	
SELENIUM	2.00	22.2 U	MG/KG	01/23/06	10.0	
SILVER	1.00	11.1 U	MG/KG	01/23/06	10.0	
WET CHEMISTRY					,	
PERCENT SOLIDS	1.0	89.9	8	01/11/06	1.00	
					· .	

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : Q6 (1-3')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873218 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS						
ARSENIC	1.00	44.5	MG/KG	01/23/06	20.0	
BARIUM	2.00	142	MG/KG	01/23/06	20.0	
CADMIUM	0.500	12.2 U	MG/KG	01/23/06	20.0	
CHROMIUM	1.00	24.3 U	MG/KG	01/23/06	20.0 -	
COPPER	2.00	81.9	MG/KG	01/23/06	20.0	
LEAD	5.00	122 U	MG/KG	01/23/06	20.0	
MERCURY	0.0333	1.00	MG/KG	01/13/06	1.00	
SELENIUM	2.00	48.6 U	MG/KG	01/23/06	20.0	
SILVER	1.00	24.3 U	MG/KG	01/23/06	20.0	
WET CHEMISTRY			•			
PERCENT SOLIDS	1.0	82.3	\$	01/11/06	1.00	
THACENI DUHLUD	T.0	84.3	₹	01/11/06	T.00	

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : I9 (2-5')

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873219 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT		
ANALYTE	PQL	RESULT	DRY WEIGH UNITS	T DATE ANALYZED	ANALYTICAL DILUTION
METALS					· .
ARSENIC	1.00	0.0000000	MG/KG	0.0	000000
BARIUM	2.00	0.0000000	MG/KG	0.0	3000000
CADMIUM	0.500	0.0000000	MG/KG	0.0	0000000
CHROMIUM	1.00	0.0000000	MG/KG	0.0	000000
COPPER	2.00	0.0000000	MG/KG	0.0	000000
LEAD	5.00	0.0000000	MG/KG	0.0	0000000
MERCURY	0.0333	0.0432 U	MG/KG	01/13/06	1 00
SELENIUM	0.500	0.0000000	MG/KG	0_(000000
SILVER	1.00	0-0000000	MG/KG	0.0	000000
WET CHEMISTRY					
PERCENT SOLIDS	1.0	77.1	8	01/11/06	1.00

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : E4 (3-6') - TCLP

Date Sampled : 01/06/06 Date Received: 01/07/06 ANALYTE	Order #: 873220 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS						
ARSENIC	0.500	0.500 U	MG/L	01/16/06	1.00	
BARIUM	1.00	1.00 U	MG/L	01/16/06	1.00	
CADMIUM	0.100	0.100 U	MG/L	01/16/06	1.00	
CHROMIUM	0.100	0.100 U	MG/L	01/16/06	1.00	
LEAD	0.100	0.100 U	MG/L	01/16/06	1.00	
MERCURY	0.000300	0.00300 U	MG/L	01/16/06	10.0	
SELENIUM	0.500	0.500 U	MG/L	01/16/06	1.00	
SILVER	0.100	0.100 U	MG/L	01/16/06	1.00	

Reported: 01/25/06

Fuss &	O'Neil	L, Ir	10			
Project	: Refere	ence	:AC	DUTTON		
Client	Sample	ID	:G2	(0.5-31)	-	TCLP

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873221 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
MRTALS						
ARSENIC	0.500	1.59	MG/L	01/16/06	1.00	
BARIUM	1.00	1.00 U	MG/L	01/16/06	1.00	
CADMIUM	0.100	9.100 U	MG/L	01/16/06	1.00	
CHROMIUM	0.100	0.100 U	MG/L	01/16/06	1.00	
LEAD	0.100	0.100 U	MG/L	01/16/06	1.00	
MERCURY	0.000300	0.00300 U	MG/L	01/16/06	10.0	
SELENIUM	0.500	0.500 U	MG/L	01/16/06	1.00	
SILVER	0.100	0.100 U	MG/L	01/16/06	1.00	

Reported: 01/25/06

Fuss & O'Neill,Inc		
Project Reference: AC DUTTON		
Client Sample ID :T10 (0.5-3')	-	TCLP

Date Sampled : 01/06/06 Date Received: 01/07/06	Order #: 873222 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT		
ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	0.500 U	MG/L	01/16/06	1.00
BARIUM	1.00	1.09	MG/L	01/16/06	1.00
CADMIUM	0.100	0.100 U	MG/L	01/16/06	1.00
CHROMIUM	0.100	0.100 U	MG/L	01/16/06	1.00
LEAD	0.100	0.100 U	MG/L	01/16/06	1.00
MERCURY	0.000300	0.00300 U	MG/L	01/16/06	10.0
SELENIUM	0.500	0.500 U	MG/L	01/16/06	1.00
SILVER	0.100	0.100 U	MG/L	01/16/06	1.00

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :B3 (0-0.5') - TCLP

Date Sampled : 01/06/06 Date Received: 01/07/06		Order #: 873223 Submission #: R2629759			Sample Matrix: SOIL/SEDIMENT			
ANALYTE		PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION		
METALS			-					
ARSENIC		0.500	0.500 U	MG/L	01/16/06	1.00		
BARIUM		1.00	1.48	MG/L	01/16/06	1.00		
CADMIUM		0.100	0.100 U	MG/L	01/16/06	1.00		
CHROMIUM		0.100	0.100 U	MG/L	01/16/06	1.00		
LEAD		0.100	0.100 U	MG/L	01/16/06	1.00		
MERCURY		0.000300	0.00300 U	MG/L	01/16/06	10.0		
SELENIUM		0.500	0.500 U	MG/L	01/16/06	1.00		
SILVER		0.100	0.100 U	MG/L	01/16/06	1.00		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :D2 (6-8') - TCLP

Date Sampled : 01/06/06 Date Received: 01/07/06 ANALYTE		Order #: 873224 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
		PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM SILVER		$\begin{array}{r} 0.500 \\ 1.00 \\ 0.100 \\ 0.100 \\ 0.100 \\ 0.000300 \\ 0.500 \\ 0.100 \end{array}$	0.500 U 1.00 U 0.100 U 0.100 U 0.100 U 0.00300 U 0.500 U 0.100 U	MG/L MG/L MG/L MG/L MG/L MG/L MG/L	01/16/06 01/16/06 01/16/06 01/16/06 01/16/06 01/16/06 01/16/06 01/16/06	1.00 1.00 1.00 1.00 1.00 10.0 1.00 1.00	

Reported: 01/25/06

Fuss & O'Neill, Inc	
Project Reference: AC DUTTON	
Client Sample ID :AA10 (8-10')	 TCLP

Date Sampled : 01/06/06 Date Received: 01/07/06	O: Submis	Order #: 873225 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT		
ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM SILVER	0.500 1.00 0.100 0.100 0.100 0.000300 0.500 0.100	0.500 U 1.00 U 0.100 U 0.100 U 0.100 U 0.00300 U 0.500 U 0.100 U	MG/L MG/L MG/L MG/L MG/L MG/L MG/L	01/16/06 01/16/06 01/16/06 01/16/06 01/16/06 01/16/06 01/16/06	1.00 1.00 1.00 1.00 1.00 10.0 1.00 1.00	

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACD-SS-A3(0.5-2.5)

Date Sampled : 01/10/06 Date Received: 01/11/06	Order #: 873969 Submission #: R2629759		Sample Matrix: SOIL/SEDIMENT			
ANALYTE	PQL	RESULT	DRY WEIGHT DATE ANALYTICAL UNITS ANALYZED DILUTION			
METALS						
ARSENIC	1.00	7 24	Ma/xa	01/20/06	1 00	
BARIUM	2.00	20.4	MG/KG	01/20/06	1.00	
CADMIUM	0.500	1 22	MG/KG	01/24/00	1.00	
CHROMIUM	1.00	15.5	MG/KG	01/24/06	1 00	
COPPER	2.00	40 3	MG/KG	01/20/00	1.00	
LEAD	5.00	20.5	MG/KG	01/20/06	1.00	
MERCURY	0.0333	0.109	MG/KG	01/13/06	1 00	
SELENIUM	2.00	2.12 11	MG/KG	01/20/06	1 00	
SILVER	1.00	1.06 U	MG/KG	01/20/06	1.00	
WET CHEMISTRY			,			
PERCENT SOLIDS	1.0	94.3	5	01/12/06	1.00	

May-03-06 16:24 From-CAS-Rochester Columbia Analytical	+2885380	T-361 P.001/003	F-918
ServiceSinc	Date: <u>May 3,</u> Number of page	2006 3	
1 Mustard St.,Suite 250 Rochester, NY 14609			
To:	From:		
Mr. Richard Totino Fuss & O'Neill, Inc 24 Madison Ave. Extension Albany, NY 12203	Michael Perry		
Phone: <u>518-281-5436</u>	Phone: (585)	288-5380	
Fax: <u>518-218-0606</u>	Fax: <u>(585)</u>	288-8475	
CC:			
RUSH	REPORT		
Submission #: R2631301 Project Reference: AC DUTTON			
TCLP RE	esults p2	(25)	
	Buck		
			•
	the	ts mile	

IMPORTANT NOTICE:

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+2885380

COLUMBIA ANALYTICAL SERVICES

Reported: 05/03/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID :ACDSS-M2 (2-5) (880070)

Date Sampled : 02/03/06 Date Received: 02/04/06		Orde Submissio	Order #: 898363 Submission #: R2631301		Sample Matrix: SOIL/SEDIMEN		
ANALYTE		PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION	
METALS ARSENIC CHROMIUM		0.500 0.100	0.500 U 0.100 U	MG/L MG/L	04/27/06 04/27/06	1.00	
			•	· .		•	
				•			
	•	. .					
			· ·				

+2885380

COLUMBIA ANALYTICAL SERVICES

Reported: 05/03/06

Fuss & O'Neill, Inc		
Project Reference: AC DUTTON		
Client Sample ID :ACDSS-B8R	(4-4.5)	(880090)

Date Sampled : 02/03/06 Date Received: 02/04/06 ANALYTE	Order #: 898364 Submission #: R2631301		Sample Matrix: SOIL/SEDIMENT		
	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS ARSENIC CHROMIUM	0.500	0.500 U 0.100 U	MG/L MG/L	04/27/06 04/27/06	1.00 1.00

Kay-11-06 14:43 From-CAS-Rochester Columbia Analytical ServiceShc. 1 Mustard St., Suite 250 Rochester, NY 14609	+2885380 T-466 P.001/009 F-058 Date: May 11, 2006 Number of pages:
To:	From:
Mr. Rich Totino (Lisa Gwiazdowski <u>Fuzz & O'Neill, Inc</u> <u>80 Wachington St.</u> <u>Suite 301</u> <u>Poughkeepsie. NX 12601</u>	Nichael Perry
Phone: 845-452-6802	Phone: (585).288-5380
Yaxı <u>845-452-5186</u>	Pax: (585) 288-8475
CC.	
RUSH REPOI	RT
Submission #: R2629759 Project Reference: AC DUTION	
Corrected	y pages
62-Mor 6-3-	
	thanks, mike

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Way-11-06	14:43	From-CAS-Rochester	+2885380	T-466	P.002/	909	F-059
		· · · · · · · · · · · · · · · · · · ·	METALS	,, , , , , , , , , , , , , , , , , , ,			
		COVER FAGE -	INORGANIC ANALYSES DATA	PACKAGE			
	-	3760	· · · · · · · · · · · · · · · · · · ·	SDG	: No. :	Σ4	
ontract:	R2023	7759					
ab Code:		Cas	e No.:	5 X 3	; No.:		
iow No.: S	W846 CI	LP-M Clie	ont: Fuss 4 O'Neill, Inc				
	· · ·	Sample No.	Lab Sample I	æ.			
		X4 (3-6')	873205				
		E4 (3-6')D	8732050				
		E4 (3-6') \$	8732055				
		<u>62 (0.5-3')</u>	873206				
		T10 (0.5-3')	673207				
		B3 (0-0.5')	873208				
		DZ (6-8')	<u> </u>				
		XA10 (8-10')	<u></u>				
		<u>C4 (0.5-3')</u>	973211				
		14 (0.5-3')	<u></u>				
		ED (3-0')	<u>873213</u>				
		V3 (3-0)	<u>0/3413</u>	······			
		$G_{4} (10-11^{\circ})$					
		34 (273)	973230				
		$\frac{1}{2}$		···· · · · · · · · · · · · · · · · · ·			
		06 (1-3')D	9732190	· · · · · · · · · · · · · · · · · · ·			
		06 (1-3')\$	8732185				
		19 (2-5')	873219				
		ACD-SS-A3 (0.5-2.5)	873969				
		ACD-55-29 (3-6')	873970				
Nora 709	, inter	lement corrections	analied?		10- /No	YF	s
WERE ICP	Dackgi	Found corrections app	1	Ľ	(es/No		
TE	yes-wei	re raw data generates	a delore	3		INC	1
41/1	AYOTCY.	AIL OF DEGASTAMENT OAT			• • •		
Comment	s: <u>3+-</u>	Attached Case Nazrat	tive				
<u></u>				<u></u>			
					•		
				·			·····
I certif	y that	this data package is	s in compliance with the to	rms and con	dition		f the
contract	, both	technically and for	completeness, for other th	an the cond	itions	de	tailed
above.	Release	of the data contain	nod in this bardoopy data p	ackage and	in the	1	
aomputer	-readak	ole data submitted o	a diskotte has been authori	zed by the	Labors	tor	Y Manager or
the Mana	vgar's d	lesignee, as verifie	d by the following signatur	ê.			
		7 0 1		0			
Signature	=: <u>M</u>	chul K. Je-	Name: Mith	arl K.B	$i \sim /$		
Dates	.6	lulas	Titles Cak	atre a	1 1 1 1 4 4 -		
		1.1110	AANGI/////	uncary 1	7	[.]	
			Cover page - in	-			

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T-466 P.003/009 F-059

SAMPLE NO.

Noy-11-06 14:44 From-CAS-Rochester

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

		G2 (0.5=3')
Contract: R2629759		
Lab Code: Case No.:	SAS No.:	SDG NO.: E4
MATRIX (Soil/water): SOIL/SEDDENT	Lab Sample	ID: 073206
Level (low/med): LOW	Date Receiv	red: 01/07/06

+2885380

% Solids: 89.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	X
7440-38-2	Arsenic	812			P
7440-39-3	BATINA	33,9	1 1		P
7440-43-9	Cacheni.vze	0.86		М	1 2
7440-47-3	Chromium	469		N	1 2
7440-50-8	Copper	876			P
7439-92-1	Load	30.6	1	W	2
7439-97-6	Mercury	0.13		ł	CV
7702-42-2	-	1.1	U	1	P
7440-22-4	Silver	1 1.1] ס	X	1 2

Color Before: BROWN Color After: XELLOW Comments: Clarity Before: Clarity After: Cl

CLEAR

Texture: MEDIUM Artifacts:

Form I - IN

JIAIAA AA TT

METALS -13-PREPARATION LOG

Contract: #2629759

Lab Code	t	Caso No.;	SAS No.:	SDG NO.	: 24	<u> </u>
Method	2					
	Sample No.	Preparation Date	e Weight	: (grams)	Volume (mL)	

No.	Preparation Date	Weight (grams)	(mL)	
AA10 (8-10')	01/16/06	1.05	100	
ACD-SS-A3 (0.5-	01/16/06	1.00	100	
ACD-35-Y12 (0.5	01/16/06	1.01	100	
ACD-85-29 (3-6'	01/16/05	1.03	100	
B3 (0-0.5')	01/16/06	1.01	100	
C4 (0.5-3')	01/16/06	1.01	100	
D2 (6-8")	01/16/06	1.02	100	
24 (3-6')	01/16/06	1.02	100	
E5 (3-6')	01/16/06	1.04	100	
G2 (0.5-3')	01/16/06	1.02	100	
G4 (10-11')	01/16/06	1.02	100	
H7 (0.5-3')	01/16/06]	3.04	100	
L4 (0.5-3')	01/16/06	1.01	100	
LCSS	01/16/06	1.05	100	
PBS	01/16/06	1.00	100	
Q6 (1-3')	01/16/06	1.03	100	******
Q5 (1-3')D	01/16/06 j	1.02	100	
Q6 (1-3')S	01/16/06	1.00	100	
\$4 (2-3')	01/16/06	1.01	100	
T10 (0.5-3')	01/16/06	1.00	100	Nimi
V9 (3-6')	01/15/06	1.05	100	

+2885380 METALS -13-PREPARATION LOG

Contract: R2629759

Lab Code	12	CASE NO.:	SAS No.:	SDG NO.:	24	
Method	CV					
		1		<u> </u>	Nr. 9	

Sample No.	Preparation Date	Weight (grame)	Volume (mL)
AALO (8-10')	01/13/06	0.66	100
ACD-55-A3 (0.5-	01/13/06]	0.64	100
ACD-59-112 (0.5	01/13/06	0.61	100
ACD-33-29 (3-6'	01/13/06]	0.61	100
B3 (0-0,5')	01/13/06	0.63	100
C4 (0.5-3')	01/13/06	0.65	100
D2 (G-8')	01/13/06	0.63	100
E4 (3-6')	01/13/06	0.61	100
E4 (3-6')D	01/13/06]	0.60	100
Z4 (3-6') Z	01/13/06	0.60	100
85 (3-6')	01/13/06	0.60	100
62 (0,5-3')	01/13/06	0.62	100
G4 (10-11')	01/13/06	0.60	100
87 (0.5-31)	01/13/06	0.63	100
19 (2-5)	01/13/06	0.62	100
14 (0.5-3')	01/13/06	0.64	100
LCSS	01/13/06	0.61	100
TAS	01/13/06	0.60	100
06 (1-3')	01/13/06	0.61	100
84 (2-3')	01/13/06	0.60 1	100
#10 (0.5-3')	01/13/06	0.61	100
V9 (3-6')	01/13/06	0.62	100

May=11-06 14:44 From-

From-CAS-Rochester

+2885380

T-466 P.006/009 F-058

METALS

-14-

ANALYSIS RUN LOG

Contract	<u>R2629759</u>			
Lab Code		Case No.:	SAS No.:	206 No.: 64
Instrument	ID Number:	Optima ICP 2	Mathod: <u>P</u>	
Start Date:	: 1/19/06		End Date: 1/20/06	

	.			Analytes																							
Sample	D/F	Time	ъх	A	5	λ	₿	B	C	C	Ç	C	C	F	2	X	M	Ħ	N	K	\$	A	N	T	۷	Z	С
No.				Ľ	8	5	X	Χ.	D		R	0	U	Ξ.	2	G	7	G	Ē		Σ	e	L	Ľ	Ц	Щ	
G2 (0.5-3°)	1.00	22:46								ļ	X				X					<u> </u>	X	X					
T10 (0.5-3')	1.00	22:52																	<u> </u>	<u> </u>				_		Ц	
b3 (0~0.5')	1.00	22:59																									
D2 (6-8')	1.00	23:05				X					X		X		X	ļ					X	X					
AA10 (8-10')	1.00	23:31				X					x		X		X].		X	X					
C4 (0,5-3')	1.00	23:18				X			ľ		x		×		X						X	x					
ZLŻZŹŹ	1.00	23:25							ļ										1	Γ	Γ						
CCV7	1.00	23:31				X			I		X	Γ	×		X					Γ	×	×					\Box
CC37	1.00	23:37		Γ		X		Γ	1		X	Γ	X		X				Γ	I	X	X					\Box
25 (3-6')	1.00	23:44							1					ļ					Γ			Γ					
79 (3-6')	1.00	23:50		Γ		X				Γ	X	Γ	X	Γ	X	Γ	T	ļ	Г	Г	X	X	Γ	Γ	Г	Γ	П
G4 (10-11')	1.00	23:56				X		Γ	Γ		x		X		X			Γ	-	T	I	X	ľ	Γ	Γ	Γ	
54 (2-3')	2.00	00:03		Γ		X	_		Γ	Τ	X	Г	×	Γ	×	Γ	Γ	Г	Г		I	I		Γ	Г	Г	\Box
¥7 (0.5-3')	1.00	00:09				Γ		ŀ	Γ	Ţ	Γ	Γ	Γ					Γ	Γ		Γ	Г	Γ	Γ	Γ	Г	Π
0e (1-3.)	1.00	00:16	I						Γ	Γ		Γ	Ι	Ţ	Γ			I	Г	Г	Γ	Γ	Γ	Γ	Γ	Γ	Π
Q6 (1-3')D	1.00	00:23				1		•		Ι	Γ		Ţ						Γ			Γ		Γ	Γ	Γ	\Box
Q6 (1-3') S	1.00	00:29	•							Γ	Γ	Ľ	Ι	Γ	Γ	Γ	1	Γ	Т	T	Γ	Γ		Γ	Γ	Γ	\Box
Q6 (1-31)A	1.00	00:36										Γ	Γ]	I		Τ		Γ	Γ		Γ	Τ	Τ	\Box
Q6 (1-3')L	5.00	00:42			E			Γ			Γ	Γ	I		Γ	Γ		Γ	Τ	I	Τ	Т	Γ	Γ	Τ	Т	\Box
CCV8	1.00	00:48		ľ		Ā					x	Γ	×	Γ	X				T	T	TX	X		Γ	Τ	Γ	\Box
CCB#	1.00	09:54		Γ		X		Γ			X	T	x		I		Ι	Ι	Т	Γ	X]x		Т	Τ	T	Π
ACD-55-A3 (0.5-2.5)	1.00	01:01		Ι	1	X			I		x	Τ	X		X				Т	Τ	[¥	:[x		T	T	T	\Box
ACD-33-29 (3-6')	1.00	01:08		Γ	I.	X		Γ	Γ	T	X	Γ	X	Ţ	X		Ι	Г	Т	Т	Ţx	J.		T	Τ	Ţ	\square
ACD-55-112 (0.5-4')	1.00	01:14		Ι		X		Γ	Γ	Г	×	T	X		X		Γ	Γ	Т	Τ	X	:]x		Γ	Т	Т	\square
CCV9	1.00	01:20				X			Γ	T	X	Τ	x	Т	Ţx	T	Т	Т	Т	Т	T	<u>ع</u> ן،		Т	Т	Т	
CCB9	1.00	01.26		Γ	Γ	x			Τ		x	Τ	x	Ι	IX		Ι	I	Ţ	T	X	: X		Γ	Т	T	\square
CRDL3	1.00	01:32		Γ		X		Γ		Ι	X		X	ſ	X		Τ	Τ	Т	Т	I×	<u>د</u> اً×	:	Т	Τ	Τ	
ICEA3	1.00	01:39		Γ	T	X					IX	Т	X	Γ	X				T	Т	X	: Ix	T	Т	Т	Т	
IC5-AB3	1.00	01:46		Γ		X		Γ	Ι	Τ	X	Γ	X	Γ	X		Τ	Τ	Г	T	Ŀ	۲Į،	Ŧ	Т	Т	T	
CCV10	1.00	01:52		Ι		X	E	Γ	Τ	Τ	X		X	T	X		Τ	Τ	T	Ť	צן	۲J.	1	Т	Т	T	T
CCB10	1.00	01:50		Γ	Ι	×		Γ	Τ	Ţ	X		X	T	Tx	T	Т	T	Т	Т	T	<u>د</u> اً،	:	Т	Ť	T	T

* - Denotes additional elements (other than the standard CLP elements) are represented on another form 14

Toma XIY - IN

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May-11-06 14:44 From-CAS-Rochoster

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METALS

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-14-

ANALYSIS RUN LOG

Contract 1	2629759		<u> </u>		
Lab Code		Case No.:	SAS No.:		SDG No.: 24
Instrument 3	D Munder:	Optuma ICF 2	Method:	<u>></u>	
Start Date:	1/23/06		End Date:	1/24/06	

														na	ly	te:	5							_			
Sampie No.	d/t	Time	4 R	A L	5 8	X S	В Л	B	υp	C X	Ċ	CQ	C T	r F	P	д К	X X	H G	N I	X	s Z	A D	X X	T L	<u>v</u>	प्र भ	C X
221222	1.00	19:09																									
ZZZZZZ	1.00	19:15																								4	
2.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z.Z	1.00	19:22																	Ļ								
ссуз	1.00	19:28				X	X	Ì	X		X		×		X						× I	X					
ссаз	1.00	19:34				X	X		×		x		X		X			<u> </u>			X	X					
222222	1.00	19:41								Ĺ								1		L	L	Ļ	L				
ZZZZZŻ	1.00	19:47							[Ļ	<u> </u>	<u> </u>	ļ			
LLLZZ	1.00	19:53										ľ				Ļ			Ļ	<u> </u>	Ļ	 _	Ļ	Ļ	\square		
ZZZZZ	5,00	20:00																L			Ļ						
22222E	1.00	20:05	1									Γ							Ţ.		L	Ļ	Ļ			<u> </u>	Ц
222222	1.00	20:13			1								Γ								L						
ZIZZZZ	1.00	Z0:20			Γ			L					Į					Γ			L		1			!	
2222ZZ	5.00	20:26		Γ	T		Γ			Ţ								1								L	
CCV4	1.00	20:33		T		×	X		X	Γ	X		X		X			T	Į		X	X					
CCB4	1.00	20:39				X	X		Þ	Γ	×	Γ	×		X	I			Γ		X	X					
CROL2	1.00	20:45				X	X		X		X	Γ	¥	1	X		Γ				X	X		[
ICSA2	1.00	20:52		Τ		X	X		¥		X	Γ	X	T	X	Γ	Γ	T			X	X		[
ICS-AB2	1.00	20:59				×	X		X	1	X	Γ	×		X	Γ		Τ			X	X					
RLCCV2	1.00	21:06	;	Γ	Γ	X	X		X		X		X		X	Ι	ŀ		1	Ι	Z	2			Γ		
MICCVI	1.00	21:13			Γ	×	X	:	X		X		X		X				T	Ţ	X	×			Γ	L	
CCVS	1.00	21:19				X	X	;	X		X		X		X			ſ	Ţ	I	Tx	; x					
GCBS	1.00	21:25				X	X		X		X		X	Γ	X			T		ľ	K	: x		ł	I	Ι	
985	1.00	21:32		Γ		Τ	X		치						Γ	T	I	I				Ι		I		Γ	Γ
LCSS	3.00	21:36	1				X	:	R	:			Γ						Τ	ſ					Γ		
24 (3-6')	10.00	21:45				X	X		X		X		X	T	X			I			7	x [X	:[Τ	Ι	T
G2 (0.5-3·)	10.00	21:53				×			Τ	T	T		X		Γ	Ι	T				Ι					Τ	
C2 (0.5-3')	1.00	21:50	;				k	:	X	:]					T	Τ	Ţ						T	T	T	Τ	
T10 (0.5-3')	2.00	22:04				×	2	:	X	:	X		X		X					T	2	() X	:				
DJ (0-0.5')	2.00	22:11				X	: >	:	X	:	X		X		T	T	1	ł	T	I	12	())	:	Ţ	Ι	Τ	
D2 (6-8')	1.00	22:17	2	Ι			ž	۲ I	X	:	Ţ	Γ	Γ		1		ł			Τ		T			Τ	Τ	Τ
AA10 (8-10')	1.0	22:24	1		T	Γ	7	۲ ۲	Þ	:	Τ	Ι	T	I	Γ	Ι	Ι	Ι	Ι	Τ	T	Τ	T	T	T	Τ	T
C4 (0.5=3')	1.0	22:33	I.	T	Ι	Τ	2	•	x	:	Τ	Τ	Γ	T	Τ	Ţ	Τ	T	Τ	Ι	Τ	Ι			Τ	Τ	Γ
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* - Denotes additional elements (other than the standard CLP elements) are represented on another form 14

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May=11-06 14:44 From=CAS=Rochester

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METALS

-14-

ANALYSIS RUN LOG

Contract R2629759			
Lab Code	Case No.:	SAS No.:	SDG No.: 24
Instrument ID Number:	PE FAA/CVAA	Method: CV	
Start Date: 1/13/06		End Date: 1/13/06	

				Analytes							_																
Sample	D/F	Time	* R	λ	\$	λ	₽	B	C	C	C	C	C	Ł	P	Х	M	Ħ	И	X	3	X	N	X	V	2	C
No.				L	8	S	λ	Ľ	D		R	<u>0</u>	2	E.	<u>.</u>	G	N	G	II.	_	2	9	Α	L	,	A	N
Calib Blank	1.00	13:07											Į					X							4		
0.2ppb atd	1.00	13:09																X									
0.5pph std	1.00	13:11																X	L				ļ				
lppb atd	1.00	73:33																X		<u> </u>	<u> </u>						
2ppb std.	1.00	13:15							Į				[<u> </u>	X					<u> </u>				
5ppb atd	1.00	13:16										L						X		Į_							\square
10ppb atd	1.00	13:19				1]]							L	X		L	<u> </u>						
ICVI	1.00	13:20			Í].								X					1				
ICBL	1.00	13:22			ł]								[x									
CROLL	1.00	13:24											T]				X									
CCVI	1.00	13:26]	Ι.						X	:			}					
CCB1	1.00	13:27			ŀ	[Ľ									X									
PBS	1.00	13:29					Γ											X									
LCSS	5.00	13:31							Γ	Ī		Γ					ł	X	;	l		[
x4 (3-6')	1.00	13:33		Ι		T							Ţ					ľ	ł		Ι	I	Ι				\Box
E4 (3-6')D	1.00	13:35											I					<u>x</u>		Ţ	Γ		Γ	1			
I4 (3-6') 5	1.00	13:36			<u> </u>				[L		1	<u> </u>	L		17	:[<u> </u>	L	L	
QZ (0.5-3')	3.00	13:38										Τ						<u> </u> x	:					1			
T10 (0.5-3')	1.00	13:40							ļ	1								k	:						L		
33 (0-0.5')	1.00	13:42		ľ					Τ						Ţ								T				
D2 (6-81)	1.00	13:44													T]				ſ	T						
CCV2	1.00	13:46							l	T					ļ	I	I	2	ł			1		L	l		
CC182	1.00	13:47													Ι	Γ	Ι	2	z					Γ		Γ	\Box
AA10 (8-10')	1.00	13:49		Τ					ſ	Τ					Γ		Ι	2	۲.	Τ		ľ					
C4 (0.5-3')	1.00	13:51											Ţ		Ι			2	٢								
14 (0.5-3')	1.00	13:53				Г								1				2	2	T							
E5 (3-6')	1.00	13:55							Γ	Γ		Ι			Γ	Ι	Γ	2	c		Ι				Ι	Γ	
V9 (3-6·)	1.00	13:57						Τ	ł	T				T				12	2		Ι	Τ	T	Ţ	Τ	T	
64 (10-11')	1.00	13:58		Γ				Γ	Τ	Τ		Τ	T	Τ	Γ	T	Т	Ţ	<	Γ	Τ		T	Γ	Γ	Γ	
\$4 (Z-3')	1.00	14:00		Γ	Γ			Ι	Ι	ł		Τ	T	Γ	Τ		Ι	1	ĸ	Ι	T		Τ		Γ	Τ	Γ
#7 (0.5-31)	1.00	14:02		I		Ţ	ľ	T	T	I	I	Τ	Т	Ţ	J	T	Ŧ	1	ĸ	Τ	Ţ	Τ	Τ	Γ	Τ	Τ	Γ
26 (1-3')	1.00	14:04		Γ	Γ	Ι	Γ		T	T	Т	Τ	T	Т	T	Т	T		K	Т	Τ	Τ	Т	T	Τ	Τ	Γ
			I	Г	Т	Г		Т	Τ			T		Τ	Γ	Γ	T	T		Τ		Т			Т	Т	T

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Form XIV - IN

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COLUMBIA ANALYTICAL SERVICES

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Reported: 05/11/06

Fuce & O'Neill.Inc Project Reference: AC DUTTON Client Sample ID : G2 (0.5-3')

Data Sampled : 01/06/06 Data Received: 01/07/06		Order baission	#: 873206 #: R2629755	St	aple Mats	ix: SOIL/	SEDIMENT
analyte	METHOD	ъбг	RESULT	dry weight Units	date Analyzed	Time Analyzed	DILOTION
PERCENT SOLIDS	160.3M	1.00	89.5	ł	01/11/06	14:30	1.0
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Richard Totino - FUSS&O'NEILL - AC DUTTON RUSH RESULTS.PDF

1 Mustard St., Suite 250 Rochestér, NY 14609

To:	From:
<u>Mr. Noah Livingston</u> <u>Fuss & O'Neill, Inc</u> <u>80 Washington St.</u> <u>Suite 301</u> Doughkeensie, NY 12601	Michael Perry
Phone: <u>845-452-6801</u>	Phone: (585) 288-5380
Fax: 845-452-5186	Fax: (585) 288-8475
CC:	
Submission #: R2529204 Project Reference: AC DUTTON	AB-TSA
AA11(12-13) AA10(12-14) U5(4-6) U6(6-8)	

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Date: <u>January 16, 20</u> Number of pages: 2006

thanks, mile

VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/16/06

Fuss & O'Neill,Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA11 (12-13')

Date Sampled : 12/09/05 Date Received: 12/10/05	Order Submission	#: #:	866486 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 84.1
ANALYTE			PQL	RESULT	UNITS
DATE ANALYZED : 12 ANALYTICAL DILUTION:	2/19/05 1.00				Dry Weight
DATE ANALYZED : 12 ANALYTICAL DILUTION: ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) SEC-BUTYLBENZENE N-BUTYLBENZENE TERT-BUTYLBENZENE CARBON DISULFIDE CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFETHANE DIBROMOCHLOROMETHANE 1, 1-DICHLOROETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHENE CIS-1, 2-DICHLOROETHENE CIS-1, 3-DICHLOROPENH TRANS-1, 3-DICHLOROPENH TRANS-1, 3-DICHLOROPENH TRANS-1, 3-DICHLOROPENH TRANS-1, 3-DICHLOROPENH ETHYLENE 2-HEXANONE ISOPROPYL BENZENE P-ISOPROPYL BENZENE METHYLENE CHLORIDE NAPHTHALENE 4-METHYL-2-PENTANONE (I N-PROPYLBENZENE STYRENE 1, 1, 2, 2-TETRACHLOROETH	2/19/05 1.00 JE SNE SNE SNE SNE		20 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{c} 5.7 \ J \\ 0.90 \ J \\ 5.9 \ U \ U \\ 5.9 \ U \\ 5.9 \ U \ U \\ 5.9 \ U \ U \ U \ U \ U \\ 5.9 $	Dry Weight UG/KG
TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE 1,3,5-TRIMETHYLBENZENE 1,2,4-TRIMETHYLBENZENE			5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	5.9 U 5.9 U 5.9 U 5.9 U 5.9 U 5.9 U 5.9 U 5.9 U	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
O-XYLENE			5.0	5.9 U	UG/KG

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VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA11 (12-13')

Date Sampled : 12/09/05	Order #: 8	66486	Sample Matrix:	84.1
Date Received: 12/10/05	Submission #: R:	2529204	Percent Solid:	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 1	2/19/05		-	Dry Weight
ANALYTICAL DILUTION:	1.00		-	
M+P-XYLENE		5.0	5.9 U	UG/KG
SURROGATE RECOVERIES	QC LIMIT	S	•	· .
4 ~BROMOFLUOROBENZENE	(65 - 12	9 %)	90	26
TOLUENE-D8	(75 - 12	8 %)	98	26
DIBROMOFLUOROMETHANE	(62 - 13	13 %)	92	26

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA11 (12-13')

Date Sampled : 12/09/05 Order #: Date Received: 12/10/05 Submission #:	866486 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 84.1
ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 12/22/05 DATE ANALYZED : 01/14/06 ANALYTICAL DILUTION: 2.00	· ·		Dry Weight
ACENAPHTHENE	330	780 U	UG/KG
ANTHRACENE	330	780 U	UG/KG
BENZO (A) ANTHRACENE	330	780 U	UG/KG
BENZO (A) PYRENE	. 330	780 U	UG/KG
BENZO (B) FLUORANTHENE	330	780 U	UG/KG
BENZO (G.H.I) PERYLENE	330	780 U	UG/KG
BENZO (K) FLUORANTHENE	330	780 U	UG/KG
INDENO(1,2,3-CD) PYRENE	330	780 U	UG/KG
CHRYSENE	330	780 U	UG/KG
DIBENZO (A.H) ANTHRACENE	330	780 U	UG/KG
FLUORANTHENE	330	780 U	UG/KG
FLUORENE	330	780 U	UG/KG
NAPHTHALENE	200	480 U	UG/KG
PHENANTHRENE	330	780 U	UG/KG
PYRENE	330	780 U	UG/KG
SURROGATE RECOVERIES QC LI	MITS		
TERPHENYL-d14 (48 -	· 131 %)	87	8
NTTROBENZENE-d5 (27	- 130 %)	72	%
2-FLUOROBIPHENYL (32	- 130 %)	80	8

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COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (12-14')

Date Sampled : 12/09/05 Order #: Date Received: 12/10/05 Submission #:	866487 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 90.6	
ANALYTE	PQL	RESULT	UNITS	
DATE ANALYZED : 12/16/05 ANALYTICAL DILUTION: 5.00			Dry Weight	- ^
ACETONE	20	32 J	UG/KG	
BENZENE	5.0	36	UG/KG	
BROMODICHLOROMETHANE	5.0	28 U	UG/KG	
BROMOFORM	5.0	28 U	UG/KG	
BROMOMETHANE	5.0	28 U	UG/KG	
2-BUTANONE (MEK)	10	55 U	UG/KG	
SEC-BUTYLBENZENE	5.0	28 U	UG/KG	
N-BUTYLBENZENE	5.0	28 U	UG/KG	
TERT-BUTYLBENZENE	5.0	28 U	UG/KG	
CARBON DISULFIDE	10	4.2 J	UG/KG	
CARBON TETRACHLORIDE	5.0	28 U	UG/KG	
CHLODORENZENE	5.0	28 U	UG/KG	
CULOROFTHANE	5.0	28 U	UG/KG	
CULOBOEODM	5.0	28 U	UG/KG	•
CHLOROFORM	5 0	28 U	UG/KG	
DIDDOMOCUI ODOMETUNIE	5.0	28 U	UG/KG	
1 1 DICHLOROWEINANE	5.0	28 1	UG/KG	
1,1-DICHEOROBINANE	5.0	28 11	IIG/KG	
1, Z-DICHLOROBINAND	5.0	28 11	UG/KG	
1, 1-DICHLOROEINENE	5.0	28 11	UG/KG	
CIS-1,2-DICHLOROETHENE	5.0	20 0	UG/KG	
TRANS-1, 2-DICHLOROETHENE	5.0	200	UG/KG	
1,2-DICHLOROPROPANE	5.0	200		
CIS-1, 3-DICHLOROPROPENE	5.0	20 0		
TRANS-1, 3-DICHLOROPROPENE	5.0	20 0		
METHYL-TERT-BUTYL-ETHER	5.0	20 0		
ETHYLBENZENE	5.0	28 U		
2-HEXANONE	. TO	55 U		
ISOPROPYL BENZENE	5.0	28 U		
P-ISOPROPYLTOLUENE	5.0	28 0		OM
METHYLENE CHLORIDE	5,-0	110		[' '
NAPHTHALENE	5.0	28 U		,
4-METHYL-2-PENTANONE (MIBK)	10	. 55 U		
N-PROPYLBENZENE	5.0	28 U		
STYRENE	5.0	28 0		
1,1,2,2-TETRACHLOROETHANE	5.0	28 0	UG/KG	
TETRACHLOROETHENE	5.0	28 U	UG/KG	
TOLUENE	5.0	1.8 J	UG/KG	
1,1,1-TRICHLOROETHANE	5.0	28 U	UG/KG	
1,1,2-TRICHLOROETHANE	5.0	28 U	UG/KG	
TRICHLOROETHENE	5.0	28 U	UG/KG	
1.3.5-TRIMETHYLBENZENE	5.0	28 U	UG/KG	
1 2 4-TRIMETHYLBENZENE	5.0	28 U	UG/KG	
VINVI. CHLORIDE	5.0	28 U	UG/KG	
V-AATEND ATEATE CUROUTOR	5.0	28 U	UG/KG	

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VOLATILE ORGANICS METHOD 8260B TCL/TANK Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (12-14')

Date Sampled : 12/09/05 Date Received: 12/10/05 Su	Order #: 866487 ubmission #: R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 90.6
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/1 ANALYTICAL DILUTION:	6/05 5.00		Dry Weight
M+P-XYLENE	5.0	0 28 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(65 - 129 %) (75 - 128 %) (62 - 133 %)	95 99 93	જે અન્

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EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (12-14')

Date Sampled : 12/09/05 Or Date Received: 12/10/05 Submiss	der #: 866487 ion #: R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 90.6	
ANALYTE	PQL	RESULT	UNITS	-
DATE EXTRACTED : 12/22/05 DATE ANALYZED : 01/14/06 ANALYTICAL DILUTION: 1.00			Dry Weight	TACM
ACENAPHTHENE	33(j 360 U	UG/KG	
ANTHRACENE	33() 360 U	UG/KC	
BENZO (A) ANTHRACENE	33() 360 U	UG/KG	
BENZO (A) PYRENE	330	D 360 U	UG/KG	
BENZO (B) FLUORANTHENE	33	0 360 U	UG/KG	•
BENZO (G, H, I) PERYLENE	33	0 360 U	UG/KG	
BENZO (K) FLUORANTHENE	-33	0 360 U	UG/KG	
INDENO(1,2,3-CD) PYRENE	33	0 360 U	UG/KG	
CHRYSENE	33	0 360 U	UG/KG	
DIBENZO (A, H) ANTHRACENE	33	0 <u>360</u> U		I DM
FLUORANTHENE	33	0 400		1
FLUORENE	33	0 360 0	UG/KG	-
NAPHTHALENE	20	0 220 U		
PHENANTHRENE	- 33	0 360 U		APM
PYRENE	33	.0 990	0G/KG 20	FI -
SURROGATE RECOVERIES	QC LIMITS	· .	· · ·	
TERPHENYL-d14	(48 - 131 %)	90	8	1
NTTROBENZENE-d5	(27 - 130 %)	77	8	
2-FLUOROBIPHENYL	(32 - 130 %)	82	8	

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VOLATILE ORGANICS METHOD 8260B TANK LIST Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U5 (4-8')

Date Sampled : 12/09/05 Date Received: 12/10/05	Order Submission	#: 8664 #: R252	88 9204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 86.5
ANALYTE	······································	· · · ···	PQL	RESULT	UNITS
	10/05				
DATE ANALYZED : 127 ANALYTICAL DILUTION:	1.00				Dry Weight
BENZENE	÷		5.0	5.8 U	UG/KG
N-BITTYLBENZENË			5.0	5.8 U	UG/KG
SEC-BUTYLBENZENE			5.0	. 5.8 U	UG/KG
TERT-BUTYLBENZENE			5.0	5.8 U	UG/KG
METHYL. TERT-BUTYL. ETHER			5.0	5.8 U	UG/KG
FTHYLBENZENE			5.0	5.8 U	UG/KG
TCODDODYL BENZENE			5.0	5.8 U	UG/KG
P-ISOPROPYLTOLIENE			5.0	5.8 U	UG/KG
NA DHTHALENE			5.0	5.8 U	UG/KG
N-DPODVI.BENZENE			5.0	5.8 U	UG/KG
TOTHENE			5.0	5.8 U	UG/KG
1 2 A TRETHVIBENZENE			5.0	5.8 U	UG/KG
1, 2, 4 = 1 EXAMPLY			5.0	5.8 U	UG/KG
1,3,3-IKIMEIHIDDENZDAD	· · ·		5.0	5.8 U	UG/KG
M+P-XYLENE			5.0	5.8 U	UG/KG
SURROGATE RECOVERIES	QC	LIMITS			
A - PROMORI LIOROBENZENE	(65	- 129	୫)	94	ક
TOTHENE DO	(75	- 128	8)	97	8
DIBROMOFLUOROMETHANE	(62	- 133	ક)	90	95
EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U5 (4-8')

Date Sampled : 12/09/05 Order Date Received: 12/10/05 Submission	r #: 1 #:	866488 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 86.5
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : 12/22/05 DATE ANALYZED : 01/14/06 ANALYTICAL DILUTION: 1.00				Dry Weight
ACENAPHTHENE ANTHRACENE BENZO (A) ANTHRACENE BENZO (A) PYRENE BENZO (B) FLUORANTHENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (K) FLUORANTHENE INDENO (I, 2, 3 - CD) PYRENE CHRYSENE DIBENZO (A, H) ANTHRACENE FLUORANTHENE FLUORENE NAPHTHALENE PHENANTHRENE	· .	330 330 330 330 330 330 330 330 330 330	380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U 380 U	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
SURROGATE RECOVERIES Quadratic contraction TERPHENYL-d14 (4 NITROBENZENE-d5 (2 2-FLUOROBIPHENYL (3	C LI 8 - 7 - 2 -	MITS 131 %) 130 %) 130 %)	95 69 76	 95 95 95

Richard Totino - FUSS&O'NEILL - AC DUTTON RUSH RESULTS.PDF

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS METHOD 8260B TANK LIST Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U6 (6-8')

Date	Sampled : Received:	12/09/05 12/10/05	Order Submission	#: #:	866489 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 80.3
 ANA	LYTE				PQL	RESULT	UNITS
DAT ANA BENZ N-BU SEC TER TER METH ISO P-I NAP N-P TOL 1,2 1,3 O-X M+H	TE ANALYZED ALYTICAL DI JTYLBENZENE -BUTYLBENZE F-BUTYLBENZE F-BUTYLBENZE HYL-TERT-BU YLBENZENE PROPYL BENZ SOPROPYLTOI HTHALENE ROPYLBENZEN UENE ,4-TRIMETHY ,5-TRIMETHY YLENE	: 12 LUTION: ME ENE TYL-ETHER LUENE UE VLBENZENE YLBENZENE	/19/05 1.00		5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U 6.2 U	Dry Weight UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
4 - H TOI DII	JRROGATE RE BROMOFLUORO LUENE-D8 BROMOFLUORO	COVERIES BENZENE METHANE	QC (65 (75 (62	L1 - -	MITS 129 %) 128 %) 133 %)	95 98 91	સ્ટ કર કર

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/16/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U6 (6-8')

Date Sampled : 12/09/05 Or Date Received: 12/10/05 Submiss	rder #: sion #:	866489 R2529204	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 80.3
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : 12/22/05 DATE ANALYZED : 01/14/06 ANALYTICAL DILUTION: 1.0 ACENAPHTHENE ANTHRACENE BENZO (A) ANTHRACENE BENZO (A) PYRENE BENZO (B) FLUORANTHENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (G, H, I) PERYLENE BENZO (K) FLUORANTHENE INDENO (1, 2, 3 - CD) PYRENE CHRYSENE DIBENZO (A, H) ANTHRACENE FLUORANTHENE FLUORENE NAPHTHALENE PHENANTHRENE PYRENE	0	330 330 330 330 330 330 330 330 330 330	410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U 410 U	Dry Weight UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
SURROGATE RECOVERIES	QC LI	MITS		•
TERPHENYL-d14 NITROBENZENE-d5 2-FLUOROBIPHENYL	(48 - (27 - (32 -	131 %) 130 %) 130 %)	104 89 100	30 00 00



A FULL SERVICE ENVIRONMENTAL LABORATORY

Page 1

January 23, 2006

Mr. Noah Livingston Fuss & O'Neill,Inc 80 Washington St. Suite 301 Poughkeepsie, NY 12601

PROJECT: AC DUTTON Submission #:R2529547

Dear Mr. Livingston

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Michael Perry

Laboratory Director

Enc.

1 Mustard St.= Suite 250 • Rochester, NY 14609 • Tele:(585)288-5380 • Fax:(585)288-8475



1 Mustard ST. Suite 250 Rochester, NY 14609 (585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Page 2

Client : Fuss & O'Neill, Inc Project Reference: AC DUTTON Lab Submission # : R2529547 Project Manager : Michael Perry Reported : 01/23/06

Report Contains a total of 16 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.



CASE NARRATIVE

This report contains analytical results for the following samples: Submission #: R2529547

> <u>Lab ID</u> 870061 870062

Client ID ACD-SL-X7(8-10') ACD-SL-B8-R(4.5-5.2')

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.









ORGANIC QUALIFIERS

- U Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the MDL.
- N- Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The concentration is reported on the Form I and flagged with a "P".
- .C- This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- . B This flag is used when the analyte is found in the associated blank as well as in the sample.
- B This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- X As specified in Case Narrative.
- This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited

Delaware Accredited

- Connecticut ID # PH0556
- Florida ID # E87674
- Illinois ID #200047
- Maine ID #NY0032

Massachusetts ID # M-NY032

Navy Facilities Engineering Service Center Approved

Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

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INORGANIC QUALIFIERS

C (Concentration) qualifier -

- B if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). This qualifier may also be used to indicate that there was contamination above the reporting limit in the associated blank. See Narrative for details.
- U if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- Spike was diluted out D -
 - The reported value is estimated because the serial dilution did not meet criteria. E -
 - Estimated Value J-
 - Duplicate injection precision not met. M -
 - Spiked sample recovery not within control limits. N -
 - The reported value was determined by the Method of Standard Additions (MSA).
 - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample w -
 - absorbance is less than 50% of spike absorbance.
 - Duplicate analysis not within control limits.
 - Correlation coefficient for the MSA is less than 0.995 +-

M (Method) qualifier:

- "P" for ICP "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- 'FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- "" where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032

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Navy Facilities Engineering Service Center Approved

Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

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COLUMBIA ANALYTICAL SERVICES

Reported: 01/23/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-X7(8-10')

Date Sampled : 12/19/05	Order #	: 870061	Sample Matrix: SOIL/SEDIMENT
Date Received: 12/22/05	Submission #	: R2529547	

ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	date Analyzed	TIME ANALYZED	DILUTION
PERCENT SOLIDS		160.3M	1.0	86.4	ŧ	01/10/06	15:30	1.0
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Lisa Gwiazdowski - 20060126134508.pdf

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS METHOD 8260B TCL Reported: 01/23/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID ; ACD-SL-X7(8-10')

Date Sampled : 12/19/05 Or Date Received: 12/22/05 Submiss	der #: ion #:	870061 R2529547	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 86.4
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 12/30/05				
ANALYTICAL DILUTION: 2.50)			Dry Weight
ACETONE		20	58 U	UG/KG
BENZENE		5.0	14 U	UG/KG
BROMODICHLOROMETHANE		5.0	14 U	UG/KG
BROMOFORM		5.0	14 U	UG/KG
BROMOMETHANE		5.0	14 U	UG/KG
2-BUTANONE (MEK)		10	29 U	UG/KG
CARBON DISULFIDE		10	29 U	UG/KG
CARBON TETRACHLORIDE		5.0	14 U	UG/KG
CHLOROBENZENE		5.0	14 U	UG/KG
CHLOROETHANE		5.0	14 U	UG/KG
CHLOROFORM		5.0	14 U	UG/KG
CHLOROMETHANE		5.0	14 U	UG/KG
DIBROMOCHLOROMETHANE		5.0	14 U	UG/KG
1,1-DICHLOROETHANE		5.0	14 U	UG/KG
1,2-DICHLOROETHANE		5.0	14 U	UG/KG
1,1-DICHLOROETHENE		5.0	14 0	UG/KG
CIS-1,2-DICHLOROETHENB		5.0	14 0	
TRANS-1, 2-DICHLOROETHENE		5.0	14 U	
1,2-DICHLOROPROPANE		5.0	14 U	
CIS-1, 3-DICHLOROPROPENE		5.0	14 0	
TRANS-1, 3-DICHLOROPROPENE		5.0		
ETHYLBENZENE		5.0	14 U	
2-HEXANONE		10	29 U	
METHYLENE CHLORIDE		5.0		
4-METHYL-2-PENTANONE (MIBK)		10	29 0	
		5.0		UG/KG
T, T, Z, Z-IETRACHLOROBIHANE		5.0	14 17	UG/KG
TOTUDID		5.0	14 0	
		5.0	14 U 14 II	
1, 1, 1- IRICHLOROBINANE		5.0	14 U 14 U	UG/KG
T, T, Z-IRICHLOROGINANG TOTOULODOETUENE		5.0	14 11	UG/KG
VINVI. CHLORIDE		5.0	14 11	UG/KG
O-XYLENE		5.0	14 U	UG/KG
M+P-XYLENE		5.0	14 U	UG/KG
SURROGATE RECOVERIES	QC LI	MITS		
		100 81	<i>~</i> +	e,
4-BROMOFLUORUBENZENE	(00 -	123 <i>ቴ)</i>	C0	70 92
TOLUENE-D8	(75 -	120 3)	90	70 92
DIRKOMOLPOOKOMELHANR	(02 -	133 8)	26	° 6

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COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/23/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-X7(8-10')

Date Sampled : 12/19/05 Order # Date Received: 12/22/05 Submission #	: 870061 : R2529547	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 86.4
ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/02/06 DATE ANALYZED : 01/17/06			
ANALYTICAL DILUTION: 5.00			Dry Weight
ACENAPHTHENE	330	1900 U	UG/KG
ANTHRACENE	330	1900 U	UG/KG
BENZO (A) ANTHRACENE	330	1900 U	UG/KG
BENZO (A) PYRENE	330	1900 U	UG/KG
BENZO (B) FLUORANTHENE	330	1900 U	UG/KG
BENZO (G, H, I) PERYLENE	330	1900 U	UG/KG
BENZO (K) FLUORANTHENE	330	1900 U	UG/KG
INDENO (1,2,3-CD) PYRENE	330	1900 U	UG/KG
CHRYSENE	330	1900 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	1900 U	UG/KG
FLUORANTHENE	330	1900 U	UG/KG
FLUORENE	330	1900 U	UG/KG
NAPHTHALENE	200	1200 U	UG/KG
PHENANTHRENE	330	1900 U	UG/KG
PYRENE	330	1900 U	UG/KG
SURROGATE RECOVERIES QC LI	MITS		

 TERPHENYL-d14
 (48 - 131 %)
 88 %

 NITROBENZENE-d5
 (27 - 130 %)
 76 %

 2-FLUOROBIPHENYL
 (32 - 130 %)
 89 %

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COLUMBIA ANALYTICAL SERVICES

Reported: 01/23/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-B8-R(4.5-5.2')

Date Sampled : 12/20/05 Date Received: 12/22/05	Sı	Order #: Ibmission #:	870062 R2529547	Sa	mple Matr	ix: SOIL/	SEDIMENT
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.0	77.6	£	01/10/06	15:30	1.0
							•

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS METHOD 8260B TCL Reported: 01/23/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-B8-R(4.5-5.2')

Date Sampled :	12/20/05	Order	#:	870062	Sample Matrix:	SOIL/SEDIMENT
Date Received:	12/22/05	Submission	#:	R2529547	Percent Solid:	77.6
ANALYTE				POL	PFSIII.T	INTTO

		VE30HI	UNI 13
DATE ANALYZED : 12/30/05	,		
ANALYTICAL DILUTION: 5.	00		Dry Weight
ACETONE	20	130 U	UG/KG
BENZENE	5.0	32 U	UG/KG
BROMODICHLOROMETHANE	5.0	32 U	UG/KG
BROMOFORM	5.0	32 U	UG/KG
BROMOMETHANE	5.0	32 U	UG/KG
2-BUTANONE (MEK)	10	64 U	UG/KG
CARBON DISULFIDE	10	64 U	UG/KG
CARBON TETRACHLORIDE	5.0	32 U	UG/KG
CHLOROBENZENE	5.0	32 U	UG/KG
CHLOROETHANE	5.0	32 Ù~	UG/KG
CHLOROFORM	5.0	32 U	UG/KG
CHLOROMETHANE	5.0	32 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	32 U	UG/KG
1,1-DICHLOROETHANE	5.0	32 U	UG/KG
1,2-DICHLOROETHANE	5.0	32 U	UG/KG
1,1-DICHLOROETHENE	5.0	32 U	UG/KG
CIS-1, 2-DICHLOROETHENE	5.0	32 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	32 U.	UG/KG
1,2-DICHLOROPROPANE	5.0	32 U	UG/KG
CIS-1, 3-DICHLOROPROPENE	5.0	32 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	32 U	UG/KG
ETHYLBENZENE	5.0	32 U	UG/KG
2-HEXANONE	10	64 U	UG/KG
METHYLENE CHLORIDE	5.0	32 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	64 U	UG/KG
STYRENE	5.0	32 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	32 U	UG/KG
TETRACHLOROETHENE	5.0	32 U	UG/KG
TOLUENE	5,0	32 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	32 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	32 U	UG/KG
TRICHLOROETHENE	5.0	32 U	UG/KG
VINYL CHLORIDE	5.0	32 U	UG/KG
O-XYLENE	5.0	32 U	UG/KG
M+P-XYLENE	5.0	32 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	106	¥
TOLUENE-D8	(75 - 128 %)	95	2
DIBROMOFLUOROMETHANE	(62 - 133 %)	102	8

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/23/06

Fuss & O'Neill,Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-B8-R(4.5-5.2')

Date Samp Date Rece	led : ived:	12/20/05 12/22/05	Order Submission	#: #:	87(R25	062 29547	Sample Ma Percent S	trix: olid:	SOIL/SEDIN 77.6	MENT
ANALYTE			· · · · · · · · · · · · · · · · · · ·		•	PQL	RES	ULT	UNITS	
DATE EXT DATE ANA ANALYTIC	RACTE LYZED AL DI	D : 0 : 0 LUTION:	1/02/06 1/18/06 10.00				tendor t		Dry Weig	ht
ACENAPHTH ANTHRACEN BENZO (A) A BENZO (A) P BENZO (B) F BENZO (G, H BENZO (K) F INDENO (1, CHRYSENE DIBENZO (A FLUORANTH FLUORANTH PLUORENE PHENANTHR PYRENE	ENE E NTHRA(YRENE LUORAI , I) PEI LUORAI 2 , 3 - CI ., H) AN ENE NE ENE	CENE NTHENE RYLENE NTHENE D) PYRENE FHRACENE				330 330 330 330 330 330 330 330 330 330	4300 4300 4300 4300 4300 4300 4300 4300	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG	
SURROGAT	e reco	OVERIES	QC (LIM	IITS		1940	-	00/103	
TERPHENYL NITROBENZ 2-FLUOROB	-d14 ENE-d IPHEN	5 ŽL	(48 (27 (32		131 130 130	웅) 응) 응)	100 103 107		% % %	

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 871965	ANALYTICAL RUN # : 124806					
		·				
ANALYTE	TRUE VALUE	& RECOVERY	QC LIMITS			
DATE ANALYZED : 12/30/05 ANALYTICAL DILUTION: 1.0						
ACETONE	20.0	94	50 - 150			
BENZENE	20.0	24 04	30 - 130			
BROMODICHLOROMETHANE	20.0	100	70 - 130			
BROMOFORM	20.0	90	70 - 130			
BROMOMETHANE	20.0	85	50 - 150			
2-BUTANONE (MEK)	20.0	86	50 - 150			
CARBON DISULFIDE	20.0	88	70 - 130			
CARBON TETRACHLORIDE	20.0	94	70 - 130			
CHLOROBENZENE	20.0	91	70 - 130			
CHLOROETHANE	20.0	101	70 - 130			
CHLOROFORM	20.0	100	70 - 130			
CHLOROMETHANE	20.0	95	70 - 130			
DIBROMOCHLOROMETHANE	20.0	100	70 - 130			
1,1-DICHLOROETHANE	20.0	98	70 - 130			
1,2-DICHLOROETHANE	20.0	102	70 - 130			
1,1-DICHLOROETHENE	20.0	94	70 - 130			
CIS-1,2-DICHLOROETHENE	20.0	96	70 ~ 130			
TRANS-1,2-DICHLOROETHENE	20.0	90	70 - 130			
1,2-DICHLOROPROPANE	20.0	104	70 - 130			
CIS-1, 3-DICHLOROPROPENE	20.0	92	70 - 130			
TRANS-1, 3-DICHLOROPROPENE	20.0	86	70 - 130			
ETHYLBENZENE	20.0	88	70 - 130			
2-HEXANONE	20.0	70	70 - 130			
METHYLENE CHLORIDE	20.0	92	70 - 130			
4-METHYL-2-PENTANONE (MIBK)	20.0	77	70 - 130			
STYRENE	20.0	82	70 - 130			
1,1,2,2-TETRACHLOROETHANE	20.0	112	70 - 130			
TETRACHLOROETHENE	20.0	87	70 - 130			
TOLUENE	20.0	93	70 - 130			
1,1,1-TRICHLOROETHANE	20.0	97	70 - 130			
1,1,2-TRICHLOROETHANE	20.0	102	70 - 130			
TRICHLOROETHENE	20.0	89	70 - 130			
VINYL CHLORIDE	20.0	95	70 - 130			
O-XYLENE	20.0	88	70 - 130			
M+P-XYLENE	40.0	83	70 - 130			

11

REFERENCE-1

VOLATILE ORGANICS METHOD 8260B TCL Reported: 01/23/06

Project Reference: Client Sample ID : METHOD BLANK

Date Sampled : Date Received:	Order Submission	#: #:	871963	Sample Matrix: Percent Solid:	SOIL/SEDIMENT 100
ANALYTE			PQL	RESULT	UNITS
DATE ANALYZED : 12	/30/05				
ANALYTICAL DILUTION:	1.00				Dry Weight
ACETONE			20	20 U	UG/KG
BENZENE			5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE			5.0	5.0 U	UG/KG
BROMOFORM			5.0	5.0 U	UG/KG
BROMOMETHANE			5.0	5.0 U	UG/KG
2-BUTANONE (MEK)			10	10 U	UG/KG
CARBON DISULFIDE			10	10 U	UG/KG
CARBON TETRACHLORIDE			5.0	5.0 U	UG/KG
CHLOROBENZENE			5.0	5.0 U	UG/KG
CHLOROETHANE			5.0	5.0 Ŭ	UG/KG
CHLOROFORM		•	5.0	5.0 U	UG/KG
CHLOROMETHANE			5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE			5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE			5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE			5.0	5.0 0	UG/KG
1,1-DICHLOROETHENE			5.0	5.0 U	
CIS-1,2-DICHLOROETHENE			5.0	5.0 1	
TRANS-1, 2-DICHLOROETHENH	2		5.0	500	
1,2-DICHLOROPROPANE	_		5.0	501	
CIS-1, 3-DICHLOROPROPENE			5.0	5.00	
TRANS-1.3-DICHLOROPROPEN	JE		5.0	5.00	UG/KG
ETHYLBENZENE			5.0	5.00	
2-HEXANONE			10	3.0 0	
METHYLENE CHIORIDE			E 0	10 0	
4-METHYL-2-PENTANONE (M)	(BK)		5.0	5.0 0	
STYRENE			E 0	10 0	UG/KG
1, 1, 2, 2-TETRACHLOROFTHAN	7 0		5.0	5.00	
TETRACHLOROETHENE	12		5.0	5.00	
TOLUENE			5.0	5.00	
1.1.1.TTRICHLOROFTHANE			5.0	5.0 0	UG/KG
1,1,2-TRICHLOROFTHANE			5.0	5.0 U	UG/KG
TRICHLOROETHENE			5.0	5.0 0	UG/KG
VINYL CHLORIDE			5.0	5.0 0	UG/KG
0-XYLENE			5.0	5.0 0	
M+P-XYLENE			5.0	5.0 U 5.0 U	UG/KG UG/KG
SURROGATE RECOVERIES	QC	LIŃ	ITS		
4-BROMOFLUOROBENZENE	(65		129 8)	76	9. ·
TOLUENE-D8	(75	_	128 81	05	с. 2-
DIBROMOFLUOROMETHANE	160		122 21	100	9.
	104	-	200 B/	102	ъ

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COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY:

LABORATORY CONTROL SAMPLE SOIL/SEDIMENT

Spiked Order No. : 875567

Dup Spiked Order No. : 875568

Client ID:

Test: 8270C STARS LIST SEMIVOLATILES

Analytical Units: UG/KG

Run Number : 125373

i Ispike		BLANKS	PIKE	BLANK S	PIKE DUP.	į	QC LIMITS
ADDED	CONCENT.	FOUND	* REC.	FOUND	* REC. R	PD RPD	REC.
3300	Ð	3130	94	3210	96 13	19	47 - 123
3300	0	3210	96	3180	,,= 95 1	30	44 - 125
3300	0	3290	99	3290	1 99 10	130	48 - 122
3300	0	3180	95	3200	1 96 11	130	49 - 126
1 3300	0	3210	96	3260	1 98 2	130	42 - 128
3300	0	3440	1 103	3360	1 101 12	130	42 - 126
3300	0	3210	96	3250	1 99 11	130	48 - 124
3300	0	3400	102	3300	1 00 12	130	41 - 127
1 3300	0	i 3280.	1 99	1 3380	1 09 19	130	1 49 - 122
3300	0	i 3610	1 108	3540	1 306 12	130	1 23 - 140
3300	F 0	3220	97	3180	1 05 11	120	42 - 134
3300	1 0	3140	1 94	3220	1 97 17	120	36 - 129
1 3300	1 0	3030	1 91	1 3060	1 07 13	120	30 - 110
1 3300	1 0	3320	1 100	1 jooo	1 00 11	120	1 20 - 110
3300	0	3480	105	3350	1 101 14	36	5 3 - 130
	 SPIKE ADDED 3300 3300 3300 3300 3300 3300 3300 3300 3300 3300 3300 3300	SPIKE SAMPLE ADDED CONCENT. 3300 0	Image: Sample Image: Sample SPIKE SAMPLE ADDED CONCENT. FOUND 3300 0 3136 3300 0 3136 3300 0 3136 3300 0 3290 3300 0 3290 3300 0 3290 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3210 3300 0 3220 3300 0 3320 3300 0 3320	SPIKE SAMPLE ADDED CONCENT. ADDED CONCENT. SOURD FOUND 3300 0	BLANK SPIKE BLANK SPIKE SPIKE SAMPLE ADDED CONCENT. GONCENT. FOUND 3300 0 3300 10 3300 10 3300 10 3300 10	BLANK SPIKE BLANK SPIKE BLANK SPIKE DUP. SPIKE SAMPLE FOUND * REC. FOUND * REC. REC. ADDED CONCENT. FOUND * REC. FOUND * REC. FOUND * REC. REC. 3300 0 3130 94 3210 96 3 3300 0 3210 96 3180 95 1 3300 0 3229 99 32290 99 0 3300 0 3210 96 3260 98 2 3300 0 3210 96 3260 98 2 3300 0 3210 96 3250 98 101 2 3300 0 3210 96 32260 98 2 3300 99 3 3300 0 3210 96 32260 98 0 3300 0 3220 97 3300	BLANK SPIKE BLANK SPIKE BLANK SPIKE DUND REC. RED. <thr< td=""></thr<>

EXTRACTABLE ORGANICS METHOD 8270C STARS LIST SEMIVOLATIL Reported: 01/23/06

Project Reference: Client Sample ID : METHOD BLANK

Date Sampled : Date Received:	Order #: Submission #:	875566	Sample Matrix: Percent Solid:	SOIL/SEDIMENT
ANALYTE		PQL	RESULT	UNITS
DATE EXTRACTED : DATE ANALYZED : ANALYTICAL DILUTION:	01/02/06 01/17/06 1.00			Dry Weight
ACENAPHTHENE ANTHRACENE BENZO (A) ANTHRACENE BENZO (A) PYRENE BENZO (B) FLUORANTHENE BENZO (C, H, I) PERYLENE BENZO (C, H, I) PERYLENE INDENO (1, 2, 3 - CD) PYREN CHRYSENE DIBENZO (A, H) ANTHRACEN FLUORENE NAPHTHALENE PHENANTHRENE PYRENE	E	330 330 330 330 330 330 330 330 330 330	330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U	UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG UG/KG
SURROGATE RECOVERIES	QC LIM	IITS		
TERPHENYL-d14 NITROBENZENE-d5 2-FLUOROBIPHENYL	(48 - (27 - (32 -	131 %) 130 %) 130 %)	93 82 90	न्द्र न्द्र

Lisa Gwiazdowski - 20060126134508.pdf

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roject/Client <u>First</u> Cooler received on <u>12/22</u> Were custody se Were custody p Did all bottles a	<u>عد محلام خ</u> <u>مدن by معلم</u> eals on outside o apers properly fi	(S1 COUI	ubmission Number RIER: CAS UI	<u>k2-29547</u> PS FEDEX V	ELOCITY CLIENT
 Were custody set Were custody p Did all bottles a 	ليدين by <u>معن</u> eals on outside o apers properly fi	e(RIER: CAS UI	PS FEDER V	ELOCITY CLIENT
 Were custody so Were custody p Did all bottles a 	eals on outside o apers properly fi	f coole	>r7			
 Did any VOA v Were Ice or Ice Where did the t Temperature of 	rrive in good co ials have signifi- packs present? bottles originate? cooler(s) upon 1	illed on nditior cant ai receipt	ut (ink n (unb r bubt	, signed, etc.)? roken)? oles?	YES YES YES (AS/ROG	NO NO NO NO , CLIENT
Is the temperatu	re within 0° - 6°	°C?.	•	Yes Yes	Yes	Yes Yes
lf No, Explain	Below	· .	Ś	No No	No	No No
Date/Time Ten	peratures Taker	1:	•	12/22/05 1115	·	· · · · · · · · · · · · · · · · · · ·
Thermometer II	D: 161 or	RGU		Reading From: T	emp Blank or	Sample Bottle
out of Temperature	e. Client Appro	valto	Run 9	Samples		
Air Samples: xplain any discrepane	Cassettes / Tube	es Inta	ct	Canisters Pressuri:	zed Tedlar® E	Bags Inflated N/A
		YES	NO	Sample 1.D.	Reagent	Vol. Added
pH	Reagent	1		· · · · ·		
12	NaOH					
. 2 .	HNO3		ļ			
2	H ₂ SO ₄	 	 			· ·
Residual Chlorine (+/-) f	or TCN & Phenol		<u> </u> .			
5-9** I	P/PCBs (608 only)	ŀ	<u> </u>			
(ES = All samples OK '*If pH adjustment is require	NO = Sam red, use NaOH and/o	iples wei r H ₂ SO4	re prese	rved at lab as listed	PC OK to adjust p	H
VOC	Vial pH Verification sted after Analysis)	1		Other Comm	ents:	<u> </u>
(Te Fe	ollowing Samples Exhibited pH > 2		. •			. •
(Te Fi	ollowing Samples Exhibited pH > 2	, ,		·······		
(Te Fi	ollowing Samples Exhibited pH > 2	· · · · ·	 		· · · · · ·	

\\ROCHESTER1\GROUP\SMODOCS\Cooler Receipt v 2.doc



A FULL SERVICE ENVIRONMENTAL LABORATORY

January 25, 2006

Mr. Noah Livingston Fuss & O'Neill,Inc 80 Washington St. Suite 301 Poughkeepsie, NY 12601

PROJECT:AC DUTTON Submission #:R2529242

Dear Mr. Livingston:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 01/13/06 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Michael Perry Laboratory Director

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 $\frac{RCRA & Metals}{A6 (0-1)} + A 10(0-.5) \\ C2(0-.5) = Z 12(0-1) \\ E6(0-1) + K2(0-.5) \\ K2(0-.5) \\ K2(0-.5) + K2(0-.5) \\ K2(0-.5) +$ K6 (0-.5) M2 (0-,5) M6(0-1) QZ (0-,5) Q8 (0-1) UG (0-1) UG (0-1) US (0-1)



1 Mustard ST. Suite 250 Rochester, NY 14609 (585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client	:	Fuss & O'Neill, Inc
Project Reference	:	AC DUTTON
Lab Submission #	:	R2529242
Project Manager	:	Michael Perry
Reported	:	01/25/06

Report Contains a total of <u>34</u> pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. <u>Hulue Karry</u>



CASE NARRATIVE

This report contains analytical results for the following samples: Submission #: R2529242

Lab ID	<u>Client ID</u>
867382	ACD-SL-A6 (0-1')
867383	ACD-SL-C2 (0-0.5')
867384	ACD-SL-E6 (0-1')
867385	ACD-SL-K6 (0-0.5')
867386	ACD-SL-M2 (0-0.5')
867387	ACD-SL-M6 (0-1')
867388	ACD-SL-Q2 (0-0.5')
867389	ACD-SL-Q8 (0-1')
867390	ACD-SL-U6 (0-0.5')
867391	ACD-SL-U8 (0-1')
867392	ACD-SL-AA10 (0-0.5')
867393	ACD-SL-Z12 (0-1')
867394	ACD-SL-K2 (0-0.5')

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.







INORGANIC QUALIFIERS

C (Concentration) qualifier -

- B if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). This qualifier may also be used to indicate that there was contamination above the reporting limit in the associated blank. See Narrative for details.
- U if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D Spike was diluted out
- E The reported value is estimated because the serial dilution did not meet criteria.
- J Estimated Value
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Additions (MSA).
- W Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
 - Duplicate analysis not within control limits.
- +- Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited Delaware Accredited Connecticut ID # PH0556 Florida ID # E87674 Illinois ID #200047 Maine ID #NY0032 Massachusetts ID # M-NY032 Navy Facilities Engineering Service Center Approved Nebraska Accredited New Jersey ID # NY004 New York ID # 10145 New Hampshire ID # 294100 A/B Pennsylvania Registration 68-786 Rhode Island ID # 158 West Virginia ID # 292

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-A6 (0-1')

TIME ANALYZED	DILUTION
12:30	1.0
=	ANALYZED 12:30

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-A6 (0-1')

Date Sampled : Date Received:	12/13/05 12/14/05		Order #: 867382 Submission #: R2529242			Sample Matrix: SOIL/SEDIMENT			
ANALYTE		METHOD	PQL		RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION	
ARSENIC		6010B	1.00		9.50	MG/KG	01/10/06	1.0	
BARIUM		6010B	2.00		47.6	MG/KG	01/11/06	1.0	
CADMIUM		6010B	2.00		2.17 U	MG/KG	01/11/06	1.0	
CHROMIUM		6010B	1.00		15.9	MG/KG	01/10/06	1.0	
COPPER		6010B	2.00		33.4	MG/KG	01/10/06	1.0	
LEAD		6010B	5.00		40.3	MG/KG	01/11/06	1.0	
MERCURY		7471A	0.0500		0.0543 U	MG/KG	12/30/05	1.0	
SELENIUM		6010B	1.00		1.09 U	MG/KG	01/10/06	1.0	
SILVER		6010B	1.00		1.09 U	MG/KG	01/11/06	1.0	

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Reported: 01/25/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-C2 (0-0.5')

Date Sar Date Rec	npled : ceived:	12/13/05 12/14/05	S	Order # ubmission #	: 867383 : R2529242	Şa	mple Matrix: SOIL	SEDIMENT
ANALYTI	3		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE TIME ANALYZED ANALYZED	DILUTION
PERCENT	SOLIDS		160.3M	1.0	89.1	¥	12/29/05 12:30	1.0
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-C2 (0-0.5')

Date Sampled : 12/13/05 Date Received: 12/14/05		Order #: 867383 Submission #: R2529242			Sample Matrix: SOIL/SEDIMENT			
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION	
ARSENIC		6010B	1.00	24.2	MG/KG	01/10/06	1.0	
BARIUM		6010B	2.00	77.0	MG/KG	01/11/06	1.0	
CADMIUM		6010B	2.00	2.24 U	MG/KG	01/11/06	1.0	
CHROMIUM		6010B	1.00	21.7	MG/KG	01/10/06	1.0	
COPPER		6010B	2.00	37.8	MG/KG	01/10/06	1.0	
LEAD		6010B	5.00	29.0	MG/KG	01/11/06	1.0	
MERCURY		7471A	0.0500	0.0866	MG/KG	12/30/05	1.0	
SELENIUM		6010B	1.00	1.12 U	MG/KG	01/10/06	1.0	
SILVER		6010B	1.00	1.12 U	MG/KG	01/11/06	1.0	

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Reported: 01/25/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-E6 (0-1')

Date Sampled : Date Received:	Order #: 867384 Sample M Submission #: R2529242					trix: SOIL/SEDIMENT			
ANALYTE		METHOD PQL		RESULT	DRY WEIGHT UNITS	DATE TIME ANALYZED ANALYZED		DILUTION	
PERCENT SOLIDS		160.3M	1.0	94.4	20 70	12/29/05	12:30	1.0	
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Reported: 01/25/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-E6 (0-1')

,

Date Sampled : 12/13/0 Date Received: 12/14/0	5 5	Order #: 867384 Submission #: R2529242			Sample Matrix: SOIL/SEDIMENT			
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC	6010B	1.00	29.2	MG/KG	01/13/06	10.0		
BARIUM	6010B	2.00	103	MG/KG	01/11/06	10.0		
CADMIUM	6010B	2.00	21.2 U	MG/KG	01/11/06	10.0		
CHROMIUM	6010B	1.00	18.0	MG/KG	01/11/06	10.0		
COPPER	6010B	2.00	43.9	MG/KG	01/13/06	10.0		
LEAD	6010B	5.00	53.0 U	MG/KG	01/11/06	10.0		
MERCURY	7471A	0.0500	0.328	MG/KG	12/30/05	10.0		
SELENIUM	6010B	0.500	5.30 U	MG/KG	01/13/06	10 0		
SILVER	6010B	1.00	10.6 U	MG/KG	01/11/06	10.0		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-K6 (0-0.5')

Date Sampled : Date Received:	12/13/05 12/14/05	Sı	Order Ibmission	#: 867385 #: R2529242	Sa	Sample Matrix: SOIL/SEDIMENT				
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION		
PERCENT SOLIDS		160.3M	1.0	99.7	 6	12/29/05	12:30	1.0		
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-K6 (0-0.5')

Date Sampled : Date Received:	12/13/05 12/14/05		Order Submission	#: 867385 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC		6010B	1.00	14.1	MG/KG	01/10/06	1.0		
BARIUM		6010B	2.00	15.4	MG/KG	01/11/06	1.0		
CADMIUM		6010B	2.00	2.01 U	MG/KG	01/11/06	1.0		
CHROMIUM		6010B	1.00	7.76	MG/KG	01/10/06	1.0		
COPPER		6010B	2.00	12.8	MG/KG	01/10/06	1.0		
LEAD		6010B	5.00	23.2	MG/KG	01/11/06	1.0		
MERCURY		7471A	0.0500	0.0502 U	MG/KG	12/30/05	1.0		
SELENIUM		6010B	1.00	1.00 U	MG/KG	01/10/06	1.0		
SILVER		6010B	1.00	1.00 U	MG/KG	01/11/06	1.0		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-M2 (0-0.5')

Date Sampled : 12/13/ Date Received: 12/14/	'05 '05 S 1	Order ubmission	#: 867386 #: R2529242	Sa	ample Matr	ix: SOIL/	L/SEDIMENT			
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION			
PERCENT SOLIDS	160.3M	1.0	93.2	웅	12/29/05	12:30	1.0			

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-M2 (0-0.5')

Date Sampled : 12 Date Received: 12	/13/05 /14/05	Orde Submissio	er #: 867386 on #: R2529242	Sa	ample Matrix:	SOIL/SEDIMENT
ANALYTE	METH	OD PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION
ARSENIC	601	DB 1.00	68.3	MG/KG	01/13/06	10.0
BARIUM	601	DB 2.00	93.7	MG/KG	01/11/06	10.0
CADMIUM	601	OB 2.00	21.5 U	MG/KG	01/11/06	10.0
CHROMIUM	601	DB 1.00	12.1	MG/KG	01/11/06	10.0
COPPER	601	0B 2.00	21.5 U	MG/KG	01/13/06	10.0
LEAD	601	0B 5.00	53.6 U	MG/KG	01/11/06	10.0
MERCURY	747	1A 0.0500	0.106	MG/KG	12/30/05	1.0
SELENIUM	601	0B 0.500	5.36 U	MG/KG	01/13/06	10.0
SILVER	601	0B 1.00	10.7 U	MG/KG	01/11/06	10.0

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-M6 (0-1')

Date Sampled : 12/13/05 Date Received: 12/14/05	S	Order ubmission	#: 867387 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION	
PERCENT SOLIDS	160.3M	1.0	91.3	સ્	12/29/05	12:30	1.0	
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-M6 (0-1')

Date Sampled : 12/13/05 Date Received: 12/14/05		Order Submission	#: 867387 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC	6010B	1.00	21.8	MG/KG	01/13/06	10.0		
BARIUM	6010B	2.00	275	MG/KG	01/11/06	10.0		
CADMIUM	6010B	2.00	21.9 U	MG/KG	01/11/06	10.0		
CHROMIUM	6010B	1.00	17.9	MG/KG	01/11/06	10.0		
COPPER	6010B	2.00	21.9 U	MG/KG	01/13/06	10.0		
LEAD	6010B	5.00	1350	MG/KG	01/11/06	10.0		
MERCURY	7471A	0.0500	0.0942	MG/KG	12/30/05	1.0		
SELENIUM	6010B	0.500	5.48 U	MG/KG	01/13/06	10.0		
SILVER	6010B	1.00	11.0 U	MG/KG	01/11/06	10.0		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-Q2 (0-0.5')

Date Sampled : 12/13/05 Date Received: 12/14/05	Su	Order Ibmission	#: #:	867388 R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL		RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION	
PERCENT SOLIDS	160.3M	1.0		96.1	8	12/29/05	12:30	1.0	
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-Q2 (0-0.5')

Date Sampled : 12/13/ Date Received: 12/14/	05 05 £	Order Submission	#: 867388 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC	6010B	1.00	17.1	MG/KG	01/11/06	1.0		
BARIUM	6010B	2.00	57.8	MG/KG	01/11/06	1.0		
CADMIUM	6010B	2.00	2.08 U	MG/KG	01/11/06	1.0		
CHROMIUM	6010B	1.00	18.6	MG/KG	01/11/06	1.0		
COPPER	6010B	2.00	42.0	MG/KG	01/11/06	1.0		
LEAD	6010B	5.00	76.8	MG/KG	01/11/06	1.0		
MERCURY	7471A	0.0500	0.152	MG/KG	12/30/05	1.0		
SELENIUM	6010B	1.00	1.04 U	MG/KG	01/11/06	1.0		
SILVER	6010B	1.00	1.04 U	MG/KG	01/11/06	1.0		

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Reported: 01/25/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-Q8 (0-1')

ANALYTE METHOD PQL RESULT DRY WEIGHT DATE T PERCENT SOLIDS 160.3M 1.0 87.0 % 12/29/05 1	Sample Matrix: SOIL/SEDIMENT				
PERCENT SOLIDS 160.3M 1.0 87.0 % 12/29/05 1:	TIME NALYZED	DILUTION			
	12:30	1.0			

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-Q8 (0-1')

Date Sampled : Date Received:	12/13/05 12/14/05	:	Order Submission	#: 867389 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC		6010B	1.00	54.3	MG/KG	01/13/06	10.0		
BARIUM		6010B	2.00	102	MG/KG	01/11/06	10.0		
CADMIUM		6010B	2.00	23.0 U	MG/KG	01/11/06	10.0		
CHROMIUM		6010B	1.00	19.5	MG/KG	01/11/06	10.0		
COPPER		6010B	2.00	26.3	MG/KG	01/13/06	10.0		
LEAD		6010B	5.00	57.5 U	MG/KG	01/11/06	10.0		
MERCURY		7471A	0.0500	0.147	MG/KG	12/30/05	1.0		
SELENIUM		6010B	0.500	5.75 U	MG/KG	01/13/06	10.0		
SILVER		6010B	1.00	11.5 U	MG/KG	01/11/06	10.0		

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U6 (0-0.5')

Date Sampled : 12/13/05 Date Received: 12/14/05		Order # Submission #	#: 867390 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION	
PERCENT SOLIDS	160.3M	1.0	99.8	8	12/29/05	12:30	1.0	
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U6 (0-0.5')

Date Sampled : Date Received:	12/13/05 12/14/05	:	Order Submission	#: #:	867390 R2529242	Sa	ample Matrix:	SOIL/SEDIMENT
ANALYTE		METHOD	PQL	-	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION
ARSENIC		6010B	1.00		8.58	MG/KG	01/11/06	1.0
BARIUM		6010B	2.00		8.54	MG/KG	01/11/06	1.0
CADMIUM		6010B	2.00		2.00 U	MG/KG	01/11/06	1.0
CHROMIUM		6010B	1.00		10.0	MG/KG	01/11/06	1.0
COPPER		6010B	2.00		9.24	MG/KG	01/11/06	1.0
LEAD		6010B	5.00		28.2	MG/KG	01/11/06	1.0
MERCURY		7471A	0.0500		0.0501 U	MG/KG	12/30/05	1.0
SELENIUM		6010B	1.00		1.00 U	MG/KG	01/11/06	1.0
SILVER		6010B	1.00		1.00 U	MG/KG	01/11/06	1.0

Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U8 (0-1')

Date Sampled : 12/13/05 Date Received: 12/14/05		Order Submission	#: 867391 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION	
PERCENT SOLIDS	160.3M	1.0	88.1	ફ	12/29/05	12:30	1.0	
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-U8 (0-1')

Date Sampled : 12/13/05 Date Received: 12/14/05	5	Order Submission	#: 867391 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC	6010B	1.00	23.2	MG/KG	01/11/06	1.0		
BARIUM	6010B	2.00	57.9	MG/KG	01/11/06	1.0		
CADMIUM	6010B	2.00	2.69	MG/KG	01/11/06	1.0		
CHROMIUM	6010B	1.00	18.7	MG/KG	01/11/06	1.0		
COPPER	6010B	2.00	42.5	MG/KG	01/11/06	1.0		
LEAD	6010B	5.00	72.5	MG/KG	01/11/06	1.0		
MERCURY	7471A	0.0500	1.66	MG/KG	12/30/05	1.0		
SELENIUM	6010B	1.00	1.14 U	MG/KG	01/11/06	1.0		
SILVER	6010B	1.00	1.14 U	MG/KG	01/11/06	1.0		

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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (0-0.5')

Date Sampled : Date Received:	12/13/05 12/14/05	ទា	Order Ibmission	#: 867392 # #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION	
PERCENT SOLIDS		160.3M	1.0	94.4	ê	12/29/05	12:30	1.0	
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-AA10 (0-0.5')

Date Sampled : 12/2 Date Received: 12/2	13/05 14/05 s	Order Submission	#: 867392 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC	6010B	1.00	83.8	MG/KG	01/11/06	1.0		
BARIUM	6010B	2.00	50.6	MG/KG	01/11/06	1.0		
CADMIUM	6010B	2.00	2.12 U	MG/KG	01/11/06	1.0		
CHROMIUM	6010B	1.00	23.2	MG/KG	01/11/06	1.0		
COPPER	6010B	2.00	53.3	MG/KG	01/11/06	1.0		
LEAD	6010B	5.00	130	MG/KG	01/11/06	1.0		
MERCURY	7471A	0.0500	0.136	MG/KG	12/30/05	1.0		
SELENIUM	6010B	1.00	1.06 U	MG/KG	01/11/06	1.0		
SILVER	6010B	1.00	1.06 U	MG/KG	01/11/06	1.0		

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Reported: 01/25/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-Z12 (0-1')

Date Sampled : Date Received:	12/13/05 12/14/05	S	Order ubmission	#: #:	867393 R2529242	Sa	ample Matı	rix: SOIL/	SEDIMENT
ANALYTE		METHOD	PQL		RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS		160.3M	1.0		94.5	ĉ	12/29/05	12:30	1.0
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-Z12 (0-1')

Date Sampled : 1 Date Received: 1	2/13/05 2/14/05	S	Order ubmission	#: 867393 #: R2529242	Sample Matrix: SOIL/SEDIMENT				
ANALYTE	ME	THOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION		
ARSENIC	6(010B	1.00	17.0	MG/KG	01/11/06	1.0		
BARIUM	60	010B	2.00	68.0	MG/KG	01/11/06	1.0		
CADMIUM	60	010B	2.00	2.12 U	MG/KG	01/11/06	1.0		
CHROMIUM	60	010B	1.00	12.2	MG/KG	01/11/06	1.0		
COPPER	60	010B	2.00	22.2	MG/KG	01/11/06	1.0		
LEAD	60	010B	5.00	52.2	MG/KG	01/11/06	1.0		
MERCURY	74	471A	0.0500	0.0529 U	MG/KG	12/30/05	1.0		
SELENIUM	60	010B	1.00	1.06 U	MG/KG	01/11/06	1.0		
SILVER	6	010B	1.00	1.06 U	MG/KG	01/11/06	1.0		

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Reported: 01/25/06

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Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-K2 (0-0.5')

Date Sampled :] Date Received:]	.2/13/05 .2/14/05	S	Order ubmission	#: 867394 #: R2529242	Sa	umple Matr	ix: SOIL/	SEDIMENT
ANALYTE		METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS		160.3M	1.0	84.5	8	12/29/05	12:30	1.0
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Reported: 01/25/06

Fuss & O'Neill, Inc Project Reference: AC DUTTON Client Sample ID : ACD-SL-K2 (0-0.5')

Date Sampled : 12/13/05 Date Received: 12/14/05		Order Submission	#: 867394 #: R2529242	S	ample Matrix:	SOIL/SEDIMENT
ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	DILUTION
ARSENIC	6010B	1.00	65.2	MG/KG	01/13/06	10.0
BARIUM	6010B	2.00	199	MG/KG	01/11/06	10.0
CADMIUM	6010B	2.00	23.7 U	MG/KG	01/11/06	10.0
CHROMIUM	6010B	1.00	26.4	MG/KG	01/11/06	10.0
COPPER	6010B	2.00	68.4	MG/KG	01/13/06	10.0
LEAD	6010B	5.00	161	MG/KG	01/11/06	10.0
MERCURY	7471A	0.0500	0.244	MG/KG	12/30/05	1.0
SELENIUM	6010B	0.500	5.92 U	MG/KG	01/13/06	10.0
SILVER	6010B	1.00	11.8 U	MG/KG	01/11/06	10.0

INORGANIC BLANK SPIKE SUMMARY

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CAS Submission #: R2529242 Client: Fuss & O'Neill,Inc AC DUTTON

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			BLAN	SAXTAS Y			
	BLANK	TOUND	ADDED	% REC	LIMITS	RUN	UNITS
	0 0500 11	ц о г	 -		<u> г</u> л 110	104757	5x/5W
MERCORY		C0.1		+04	74T - 1C	101227	
ARSENIC	1.00 U	148	146	101	74 - 126	125198	MG/KG
					011 0	105100	- KG
СОРРЕК	2.00 U	64.J	0.0/	ת	0TT - 70	0/TC7T	DA / DM
SELENIUM	1.00 U	70.7	73.0	57	74 - 125	125198	MG/KG
BARIUM	2.00 U	360	351	103	77 - 123	125202	MG/KG
CADMIUM	2.00 U	100	91.9	109	77 - 123	125202	MG/KG
CHROMIUM	1.00 U	187	176	106	80 - 120	125202	MG/KG
LEAD	5.00 U	66.2	68.1	97	76 - 124	125202	MG/KG
SILVER	1.00 U	94.8	93.0	102	74 - 126	125202	MG/KG
ARSENIC 😀	1.00 U	138	146	94	74 - 126	125363	MG/KG
0							

INORGANIC BLANK SPIKE SUMMARY

CAS Submission #: R2529242 Client: Fuss & O'Neill, Inc AC DUTTON

BLANK SPIKES

	-		
UNITS		MG/KG	MG/KG
RUN		125363	125363
LIMITS		82 - 118	74 - 125
% REC		92	100
ADDED		70.0	73.0
FOUND		64.2	73.1
BLANK		2.00 U	0.500 U

SELENIUM

COPPER

c. 70°)))))))))))))))))))	Lавопатору Д <i>S</i>	LF=Landfill R=River/Stream	ST=Septic Tank		TRANSFER NUMBER & CHECK 1 2 3 4									[Na ₂ S ₂ O ₃]	DATE TIME	2 Lopelta	12/19/05 7:46	Shib sa-H-El		F&O 500
FUSS & O'NEILL, IN	146 HARTFORD ROAD MANCHESTER, CT 060 (860) 646-2469	\mathcal{T}	L=Lake/Pond/Ocean PM=Potable Water	SG=Studge		COMMENTS									T=Sodium Thiosulfate	ACCEPTED BY	afris.	nn. Lasko	All Jusan		
·	Nº 60893	PROJECT NUMBER 2004 0764. AIN	B=Bottom Sediment	S=Soil IItv W=Well	117A M MOIL	REQUIRED	er method 6010							B=Bacteria Bottle	i=Sodium Hydroxide [NaOH] BO ₆] X=Other, Specify	ANSFERS QUISHED BY	- angata P	rix." Te			
	JSTODY RECORD	NY V	Source Codes : MM=Mcni+or Medi	0 RO=RUN Off T=Treatment Faci	X= Other, Specify	ANALYSIS	RCRA 8 + COP	 					\rightarrow	ther Glass T=Teflon Lid	drochloric Acid[HCl] S 4】 A=Ascorbic Acid [C ₆ H	ER ITEM TR. RUMBER RELIN	Noard	FN			
	CHAIN-OF-CI	PROJECT LOCAT	<i>n</i>	ghkupsic, NY 126		CONTAINER	6 402. 1	G 402 1	G 402 1	A [toz. [A 402 1	G 4ez. 1	Sube G=Glass A=An	Vitric Acid [HNO ₃] H=Hy O=Sulfuric Acid [H ₂ SO	Date Time TRANSFI	12/13/05	2	£	4	
<u>O</u>	Fuss & O'Neill Inc. consulting engineers Environmental Field Services	ect NAME vttok	Nouh Livingston	80 Washington St. Bu	845 452 680	MPLE NUMBER SOURCE	SL-A6(0-1) S 1	L-CZ(0-05) S 1	L-EG (0-1) S (5L-K6(0-0.5') S 1	~	SL-M2(0-0.5) S 1	5L-M6(0-1) S 1	P=Plastic V=VOA Vial C=(l=Iced F=Filtered N=1 B=Sodium Bisulfate [NaHSO4]	Affiliation	Men PUSSXONEILL	NTS:	why confer	R25292	
		AC D	REPORT TO:	INVOICE TO:	ا، ۵. #،	ITEM NUMBER	I ACD-	 2 ACD-	3 ACD-5	4 AcD-		5 ACD-	 6 ACD	 Container Code :	Preservative Code :	Sampler's Signature	Month for	ADDITIONAL COMME	these ra	Ş	

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FUSS & O'NEILL, INC. 146 HARTFORD ROAD MANCHESTER, CT 06040	(860) 646-2469	LABORATORY CAC		L≠Lake/Pond/Ocean LF≐Landfil PW=Potable Water R=River/Stream SG=Stuchoe ST=Sentic Tank		COMMENTS & CHECK	* *									T≔Sodium Thiosulfate [Na₂S₂O₃]	ACCEPTED BY DATE TIME	Refrig. 12/12/05 205	NN (\$ 5/60 R1145 7:45	Ship annon 121405 9:45	
70903 (OV	PCOND NT	PROJECT NUMBER 20040764 41N		B=Bottom Sediment O=Outfall S=Soit	ty W=Well	reauired	Method 6010								B=Bacteria Bottle	=Sodium Hydroxide [NaOH] O ₆] X=Other, Specify	NSFERS DUISHED BY	-rivestr-	· " - 154	Å	
		Z		Source Codes : MW=Monitor Well	X= Other, Specify	ANALYSIS F	CRA 8 reapper							\uparrow	er Glass T=Teflon Lid	ochioric Acid [HCI] S= A=Ascorbic Acid [C ₆ H ₈	ITEM TRA	Nort	Refris	2	
		PROJECT LOCATIO	I WAY NEXPICINY	1 12 2212 111	ngurectore NY 12	CONTAINER	A 402. RRESERV	-	G 402. 1	A 402 1	G Yez 1	A those I	G 402. 1	G yoz 1	oe G=Glass A=Ambe	ric Acid [HNO ₃] H=Hydr O=Sulfuric Acid [H ₂ SO4]	Date Time TRANSFER	1 105 1	2	£	4
Fuss & O'Neill Inc.	Environmental Field Services	PROJECT NAME	AC VWIM	EPORT TO: Nou h Living ston	POICE TO: SU WASKINGTON St. 10 POINT SUC 1120 (SVI	EM SAMPLE NUMBER SOURCE	1 ACD-5L-02/1-1 5 1		3 ACD-SL-Q8 (0-1) 5 1	1 ACD-SL-U6 (0-0.5) S 1) ACD-5L-U8(0-1) 5 1	ACD - 5L - AA10/0-05) 5 1	ACD-SL-Z12/0-1) S 1	ACD-SL-K2(0-05) S 1	tontainer Code : P=Plastic V=VOA Vial C=Cub	servative Code : I=Iced F≃Filtered N≂Niti 8=Sodium Bisulfate [NaHSO4]	Jer's Signature Affiliation	ad hylon fusse cherchiz	TIONAL COMMENTS:	the return conter	

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	Cooler Rec	eipt A	nd Pr	eserv	ation Checl	k Form	-	
Project/Client	135 + Oneil	1	S	ubmis	sion Numbe	r <u>R2-2975</u>	12	
Cooler received on	<u>a-14-05</u> by: /	TE.	COUI	RIER	CAS U	PS FEDEX	VELOC	ITY CLIENT
 Were custody Were custody Did all bottles Did any VOA Were free of 1 Where did the Temperature 	seals on outside of papers properly f s arrive in good co vials have significe ce packs present? bottles originate of cooler(s) upon	of cool illed o ondition icant ai ? receipt	er? ut (ink n (unb ir bubt :	, signo roken) oles?	ed, etc.)? ?	YES YES YES YES CAS/R	NO NO NO NO OC, CLI	N/A ÉNT
ls the temper	ature within 0° - 6	° C?:	6	res	Yes	Yes	Yes	Yes
lf No, Expla Date/Time To	in Below emperatures Taker	1: _	12-	NO - 14-1	No 05 @	№ 9;50	No	No
Thermometer	ID: 161 or	IR GU		Readiu	o From T	emn Blank	or Sau	nnle Bottle
Cooler Breakdown: 1. Were all bott 2. Did all bottle 3. Were correct 4. Air Samples: Explain any discrepa	Date : 12 le labels complete labels and tags ag containers used fo Cassettes / Tube ncies:	(<i>i.e.</i> and the second	5 nalysis th cust ests in ct (, preso ody p dicate Canist	by: ervation, etc apers? d? ers Pressuri	N/	NO NO NO B Bags In	flated N/A
[<u></u>	YES	NO	Samp	le I.D.	Reagent		I. Added
рН	Reagent							
12	NaOH					· · · · · · · · · · · · · · · · · · ·		 .
2	HNO3				· ·	· ·		
2	H ₂ SO ₄				· · · ·			
Residual Chlorine (+/-)	for TCN & Phenol	·		[
5-9**	P/PCBs (608 only)	<u> </u>		ſ	, <u>, , , , , , , , , , , , , , , , , , </u>			
YES = All samples OK **If pH adjustment is req	NO = Sam uired, use NaOH and/o	ples wer r H2SO4	e preser	ved at l	ab as listed	PC OK to adju	st pH	
VC (C Vial pH Verification Tested after Analysis) Following Samples]			Other Comm	ents:		······································

PC Secondary Review: _

\\ROCHESTER1\GROUP\SMODOCS\Cooler Receipt v 2.doc



APPENDIX D

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT

DATA USABILITY SUMMARY REPORT



MEMORANDUM

TO: AC Dutton 2004-0764 A1N

FROM: Paula Bibeau

DATE: 05/11/2006

RE: Sampling Event 05-T-01: Problems with import SDG R2529204 and R2629759

SDG R5259204

- Surrogate results were missing the units (%).
- Dilution was zero for some records. This is invalid. The dilution must be 0.01 to 9999. It cannot be zero.
- The results for this SDG had limit1 and limit2 incorrect. Limit1 is the reporting limit and limit2 is the MDL/PQL/IDL (whichever is used for a particular job). The limit1 should never be lower than limit2. It can be the same as limit2 if the data is being reported to the MDL/PQL/IDL.

SDG R2629759

- Filtered was T for some samples. This is an invalid. The only acceptable options are Y for yes, N for no or U for unknown.
- Basis was left blank for some records. Basis must be filled in for all soil samples.

Both SDG R2529204 and R2629759

- The lab_id was incorrect. It is CAS for Columbia Anaytical Services in Rochester, NY as noted in the Fuss & O'Neill structure notes.
- The prog_type (program code) should be blank unless the data reported is air or soil gas data than the program code will always be S.
- The case_id should be left blank. This field to be filled in by us.

Data Usability Summary Report Project: 20040764.A1N – AC Dutton

Columbia Analytical Services Lab Project Number:	R2529204
Date Samples Received at Laboratory:	12/10/2005
Date of Review:	5/26/2006

Four soil samples were collected and submitted to Columbia Analytical Services in Rochester, New York for analysis of volatile organic compounds (VOCs) (TCL list) and semi-volatile organic compounds (SVOCs) (TCL/STARS list) on a mass basis.

- Is the data package complete as defined under the requirements for NYDES ASP Category B deliverables?
 Yes X
 No
- Have all holding times been met?
- Do all the QC data (blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, replicate analyses, laboratory controls, and sample data fall within the protocol required limits and specifications?
 Yes X

• Have all of the data been generated using established and agreed upon analytical protocols? Yes X No

- Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?
 Yes X
 No
- Have the correct data qualifiers been used?

Yes 🔀

Yes 🕅

No 🗌

No 🗌

Certified by:

evin Miller, Ph.D. COfficer

FUSS & O'NEILL

Data Validation NYSDEC ASP Category B Data Deliverables	Project Name: Project Number: SDG:	AC Dutton 20040764.A1N R2529204
SDG Narrative Contract Lab Sample Information Sheets NYSDEC Data Package Summary Forms		YES NO
GC/MS Volatiles Data	nal)	
QC Summary System Monitoring Compou MS/MSD Duplicate Summa QC Check Sample/Standard Method Blank Summary GC/MS Instrument Perform Instrument Detection Limits Sample Data	nd Summary ry l nance Check	
TCL Results (1 sig fig if <10 TICs (for up to 10 compour RICs (Reconstructed Total I Standarda Data	; 2 sig figs if>10) ads) on Chromatograms	
Initial Calibration Data Continuing Calibration Raw OC Data		
BFB Blanks Matrix Spike Blanks Matrix Spike Data Matrix Spike Duplicate Data QC Check Sample/Standard Copy of Calculations Copy of Extraction Logs	L 1	
GC/MS Semi-Volatiles Data QC Summary Sutrogate % Recovery Summ MS /MSD Summary	naty	
QC Check Sample/Standard Method Blank Summary GC/MS Instrument Perforr Internal Standard Area and I Instrument Detection Limit Sample Data	l nance and Mass Calibra RT Summary s	tion
TCL Results TICs RICs		

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GC/MS Semi-Volatiles Data (continued) Standards Data Initial Calibration Data **Continuing Calibration** Internal Standard Area Summary SVOC GPC Calibration Data Raw QC Data DFTPP Blanks Matrix Spike Blank Data MSD Data QC Check Sample/Standard Copy of Calculations Copy of Extraction Logs GC/ECD Pesticides/Aroclor Data QC Summary N/A MS/MSD/MS Blank Summary QC Check Sample/Standard Recovery Method Blank Summary Instrument Detection Limits Sample Data TCL Results Copies of Pesticide Chromatograms Standards Data ICal - Single ICal – Multi Analyte Resolution Summary Calibration Verification Summary (Pest 1) Calibration Verification Summary (Pest 2) Analytical Sequence Florisil Cartridge Check Pesticide GPC Calibration Pesticide Identification Summary - Single Pesticide Identification Summary - Multi Chromatograms/Data System Printouts Retention Times and Peak Areas/Heights Raw QC Data Blanks Matrix Spike Data Matrix Spike Duplicate Data Matrix Spike Blank Data QC Check Sample/Standard Copy of Calculations Copy of Extraction Log



GC Organic Data	YES	NO
QC Summary		
Surrogate Percent Recovery Summary		
MS/MSD/MS Blank Summary		
QC Check Sample/Standard	Π	\square
Method Blank Summary		
Instrument Detection Limits	Ħ	
Sample Data	لسبية	
TCL Results		
Copies of Chromatograms	H	H
Copies of Chromatograms from 2 nd Column	H	H
GC Integration Report/Data System Printout	H	H
Manual Work Sheets	H	H
GPC Chrometograms		H
Standards Data		اا
Initial Calibration Data		
Continuing Calibration Data	H	H
OC Check Sample /Standard	H	H
Standard Chromatograms / Data System		
Printouts (ALL Stondardo)		
Raw OC Data		L
Blank Data		
MS Data	H	
MSD Data	H	
OC Check Sample/Standard	H	H
Copy of Calculations		
Copy of Extraction Log		H
Copy of Extraction Log		
Inorganic Data		
Results - Inotoanic Analysis Data Sheet	[]	
Ouality Control Data	لسا	
Initial and Continuing Calibration Varification		
CRDL Standard for AA and Linear Range		
Analysis for ICP		
Blanks	H	H
ICP Interference Check Sample		H
Spike Sample Recovery	H	H
Post Digest Spike Sample Recovery	H	
Duplicates	H	H
Quality Control Sample	H	H
Standard Addition Results	H	H
ICP Serial Dilutions	H	H
Holding Times	H	H
Troiding Times		

Inorganic Data (Continued) YES NO Verification of Instrument Parameters Instrument Detection Limits (Semi-annually) **ICP** Interelement Correction Factors (Annually) (Part 1) **ICP** Interelement Correction Factors (Annually) (Part 2) ICP Linear Ranges (Quarterly) Raw Data Calibration Standards Initial/Continuing Calibration Blanks/Prep Blanks Initial/Continuing Calibration Verification Standards (Interference check samples, ICP serial dilution samples, CRDL Standard for ICP/AA, LCS, Post-Digest Spike) Diluted/Undiluted Samples **Duplicates** Spikes **Digestion** Logs Wet-Chemical Data Results QC Data Raw Data **Digestion/Distillation Logs TCLP** Data Results Inorganic QC Data Verification of Instrument Parameters Raw Data Digestion Logs

Data Usability Summary Report Project: 20040764.A1N – AC Dutton

Columbia Analytical Services Lab Project Number:	R2629759
Date Samples Received at Laboratory:	1/7/2006
Date of Review:	5/26/2006

Eighteen soil samples were collected and submitted to Columbia Analytical Services in Rochester, New York for analysis of RCRA-8 metals and copper on a mass basis. In addition, TCLP extractions were performed on six of the samples.

 Is the data package complete as defined under the requirements for NYDES ASP Category B deliverables?
 Yes X
 No

- Have all holding times been met?
- Do all the QC data (blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, replicate analyses, laboratory controls, and sample data fall within the protocol required limits and specifications?

Initial and continuing calibration criteria were met for all analytes. Recoveries of cadmium, chromium, and lead in the matrix spike were outside control limits, biased high. Analyses of the remaining QA/QC samples were satisfactory.

- Have all of the data been generated using established and agreed upon analytical protocols?
 Yes X
 No
- Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms? Yes X No
- Have the correct data qualifiers been used?

Certified by:

′Office

Yes 🕅

Yes 🔀

No

No

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Data Validation NYSDEC ASP Category B Data Deliverables	Project Name: Project Number: SDG:	AC Dutton 20040764.A1N R2629759
SDG Narrative Contract Lab Sample Information Sheets NYSDEC Data Package Summary Forms Chain of Custody Forms (external and intern	al)	YES NO
GC/MS Volatiles Data QC Summary System Monitoring Compoun MS/MSD Duplicate Summar QC Check Sample/Standard Method Blank Summary GC/MS Instrument Performa Instrument Detection Limits	N/A ad Summary y ance Check	
Sample Data TCL Results (1 sig fig if <10; TICs (for up to 10 compound RICs (Reconstructed Total Io Standards Data Initial Calibration Data Continuing Calibration Bary OC Data	2 sig figs if>10) ls) n Chromatograms	
BFB Blanks Matrix Spike Blanks Matrix Spike Data Matrix Spike Duplicate Data QC Check Sample/Standard Copy of Calculations Copy of Extraction Logs		
GC/MS Semi-Volatiles Data QC Summary Surrogate % Recovery Summary MS/MSD Summary QC Check Sample/Standard Method Blank Summary GC/MS Instrument Performat Internal Standard Area and R Instrument Detection Limits Sample Data	N/A ary ance and Mass Calibrati I' Summary	on
TCL Results TICs RICs		

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GC Organic Data	YES	NO
QC Summary		
Surrogate Percent Recovery Summary		
MS/MSD/MS Blank Summary	П	П
QC Check Sample/Standard	Ħ	H
Method Blank Summary	H	H
Instrument Detection Limits		H
Sample Data	ل ا	L
TCL Results		
Conjes of Chromatograms		H
Copies of Chromotograms		
Copies of Chromatograms from 2 Column		Ц
GC Integration Report/Data System Printout		
Manual Work Sheets		Ц
GPC Chromatograms		
Standards Data		
Initial Calibration Data		
Continuing Calibration Data		
QC Check Sample/Standard		
Standard Chromatograms/Data System		
Printouts (ALL Standards)		
Raw QC Data	_	
Blank Data		
MS Data		П
MSD Data	Ē	E F
OC Check Sample/Standard	H	H
Copy of Calculations	H	H
Copy of Extraction Log	님	H
Inorganic Data		
Besults - Inotranic Analysis Data Sheet		[]
Quality Control Data		
Initial and Continuing Calibration Verification		
CRDI Standard for A A and Lingue Banas		L _
A palmois for ICD	57	[]
Blanka		
ICD Interference Charle Same 1	<u>A</u>	
Seite Semple Berger		
Direct Direct Could Direct Direct Could Direct Direct Could Direct Direct Could Direct		Ц
Post Digest Spike Sample Recovery		Ц
Duplicates	<u>Ц</u>	Ц
Quality Control Sample	M	Ц
Standard Addition Results		\square
ICP Serial Dilutions	\boxtimes	
Holding Times	\boxtimes	

Inorganic Data (Continued)	YES	NO
Verification of Instrument Parameters		
Instrument Detection Limits (Semi-annually)	\bowtie	Π
ICP Interelement Correction Factors		
(Annually) (Part 1)	\bowtie	Π
ICP Interelement Correction Factors	·	
(Annually) (Part 2)	\boxtimes	
ICP Linear Ranges (Quarterly)	X	П
Raw Data	الاتبكا	
Calibration Standards	\boxtimes	
Initial/Continuing Calibration Blanks/Prep Blanks	X	Ħ
Initial/Continuing Calibration Verification	X	
Standards (Interference check samples,	K	ليسما
ICP serial dilution samples, CRDL		
Standard for ICP/AA, LCS,		
Post-Digest Spike)		
Diluted/Undiluted Samples	\bowtie	
Duplicates	\square	П
Spikes	$\overline{\boxtimes}$	Ħ
Digestion Logs	$\overline{\boxtimes}$	П
Wet-Chemical Data	• ••••	 .
Results	\bowtie	Π
QC Data	$\overline{\boxtimes}$	Π
Raw Data	$\overline{\boxtimes}$	Π
Digestion/Distillation Logs	$\overline{\boxtimes}$	Π
TCLP Data		<u> </u>
Results	\boxtimes	
Inorganic QC Data	\boxtimes	
Verification of Instrument Parameters	\boxtimes	
Raw Data	\boxtimes	
Digestion Logs	\square	

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Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive Soil

SAMP	ĽΕ	IYF	Έ:	 50

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	A03 A03_0.5-2.5 12/15/2005 1.50	AA10 AA10_8-10 12/07/2005 9.00	AA10 AA10_12-14 12/07/2005 13.00	AA11 AA11_12-13 12/08/2005 12.50	B03 B03_0-0.5 12/15/2005 0.25	C04 C04_0.5-3 12/06/2005 1.75
Acetone	(ug/kg)			32J	[5.7]J		
Benzene	(ug/kg)			36	[0.90]J		
Bromodichloromethane	(ug/kg)			<28U	<5.9U		
Bromoform	(ug/kg)			<28U	<5.9U		
Bromomethane	(ug/kg)			<28U	<5.9U		
2-Butanone (MEK)	(ug/kg)			<55U	<12U		
sec-Butylbenzene	(ug/kg)			<28U	<5.9U		
n-Butylbenzene	(ug/kg)			<28U	<5.9U		
tert-Butylbenzene	(ug/kg)			<28U	<5.9U		
Carbon Disulfide	(ug/kg)			[4.2]J	[1.00]J		
Carbon tetrachloride	(ug/kg)			<28U	<5.9U		
Chlorobenzene	(ug/kg)			<28U	<5.9U		
Chloroethane	(ug/kg)			<28U	<5.9U		
Chloroform	(ug/kg)			<28U	<5.9U		
Chloromethane	(ug/kg)			<28U	<5.9U		
Dibromochloromethane	(ug/kg)			<28U	<5.9U		
1,1-Dichloroethane	(ug/kg)			<28U	<5.9U		
1,2-Dichloroethane	(ug/kg)			<28U	<5.9U		
1,1-Dichloroethene	(ug/kg)			<28U	<5.9U		
cis-1,2-Dichloroethene	(ug/kg)			<28U	<5.9U		
Trans-1,2-Dichloroethene	(ug/kg)			<28U	<5.9U		

[x]=Less than Reporting Limit ----=Not analyzed

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive Soil

SAIVIP	LE	ITP	E:	Sc

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CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	A03 A03_0.5-2.5 12/15/2005 1.50	AA10 AA10_8-10 12/07/2005 9.00	AA10 AA10_12-14 12/07/2005 13.00	AA11 AA11_12-13 12/08/2005 12.50	B03 B03_0-0.5 12/15/2005 0.25	C04 C04_0.5-3 12/06/2005 1.75
1,2-Dichloropropane	(ug/kg)			<28U	<5.9U		
cis-1,3-Dichloropropene	(ug/kg)			<28U	<5.9U		
Trans-1,3-Dichloropropene	(ug/kg)			<28U	<5.9U		
Methyl tert butyl ether	(ug/kg)			<28U	<5.9U		
Ethylbenzene	(ug/kg)			<28U	<5.9U		
2-Hexanone	(ug/kg)			<55U	<12U		
Isopropylbenzene	(ug/kg)			<28U	<5.9U		
4-Isopropyltoluene	(ug/kg)			<28U	<5.9U		
Methylene chloride	(ug/kg)			110	9.9		
Naphthalene	(ug/kg)			[150]J ?	<5.9U ?		
4-Methyl-2-pentanone (MIBK)	(ug/kg)			<55U	<12U		
n-Propylbenzene	(ug/kg)			<28U	<5.9U		
Styrene	(ug/kg)			<28U	<5.9U		
1,1,2,2-Tetrachloroethane	(ug/kg)			<28U	<5.9U		
Tetrachloroethene	(ug/kg)			<28U	<5.9U		
Toluene	(ug/kg)			[1.8]J	<5.9U		
1,1,1-trichloroethane	(ug/kg)			<28U	<5.9U		
1,1,2-Trichloroethane	(ug/kg)			<28U	<5.9U		
Trichloroethene	(ug/kg)			<28U	<5.9U		
1,3,5-Trimethylbenzene	(ug/kg)			<28U	<5.9U		
1,2,4-Trimethylbenzene	(ug/kg)			<28U	<5.9U		

?=Duplicate records found, Data review required. [x]=Less than Reporting Limit ----=Not analyzed

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive Soil

SAMPLE	TTPE:	Sc

	SITE	٥٥٦	AA10	4410	۸۸11	B03	C04
CONSTITUENT	SAMPLE ID DATE DEPTH (ft)	A03_0.5-2.5 12/15/2005 1.50	AA10_8-10 12/07/2005 9.00	AA10_12-14 12/07/2005 13.00	AA11_12-13 12/08/2005 12.50	B03_0-0.5 12/15/2005 0.25	C04 C04_0.5-3 12/06/2005 1.75
Vinyl Chloride	(ug/kg)			<28U	<5.9U		
o-Xylene	(ug/kg)			<28U	<5.9U		
M/P-xylenes	(ug/kg)			<28U	<5.9U		
Acenaphthene	(ug/kg)			<360U	<780U		
Anthracene	(ug/kg)			<360U	<780U		
Benzo(a)anthracene	(ug/kg)			[280]J	[200]J		
Benzo(a)pyrene	(ug/kg)			[260]J	[210]J		
Benzo(b)fluoranthene	(ug/kg)			[160]J	[180]J		
Benzo(ghi)perylene	(ug/kg)			[160]J	[170]J		
Benzo(k)fluoranthene	(ug/kg)			[160]J	[220]J		
Indeno(1,2,3-cd)pyrene	(ug/kg)			[92]J	[160]J		
Chrysene	(ug/kg)			[240]J	[200]J		
Dibenzo(a,h)anthracene	(ug/kg)			[37]J	<780U		
Fluoranthene	(ug/kg)			400	[230]J		
Fluorene	(ug/kg)			<360U	<780U		
Phenanthrene	(ug/kg)			<360U	[130]J		
Pyrene	(ug/kg)			990	[200]J		
Arsenic	(mg/kg)	7.2	7.1			18.2	7.8
Barium	(mg/kg)	20.3	45.4			63.0	32.8
Cadmium	(mg/kg)	1.2N	1.5N			<1.1UN	1.1N
Chromium	(mg/kg)	15.5N	20.4N			13.9N	8.5N

[x]=Less than Reporting Limit ----=Not analyzed

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	A03	AA10	AA10	AA11	B03	C04
CONSTITUENT	SAMPLE ID DATE DEPTH (ft)	A03_0.5-2.5 12/15/2005 1.50	AA10_8-10 12/07/2005 9.00	AA10_12-14 12/07/2005 13.00	AA11_12-13 12/08/2005 12.50	B03_0-0.5 12/15/2005 0.25	C04_0.5-3 12/06/2005 1.75
Copper	(mg/kg)	40.3	44.2			20.3	50.1
Lead	(mg/kg)	20.5N	18.3N			19.7N	33.0N
Mercury	(mg/kg)	0.11	0.06			0.05	0.12
Selenium	(mg/kg)	<1.1U	<1.1U			<2.2U	<1.1U
Silver	(mg/kg)	<1.1U	<1.1U			<2.2U	<1.1U
Arsenic (TCLP)	(ug/l)		<500U			<500U	
Barium (TCLP)	(ug/l)		<1000U			1480	
Cadmium (TCLP)	(ug/l)		<100U			<100U	
Chromium (TCLP)	(ug/l)		<100U			<100U	
Lead (TCLP)	(ug/l)		<100U			<100U	
Mercury (TCLP)	(ug/l)		<2.0U			<2.0U	
Selenium (TCLP)	(ug/l)		<500U			<500U	
Silver (TCLP)	(ug/l)		<100U			<100U	

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive Soil

SAIVIP	LEI	TPE:	Sc)

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	D02 D02_6-8 12/15/2005 7.00	E04 E04_3-6 12/06/2005 4.50	E05 E05_3-6 12/19/2005 4.50	G02 G02_0.5-3 12/06/2005 1.75	G04 G04_10-11 12/13/2005 10.50	H07 H07_0.5-3 12/14/2005 1.75
Acetone	(ug/kg)						
Benzene	(ug/kg)						
Bromodichloromethane	(ug/kg)						
Bromoform	(ug/kg)						
Bromomethane	(ug/kg)						
2-Butanone (MEK)	(ug/kg)						
sec-Butylbenzene	(ug/kg)						
n-Butylbenzene	(ug/kg)						
tert-Butylbenzene	(ug/kg)						
Carbon Disulfide	(ug/kg)						
Carbon tetrachloride	(ug/kg)						
Chlorobenzene	(ug/kg)						
Chloroethane	(ug/kg)						
Chloroform	(ug/kg)						
Chloromethane	(ug/kg)						
Dibromochloromethane	(ug/kg)						
1,1-Dichloroethane	(ug/kg)						
1,2-Dichloroethane	(ug/kg)						
1,1-Dichloroethene	(ug/kg)						
cis-1,2-Dichloroethene	(ug/kg)						
Trans-1,2-Dichloroethene	(ug/kg)						

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive Soil

SAIVIP	TPE.	Sc

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	D02 D02_6-8 12/15/2005 7.00	E04 E04_3-6 12/06/2005 4.50	E05 E05_3-6 12/19/2005 4.50	G02 G02_0.5-3 12/06/2005 1.75	G04 G04_10-11 12/13/2005 10.50	H07 H07_0.5-3 12/14/2005 1.75
1,2-Dichloropropane	(ug/kg)						
cis-1,3-Dichloropropene	(ug/kg)						
Trans-1,3-Dichloropropene	(ug/kg)						
Methyl tert butyl ether	(ug/kg)						
Ethylbenzene	(ug/kg)						
2-Hexanone	(ug/kg)						
Isopropylbenzene	(ug/kg)						
4-Isopropyltoluene	(ug/kg)						
Methylene chloride	(ug/kg)						
Naphthalene	(ug/kg)						
4-Methyl-2-pentanone (MIBK)	(ug/kg)						
n-Propylbenzene	(ug/kg)						
Styrene	(ug/kg)						
1,1,2,2-Tetrachloroethane	(ug/kg)						
Tetrachloroethene	(ug/kg)						
Toluene	(ug/kg)						
1,1,1-trichloroethane	(ug/kg)						
1,1,2-Trichloroethane	(ug/kg)						
Trichloroethene	(ug/kg)						
1,3,5-Trimethylbenzene	(ug/kg)						
1,2,4-Trimethylbenzene	(ug/kg)						

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	D02	E04	E05	G02	G04	H07
	SAMPLE ID	D02_6-8	E04_3-6	E05_3-6	G02_0.5-3	G04_10-11	H07_0.5-3
CONSTITUENT	DATE	12/15/2005	12/06/2005	12/19/2005	12/06/2005	12/13/2005	12/14/2005
	DEPTH (ft)	7.00	4.50	4.50	1.75	10.50	1.75
Vinyl Chloride	(ug/kg)						
o-Xylene	(ug/kg)						
M/P-xylenes	(ug/kg)						
Acenaphthene	(ug/kg)						
Anthracene	(ug/kg)						
Benzo(a)anthracene	(ug/kg)						
Benzo(a)pyrene	(ug/kg)						
Benzo(b)fluoranthene	(ug/kg)						
Benzo(ghi)perylene	(ug/kg)						
Benzo(k)fluoranthene	(ug/kg)						
Indeno(1,2,3-cd)pyrene	(ug/kg)						
Chrysene	(ug/kg)						
Dibenzo(a,h)anthracene	(ug/kg)						
Fluoranthene	(ug/kg)						
Fluorene	(ug/kg)						
Phenanthrene	(ug/kg)						
Pyrene	(ug/kg)						
Arsenic	(mg/kg)	6.0	44.2	<116U	812	9.2	19.5
Barium	(mg/kg)	22.2	106	382	33.9	87.1	58.9
Cadmium	(mg/kg)	1.3N	<6.0UN	<58.2UN	0.88N	1.1N	<5.3UN
Chromium	(mg/kg)	15.9N	19.7N	<116UN	469N	21.2N	16.7N
Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	D02 D02_6-8 12/15/2005 7.00	E04 E04_3-6 12/06/2005 4.50	E05 E05_3-6 12/19/2005 4.50	G02 G02_0.5-3 12/06/2005 1.75	G04 G04_10-11 12/13/2005 10.50	H07 H07_0.5-3 12/14/2005 1.75
Copper	(mg/kg)	33.2	<24.1U	<233U	876	30.6	28.7
Lead	(mg/kg)	13.9N	77.2N	<582UN	30.6N	78.7N	<53.5UN
Mercury	(mg/kg)	<0.04U	<0.04U	<0.04U	0.13	0.66	0.12
Selenium	(mg/kg)	<1.1U	<12.0U	<116U	<1.1U	<1.4U	<10.7U
Silver	(mg/kg)	<1.1U	<12.0U	<116U	<1.1U	<1.4U	<10.7U
Arsenic (TCLP)	(ug/l)	<500U	<500U		1590		
Barium (TCLP)	(ug/l)	<1000U	<1000U		<1000U		
Cadmium (TCLP)	(ug/l)	<100U	<100U		<100U		
Chromium (TCLP)	(ug/l)	<100U	<100U		<100U		
Lead (TCLP)	(ug/l)	<100U	<100U		<100U		
Mercury (TCLP)	(ug/l)	<2.0U	<2.0U		<2.0U		
Selenium (TCLP)	(ug/l)	<500U	<500U		<500U		
Silver (TCLP)	(ua/l)	<100U	<100U		<100U		

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	OITE	100	104	006	504	T 40	1105
CONSTITUENT	SAMPLE ID DATE DEPTH (ft)	109 109_2-5 12/19/2005 3.50	L04 L04_0.5-3 12/13/2005 1.75	Q06_1-3 12/01/2005 2.00	S04 S04_2-3 12/13/2005 2.50	T10_0.5-3 12/15/2005 1.75	U05_4-8 12/08/2005 6.00
Acetone	(ug/kg)						
Benzene	(ug/kg)						<5.8U
Bromodichloromethane	(ug/kg)						
Bromoform	(ug/kg)						
Bromomethane	(ug/kg)						
2-Butanone (MEK)	(ug/kg)						
sec-Butylbenzene	(ug/kg)						<5.8U
n-Butylbenzene	(ug/kg)						<5.8U
tert-Butylbenzene	(ug/kg)						<5.8U
Carbon Disulfide	(ug/kg)						
Carbon tetrachloride	(ug/kg)						
Chlorobenzene	(ug/kg)						
Chloroethane	(ug/kg)						
Chloroform	(ug/kg)						
Chloromethane	(ug/kg)						
Dibromochloromethane	(ug/kg)						
1,1-Dichloroethane	(ug/kg)						
1,2-Dichloroethane	(ug/kg)						
1,1-Dichloroethene	(ug/kg)						
cis-1,2-Dichloroethene	(ug/kg)						
Trans-1,2-Dichloroethene	(ug/kg)						

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive Soil

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CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	109 109_2-5 12/19/2005 3.50	L04 L04_0.5-3 12/13/2005 1.75	Q06 Q06_1-3 12/01/2005 2.00	S04 S04_2-3 12/13/2005 2.50	T10 T10_0.5-3 12/15/2005 1.75	U05 U05_4-8 12/08/2005 6.00
1,2-Dichloropropane	(ug/kg)						
cis-1,3-Dichloropropene	(ug/kg)						
Trans-1,3-Dichloropropene	(ug/kg)						
Methyl tert butyl ether	(ug/kg)						<5.8U
Ethylbenzene	(ug/kg)						<5.8U
2-Hexanone	(ug/kg)						
Isopropylbenzene	(ug/kg)						<5.8U
4-Isopropyltoluene	(ug/kg)						<5.8U
Methylene chloride	(ug/kg)						
Naphthalene	(ug/kg)						[160]J ?
4-Methyl-2-pentanone (MIBK)	(ug/kg)						
n-Propylbenzene	(ug/kg)						<5.8U
Styrene	(ug/kg)						
1,1,2,2-Tetrachloroethane	(ug/kg)						
Tetrachloroethene	(ug/kg)						
Toluene	(ug/kg)						<5.8U
1,1,1-trichloroethane	(ug/kg)						
1,1,2-Trichloroethane	(ug/kg)						
Trichloroethene	(ug/kg)						
1,3,5-Trimethylbenzene	(ug/kg)						<5.8U
1,2,4-Trimethylbenzene	(ug/kg)						<5.8U

?=Duplicate records found, Data review required. [x]=Less than Reporting Limit ----=Not analyzed

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	109	L04	Q06	S04	T10	U05
	SAMPLE ID	109_2-5	L04_0.5-3	Q06_1-3	S04_2-3	T10_0.5-3	U05_4-8
CONSTITUENT		12/19/2005	12/13/2005	12/01/2005	12/13/2005	12/15/2005	12/08/2005
		3.50	1.75	2.00	2.50	1.75	6.00
Vinyi Chioride	(ug/kg)						
o-Xylene	(ug/kg)						<5.8U
M/P-xylenes	(ug/kg)						<5.8U
Acenaphthene	(ug/kg)						<380U
Anthracene	(ug/kg)						<380U
Benzo(a)anthracene	(ug/kg)						<380U
Benzo(a)pyrene	(ug/kg)						<380U
Benzo(b)fluoranthene	(ug/kg)						<380U
Benzo(ghi)perylene	(ug/kg)						<380U
Benzo(k)fluoranthene	(ug/kg)						<380U
Indeno(1,2,3-cd)pyrene	(ug/kg)						<380U
Chrysene	(ug/kg)						<380U
Dibenzo(a,h)anthracene	(ug/kg)						<380U
Fluoranthene	(ug/kg)						<380U
Fluorene	(ug/kg)						<380U
Phenanthrene	(ug/kg)						<380U
Pyrene	(ug/kg)						<380U
Arsenic	(mg/kg)	66.7N	21.4	44.4	11.0	36.1	
Barium	(mg/kg)	175	92.9	142	22.1	121	
Cadmium	(mg/kg)	<12.4U	<2.8UN	<11.8UN	1.9N	<1.4UN	
Chromium	(mg/kg)	<24.7U	12.7N	<23.6UN	20.2N	9.2N	

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive oil

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	SITE	109	104	Q06	S04	T10	U05
CONSTITUENT	SAMPLE ID DATE DEPTH (ft)	109_2-5 12/19/2005 3.50	L04_0.5-3 12/13/2005 1.75	Q06_1-3 12/01/2005 2.00	S04_2-3 12/13/2005 2.50	T10_0.5-3 12/15/2005 1.75	U05_4-8 12/08/2005 6.00
Copper	(mg/kg)	<49.4U	44.2	81.9	56.3	33.8	
Lead	(mg/kg)	<124U	55.2N	<118UN	19.2N	40.3N	
Mercury	(mg/kg)	<0.04U	0.04	1.0	0.08	0.18	
Selenium	(mg/kg)	<24.7U	<5.6U	<23.6U	<1.1U	<2.7U	
Silver	(mg/kg)	<24.7U	<5.6U	<23.6U	<1.1U	<2.7U	
Arsenic (TCLP)	(ug/l)					<500U	
Barium (TCLP)	(ug/l)					1090	
Cadmium (TCLP)	(ug/l)					<100U	
Chromium (TCLP)	(ug/l)					<100U	
Lead (TCLP)	(ug/l)					<100U	
Mercury (TCLP)	(ug/l)					<2.0U	
Selenium (TCLP)	(ug/l)					<500U	
Silver (TCLP)	(ug/l)					<100U	

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	U06	V09	Y12	Z09
	SAMPLE ID	U06 6-8	V09 3-6	Y12 0.5-4	Z09 3-6
CONSTITUENT	DATE	12/07/2005	12/19/2005	12/07/2005	
	DEPTH (ft)	7.00	4.50	2.25	4.50
Acetone	(ug/kg)				
Benzene	(ug/kg)	<6.2U			
Bromodichloromethane	(ug/kg)				
Bromoform	(ug/kg)				
Bromomethane	(ug/kg)				
2-Butanone (MEK)	(ug/kg)				
sec-Butylbenzene	(ug/kg)	<6.2U			
n-Butylbenzene	(ug/kg)	<6.2U			
tert-Butylbenzene	(ug/kg)	<6.2U			
Carbon Disulfide	(ug/kg)				
Carbon tetrachloride	(ug/kg)				
Chlorobenzene	(ug/kg)				
Chloroethane	(ug/kg)				
Chloroform	(ug/kg)				
Chloromethane	(ug/kg)				
Dibromochloromethane	(ug/kg)				
1,1-Dichloroethane	(ug/kg)				
1,2-Dichloroethane	(ug/kg)				
1,1-Dichloroethene	(ug/kg)				
cis-1,2-Dichloroethene	(ug/kg)				
Trans-1,2-Dichloroethene	(ug/kg)				
				_Not or	nalyzed
				=INOL al	laiyzeu

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	U06 U06_6-8 12/07/2005 7.00	V09 V09_3-6 12/19/2005 4.50	Y12 Y12_0.5-4 12/07/2005 2.25	Z09 Z09_3-6 12/15/2005 4.50
1,2-Dichloropropane	(ug/kg)				
cis-1,3-Dichloropropene	(ug/kg)				
Trans-1,3-Dichloropropene	(ug/kg)				
Methyl tert butyl ether	(ug/kg)	<6.2U			
Ethylbenzene	(ug/kg)	<6.2U			
2-Hexanone	(ug/kg)				
Isopropylbenzene	(ug/kg)	<6.2U			
4-Isopropyltoluene	(ug/kg)	<6.2U			
Methylene chloride	(ug/kg)				
Naphthalene	(ug/kg)	<6.2U ?			
4-Methyl-2-pentanone (MIBK)	(ug/kg)				
n-Propylbenzene	(ug/kg)	<6.2U			
Styrene	(ug/kg)				
1,1,2,2-Tetrachloroethane	(ug/kg)				
Tetrachloroethene	(ug/kg)				
Toluene	(ug/kg)	<6.2U			
1,1,1-trichloroethane	(ug/kg)				
1,1,2-Trichloroethane	(ug/kg)				
Trichloroethene	(ug/kg)				
1,3,5-Trimethylbenzene	(ug/kg)	<6.2U			
1,2,4-Trimethylbenzene	(ug/kg)	<6.2U			

?=Duplicate records found, Data review required. ----=Not analyzed

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	U06 U06_6-8 12/07/2005 7.00	V09 V09_3-6 12/19/2005 4.50	Y12 Y12_0.5-4 12/07/2005 2.25	Z09 Z09_3-6 12/15/2005 4.50
Vinyl Chloride	(ug/kg)				
o-Xylene	(ug/kg)	<6.2U			
M/P-xylenes	(ug/kg)	<6.2U			
Acenaphthene	(ug/kg)	<410U			
Anthracene	(ug/kg)	<410U			
Benzo(a)anthracene	(ug/kg)	<410U			
Benzo(a)pyrene	(ug/kg)	<410U			
Benzo(b)fluoranthene	(ug/kg)	<410U			
Benzo(ghi)perylene	(ug/kg)	<410U			
Benzo(k)fluoranthene	(ug/kg)	<410U			
Indeno(1,2,3-cd)pyrene	(ug/kg)	<410U			
Chrysene	(ug/kg)	<410U			
Dibenzo(a,h)anthracene	(ug/kg)	<410U			
Fluoranthene	(ug/kg)	[72]J			
Fluorene	(ug/kg)	<410U			
Phenanthrene	(ug/kg)	[140]J			
Pyrene	(ug/kg)	[120]J			
Arsenic	(mg/kg)		6.2	31.4	24.5
Barium	(mg/kg)		34.1	107	117
Cadmium	(mg/kg)		5.0N	2.1N	1.2N
Chromium	(mg/kg)		9.9N	26.0N	13.6N

[x]=Less than Reporting Limit ----=Not analyzed

Summary of Analytical Results

AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	U06	V09	Y12	Z09
	SAMPLE ID	U06_6-8	V09_3-6	Y12_0.5-4	Z09_3-6
CONSTITUENT	DATE	12/07/2005	12/19/2005	12/07/2005	12/15/2005
	DEPTH (ft)	7.00	4.50	2.25	4.50
Copper	(mg/kg)		46.8	60.3	35.0
Lead	(mg/kg)		26.5N	328N	125N
Mercury	(mg/kg)		0.04	0.22	0.20
Selenium	(mg/kg)		<1.1U	<1.4U	<1.2U
Silver	(mg/kg)		1.2	<1.4U	<1.2U
Arsenic (TCLP)	(ug/l)				
Barium (TCLP)	(ug/l)				
Cadmium (TCLP)	(ug/l)				
Chromium (TCLP)	(ug/l)				
Lead (TCLP)	(ug/l)				
Mercury (TCLP)	(ug/l)				
Selenium (TCLP)	(ug/l)				
Silver (TCLP)	(ug/l)				

 PERIOD:
 From 12/01/2005 thru 12/19/2005 - Inclusive

 SAMPLE TYPE:
 Soil

	SITE	A03	AA10	AA10	AA11	B03	C04
CONSTITUENT	SAMPLE ID DATE DEPTH (ft)	A03_0.5-2.5 12/15/2005 1.50	AA10_8-10 12/07/2005 9.00	AA10_12-14 12/07/2005 13.00	AA11_12-13 12/08/2005 12.50	B03_0-0.5 12/15/2005 0.25	C04_0.5-3 12/06/2005 1.75
Acetone	(ug/kg)			32J	[5.7]J		
Benzene	(ug/kg)			36	[0.90]J		
Carbon Disulfide	(ug/kg)			[4.2]J	[1.00]J		
Methylene chloride	(ug/kg)			110	9.9		
Naphthalene	(ug/kg)			[150]J ?	<5.9U ?		
Toluene	(ug/kg)			[1.8]J	<5.9U		
Benzo(a)anthracene	(ug/kg)			[280]J	[200]J		
Benzo(a)pyrene	(ug/kg)			[260]J	[210]J		
Benzo(b)fluoranthene	(ug/kg)			[160]J	[180]J		
Benzo(ghi)perylene	(ug/kg)			[160]J	[170]J		
Benzo(k)fluoranthene	(ug/kg)			[160]J	[220]J		
Indeno(1,2,3-cd)pyrene	(ug/kg)			[92]J	[160]J		
Chrysene	(ug/kg)			[240]J	[200]J		
Dibenzo(a,h)anthracene	(ug/kg)			[37]J	<780U		
Fluoranthene	(ug/kg)			400	[230]J		
Phenanthrene	(ug/kg)			<360U	[130]J		
Pyrene	(ug/kg)			990	[200]J		
Arsenic	(mg/kg)	7.2	7.1			18.2	7.8
Barium	(mg/kg)	20.3	45.4			63.0	32.8
Cadmium	(mg/kg)	1.2N	1.5N			<1.1UN	1.1N
Chromium	(mg/kg)	15.5N	20.4N			13.9N	8.5N

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AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	A03	AA10	AA10	AA11	B03	C04
	SAMPLE ID	A03_0.5-2.5	AA10_8-10	AA10_12-14	AA11_12-13	B03_0-0.5	C04_0.5-3
CONSTITUENT	DATE	12/15/2005	12/07/2005	12/07/2005	12/08/2005	12/15/2005	12/06/2005
	DEPTH (ft)	1.50	9.00	13.00	12.50	0.25	1.75
Copper	(mg/kg)	40.3	44.2			20.3	50.1
Lead	(mg/kg)	20.5N	18.3N			19.7N	33.0N
Mercury	(mg/kg)	0.11	0.06			0.05	0.12
Silver	(mg/kg)	<1.1U	<1.1U			<2.2U	<1.1U
Arsenic (TCLP)	(ug/l)		<500U			<500U	
Barium (TCLP)	(ug/l)		<1000U			1480	

AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	D02	E04	E05	G02	G04	H07
	SAMPLE ID	D02_6-8	E04_3-6	E05_3-6	G02_0.5-3	G04_10-11	H07_0.5-3
CONSTITUENT	DATE	12/15/2005	12/06/2005	12/19/2005	12/06/2005	12/13/2005	12/14/2005
	DEPTH (ft)	7.00	4.50	4.50	1.75	10.50	1.75
Acetone	(ug/kg)						
Benzene	(ug/kg)						
Carbon Disulfide	(ug/kg)						
Methylene chloride	(ug/kg)						
Naphthalene	(ug/kg)						
Toluene	(ug/kg)						
Benzo(a)anthracene	(ug/kg)						
Benzo(a)pyrene	(ug/kg)						
Benzo(b)fluoranthene	(ug/kg)						
Benzo(ghi)perylene	(ug/kg)						
Benzo(k)fluoranthene	(ug/kg)						
Indeno(1,2,3-cd)pyrene	(ug/kg)						
Chrysene	(ug/kg)						
Dibenzo(a,h)anthracene	(ug/kg)						
Fluoranthene	(ug/kg)						
Phenanthrene	(ug/kg)						
Pyrene	(ug/kg)						
Arsenic	(mg/kg)	6.0	44.2	<116U	812	9.2	19.5
Barium	(mg/kg)	22.2	106	382	33.9	87.1	58.9
Cadmium	(mg/kg)	1.3N	<6.0UN	<58.2UN	0.88N	1.1N	<5.3UN
Chromium	(mg/kg)	15.9N	19.7N	<116UN	469N	21.2N	16.7N

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Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	D02	E04	E05	G02	G04	H07
	SAMPLE ID	D02_6-8	E04_3-6	E05_3-6	G02_0.5-3	G04_10-11	H07_0.5-3
CONSTITUENT	DATE	12/15/2005	12/06/2005	12/19/2005	12/06/2005	12/13/2005	12/14/2005
	DEPTH (ft)	7.00	4.50	4.50	1.75	10.50	1.75
Copper	(mg/kg)	33.2	<24.1U	<233U	876	30.6	28.7
Lead	(mg/kg)	13.9N	77.2N	<582UN	30.6N	78.7N	<53.5UN
Mercury	(mg/kg)	<0.04U	<0.04U	<0.04U	0.13	0.66	0.12
Silver	(mg/kg)	<1.1U	<12.0U	<116U	<1.1U	<1.4U	<10.7U
Arsenic (TCLP)	(ug/l)	<500U	<500U		1590		
Barium (TCLP)	(ug/l)	<1000U	<1000U		<1000U		

AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

	SITE	109	L04	Q06	S04	T10	U05
	SAMPLE ID	109_2-5	L04_0.5-3	Q06_1-3	S04_2-3	T10_0.5-3	U05_4-8
CONSTITUENT	DATE	12/19/2005	12/13/2005	12/01/2005	12/13/2005	12/15/2005	12/08/2005
	DEPTH (ft)	3.50	1.75	2.00	2.50	1.75	6.00
Acetone	(ug/kg)						
Benzene	(ug/kg)						<5.8U
Carbon Disulfide	(ug/kg)						
Methylene chloride	(ug/kg)						
Naphthalene	(ug/kg)						[160]J ?
Toluene	(ug/kg)						<5.8U
Benzo(a)anthracene	(ug/kg)						<380U
Benzo(a)pyrene	(ug/kg)						<380U
Benzo(b)fluoranthene	(ug/kg)						<380U
Benzo(ghi)perylene	(ug/kg)						<380U
Benzo(k)fluoranthene	(ug/kg)						<380U
Indeno(1,2,3-cd)pyrene	(ug/kg)						<380U
Chrysene	(ug/kg)						<380U
Dibenzo(a,h)anthracene	(ug/kg)						<380U
Fluoranthene	(ug/kg)						<380U
Phenanthrene	(ug/kg)						<380U
Pyrene	(ug/kg)						<380U
Arsenic	(mg/kg)	66.7N	21.4	44.4	11.0	36.1	
Barium	(mg/kg)	175	92.9	142	22.1	121	
Cadmium	(mg/kg)	<12.4U	<2.8UN	<11.8UN	1.9N	<1.4UN	
Chromium	(mg/kg)	<24.7U	12.7N	<23.6UN	20.2N	9.2N	

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AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	109 109_2-5 12/19/2005 3.50	L04 L04_0.5-3 12/13/2005 1.75	Q06 Q06_1-3 12/01/2005 2.00	S04 S04_2-3 12/13/2005 2.50	T10 T10_0.5-3 12/15/2005 1.75	U05 U05_4-8 12/08/2005 6.00
Copper	(mg/kg)	<49.4U	44.2	81.9	56.3	33.8	
Lead	(mg/kg)	<124U	55.2N	<118UN	19.2N	40.3N	
Mercury	(mg/kg)	<0.04U	0.04	1.0	0.08	0.18	
Silver	(mg/kg)	<24.7U	<5.6U	<23.6U	<1.1U	<2.7U	
Arsenic (TCLP)	(ug/l)					<500U	
Barium (TCLP)	(ug/l)					1090	

AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	U06 U06_6-8 12/07/2005 7.00	V09 V09_3-6 12/19/2005 4.50	Y12 Y12_0.5-4 12/07/2005 2.25	Z09 Z09_3-6 12/15/2005 4.50
Acetone	(ug/kg)				
Benzene	(ug/kg)	<6.2U			
Carbon Disulfide	(ug/kg)				
Methylene chloride	(ug/kg)				
Naphthalene	(ug/kg)	<6.2U ?			
Toluene	(ug/kg)	<6.2U			
Benzo(a)anthracene	(ug/kg)	<410U			
Benzo(a)pyrene	(ug/kg)	<410U			
Benzo(b)fluoranthene	(ug/kg)	<410U			
Benzo(ghi)perylene	(ug/kg)	<410U			
Benzo(k)fluoranthene	(ug/kg)	<410U			
Indeno(1,2,3-cd)pyrene	(ug/kg)	<410U			
Chrysene	(ug/kg)	<410U			
Dibenzo(a,h)anthracene	(ug/kg)	<410U			
Fluoranthene	(ug/kg)	[72]J			
Phenanthrene	(ug/kg)	[140]J			
Pyrene	(ug/kg)	[120]J			
Arsenic	(mg/kg)		6.2	31.4	24.5
Barium	(mg/kg)		34.1	107	117
Cadmium	(mg/kg)		5.0N	2.1N	1.2N
Chromium	(mg/kg)		9.9N	26.0N	13.6N

?=Duplicate records found, Data review required. [x]=Less than Reporting Limit ----=Not analyzed

AC Dutton

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	U06 U06_6-8 12/07/2005 7.00	V09 V09_3-6 12/19/2005 4.50	Y12 Y12_0.5-4 12/07/2005 2.25	Z09 Z09_3-6 12/15/2005 4.50
Copper	(mg/kg)		46.8	60.3	35.0
Lead	(mg/kg)		26.5N	328N	125N
Mercury	(mg/kg)		0.04	0.22	0.20
Silver	(mg/kg)		1.2	<1.4U	<1.2U
Arsenic (TCLP)	(ug/l)				
Barium (TCLP)	(ug/l)				

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE		DATE / TIME	DEP	ТН				
LAB METHC	D PF	RES TYPE						
CONSTITUENT					ACTION LEVEL CODE	ACTION L	EVEL	TESTED CONCENTRATION
A03		12/15/2005	09:50	1.50				
CAS 6010E	Т	P01						
7440-43-9	Cadmium				NY-TAGM	1	mg/Kg	1.2 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4	mg/Kg	15.5 mg/Kg
7440-47-3	Chromium				NY-TAGM	10	mg/Kg	15.5 mg/Kg
7440-50-8	Copper				NY-TAGM	25	mg/Kg	40.3 mg/Kg
CAS 7470A	Т	P01						
7439-97-6	Mercury				NY-TAGM	0.1	mg/Kg	0.11 mg/Kg
4440		10/7/0005	00.20	0.00				
CAS 6010F	г	12/7/2005 P01	09:38	9.00				
7440-43-9	Cadmium				NY-TAGM	1	mg/Kg	1.5 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4	mg/Kg	20.4 mg/Kg
7440-47-3	Chromium				NY-RCUPGWD	19	mg/Kg	20.4 mg/Kg
7440-47-3	Chromium				NY-TAGM	10	mg/Kg	20.4 mg/Kg
7440-47-3	Chromium				NY-URCUPHD	19	mg/Kg	20.4 mg/Kg
7440-50-8	Copper				NY-TAGM	25	mg/Kg	44.2 mg/Kg
AA10	. т	12/7/2005 P01	09:48	13.00				
71-43-2	Benzene	101			NY-FOTOTAL	14	daa	36 ua/Ka
71-43-2	Benzene				NY-GASTOT	14	daa	36 ua/Ka
75-09-2	Dichloromet	hane			NY-RCUPGWD	0.05	mg/Kg	110 ug/Kg
75-09-2	Dichloromet	hane			NY-TAGM	0.1	mg/Kg	110 ug/Kg
75-09-2	Dichloromet	hane			NY-URCUPHD	0.05	mg/Kg	110 ug/Kg
CAS 82700	т ;	P01						
50-32-8	Benzo(a)pyr	rene			NY-FOHH	61	ppb	260 ug/Kg
50-32-8	Benzo(a)pyr	rene			NY-FOIOIAL	0.04	ррр	260 ug/Kg
50-32-8	Benzo(a)pyr	rene			NY-TAGM	0.061	mg/Kg	260 ug/Kg
53-70-3	Dibenz(a,h)	anthracene			NY-FOHH	14	ррр	37 ug/Kg
53-70-3	Dibenz(a,h)	anthracene			NY-TAGM	0.014	mg/Kg	37 ug/Kg
56-55-3	Benz(a)anth	iracene			NY-FOHH	220	ppb	280 ug/Kg
56-55-3	Benz(a)anth	iracene			NY-FOTOTAL	0.04	ppb	280 ug/Kg
56-55-3	Benz(a)anth	iracene			NY-TAGM	0.224	mg/Kg	280 ug/Kg
191-24-2	Benzo(g,h,i)	perylene			NY-FOTOTAL	0.04	ppb	160 ug/Kg
193-39-5	Indeno(1,2,3	3-cd)pyrene			NY-FOTOTAL	0.04	ppb	92 ug/Kg
205-99-2	Benzo(b)flue	oranthene			NY-FOTOTAL	0.04	ppb	160 ug/Kg

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE		DATE / TIME	DEF	ТН				
LAB METHO	D PF	RES TYPE						
CONSTITUENT					ACTION LEVEL CODE	ACTION L	EVEL	TESTED CONCENTRATION
207-08-9	Benzo(k)fluo	ranthene			NY-FOTOTAL	0.04	ppb	160 ug/Kg
218-01-9	Chrysene				NY-FOTOTAL	0.04	ppb	240 ug/Kg
AA11		12/8/2005	14:30	12.50				
CAS 82700	; т	P01						
50-32-8	Benzo(a)pyre	ene			NY-FOHH	61	ppb	210 ug/Kg
50-32-8	Benzo(a)pyre	ene			NY-FOTOTAL	0.04	ppb	210 ug/Kg
50-32-8	Benzo(a)pyre	ene			NY-TAGM	0.061	mg/Kg	210 ug/Kg
56-55-3	Benz(a)anthi	racene			NY-FOTOTAL	0.04	ppb	200 ug/Kg
191-24-2	Benzo(g,h,i)	perylene			NY-FOTOTAL	0.04	ppb	170 ug/Kg
193-39-5	Indeno(1,2,3	-cd)pyrene			NY-FOTOTAL	0.04	ppb	160 ug/Kg
205-99-2	Benzo(b)fluc	oranthene			NY-FOTOTAL	0.04	ppb	180 ug/Kg
207-08-9	Benzo(k)fluo	ranthene			NY-FOTOTAL	0.04	ppb	220 ug/Kg
218-01-9	Chrysene				NY-FOTOTAL	0.04	ppb	200 ug/Kg
B03	т	12/15/2005 P01	09:00	0.25				
7440-38-2	Arsenic	FUI			NY-CUERD	13	ma/Ka	18.2 ma/Ka
7440-38-2	Arsenic				NY-RCUPGWD	16	mg/Kg	18.2 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16	mg/Kg	18.2 mg/Kg
7440-38-2	Arsenic					16	mg/Kg	18.2 mg/Kg
7440-38-2	Arsenic				NY-RCUPERD	16	mg/Kg	18.2 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5	ma/Ka	18.2 mg/Kg
7440-38-2	Arsonic					1.5	mg/Kg	18.2 mg/Kg
7440-47-3	Chromium				NY-CLIERD	0.4	mg/Kg	13.9 mg/Kg
7440-47-3	Chromium				NY-TAGM	10	mg/Kg	13.9 mg/Kg
7440-47-5	Chiomun				NT-TAGM	10	iiig/itg	13.9 mg/rg
C04		12/6/2005	09:10	1.75				
CAS 6010B	Т	P01						
7440-38-2	Arsenic				NY-TAGM	7.5	mg/Kg	7.8 mg/Kg
7440-43-9	Cadmium				NY-TAGM	1	mg/Kg	1.1 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4	mg/Kg	8.5 mg/Kg
7440-50-8	Copper				NY-CUERD	50	mg/Kg	50.1 mg/Kg
7440-50-8	Copper				NY-TAGM	25	mg/Kg	50.1 mg/Kg
CAS 7470A	Т	P01						
7439-97-6	Mercury				NY-TAGM	0.1	mg/Kg	0.12 mg/Kg
D02		12/15/2005	14:15	7.00				

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE			DATE / TIME	DEP'	TH				
LAB	METHO	D PF	RES TYPE						
CONSTITUE	ENT					ACTION LEVEL CODE	ACTION L	_EVEL	TESTED CONCENTRATION
CAS	6010B	Т	P01						
7440-43-9)	Cadmium				NY-TAGM	1	mg/Kg	1.3 mg/Kg
7440-47-3	3	Chromium				NY-CUERD	0.4	mg/Kg	15.9 mg/Kg
7440-47-3	3	Chromium				NY-TAGM	10	mg/Kg	15.9 mg/Kg
7440-50-8	3	Copper				NY-TAGM	25	mg/Kg	33.2 mg/Kg
E04			12/6/2005	00.20	4 50				
CAS	6010B	Т	P01	09:30	4.50				
7439-92-1		Lead				NY-CUERD	63	mg/Kg	77.2 mg/Kg
7440-38-2	2	Arsenic				NY-CUERD	13	mg/Kg	44.2 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPGWD	16	mg/Kg	44.2 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPRCD	16	mg/Kg	44.2 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPRID	16	mg/Kg	44.2 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPRRD	16	mg/Kg	44.2 mg/Kg
7440-38-2	2	Arsenic				NY-TAGM	7.5	mg/Kg	44.2 mg/Kg
7440-38-2	2	Arsenic				NY-URCUPHD	16	mg/Kg	44.2 mg/Kg
7440-47-3	3	Chromium				NY-CUERD	0.4	mg/Kg	19.7 mg/Kg
7440-47-3	3	Chromium				NY-RCUPGWD	19	mg/Kg	19.7 mg/Kg
7440-47-3	3	Chromium				NY-TAGM	10	mg/Kg	19.7 mg/Kg
7440-47-3	3	Chromium				NY-URCUPHD	19	mg/Kg	19.7 mg/Kg
_									
E05	6010B	т	12/19/2005 P01	13:10	4.50				
7440-39-3	3	Barium	101			NY-TAGM	300	ma/Ka	382 ma/Ka
7440-39-3	3	Barium				NY-URCUPHD	350	ma/Ka	382 ma/Ka
G02			12/6/2005	11:30	1.75				
CAS	6010B	T	P01				40		040
7440-38-2	2	Arsenic				NY-CUERD	13	mg/Kg	812 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPGWD	16	mg/Kg	812 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPRCD	16	mg/Kg	812 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPRID	16	mg/Kg	812 mg/Kg
7440-38-2	2	Arsenic				NY-RCUPRRD	16	mg/Kg	812 mg/Kg
7440-38-2	2	Arsenic				NY-TAGM	7.5	mg/Kg	812 mg/Kg
7440-38-2	2	Arsenic				NY-URCUPHD	16	mg/Kg	812 mg/Kg
7440-47-3	5	Chromium					0.4	mg/Kg	469 mg/Kg
7440-47-3	>	Chromium					19	mg/Kg	469 mg/Kg
7440-47-3)	Chromium				NY-KUUPKUD	400	mg/Kg	469 mg/Kg

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE		DATE / TIME	DEF	РΤΗ				
LAB MET	HOD PF	RES TYPE						
CONSTITUENT					ACTION LEVEL CODE	ACTION L	EVEL	TESTED CONCENTRATION
7440-47-3	Chromium				NY-RCUPRRD	110	mg/Kg	469 mg/Kg
7440-47-3	Chromium				NY-TAGM	10	mg/Kg	469 mg/Kg
7440-47-3	Chromium				NY-URCUPHD	19	mg/Kg	469 mg/Kg
7440-50-8	Copper				NY-CUERD	50	mg/Kg	876 mg/Kg
7440-50-8	Copper				NY-RCUPRCD	270	mg/Kg	876 mg/Kg
7440-50-8	Copper				NY-RCUPRRD	270	mg/Kg	876 mg/Kg
7440-50-8	Copper				NY-TAGM	25	mg/Kg	876 mg/Kg
7440-50-8	Copper				NY-URCUPHD	270	mg/Kg	876 mg/Kg
CAS 74	т 407	D01						
7439-97-6	Mercury	FUI			NY-TAGM	0.1	ma/Ka	0.13 ma/Ka
1433-31-0	Weredry					0.1	ing/itg	0.13 mg/kg
G04		12/13/2005	12:28	10.50				
CAS 60	10B T	P01						
7439-92-1	Lead				NY-CUERD	63	mg/Kg	78.7 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5	mg/Kg	9.2 mg/Kg
7440-43-9	Cadmium				NY-TAGM	1	mg/Kg	1.1 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4	mg/Kg	21.2 mg/Kg
7440-47-3	Chromium				NY-RCUPGWD	19	mg/Kg	21.2 mg/Kg
7440-47-3	Chromium				NY-TAGM	10	mg/Kg	21.2 mg/Kg
7440-47-3	Chromium				NY-URCUPHD	19	mg/Kg	21.2 mg/Kg
7440-50-8	Copper				NY-TAGM	25	mg/Kg	30.6 mg/Kg
CAS 747	70A T	P01						
7439-97-6	Mercury				NY-TAGM	0.1	mg/Kg	0.66 mg/Kg
H07		12/14/2005	09:10	1.75				
7440-38-2	Arsenic	PUI			NY-CUERD	13	ma/Ka	19.5 ma/Ka
7440-38-2	Arsenic				NY-RCUPGWD	16	ma/Ka	19.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16	ma/Ka	19.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPRID	16	ma/Ka	19.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPRRD	16	ma/Ka	19.5 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5	ma/Ka	19.5 mg/Kg
7440-38-2	Arsenic				NY-URCUPHD	16	ma/Ka	19.5 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4	mg/Kg	16.7 mg/Kg
7440-47-3	Chromium				NY-TAGM	10	ma/Ka	16.7 mg/Kg
7440-50-8	Copper				NY-TAGM	25	mg/Kg	28.7 mg/Kg
1 ++0 00 0	Coppor					20		20.7 mg/Ng

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE		DATE / TIME	DEP.	TH			
LAB METH	OD PF	RES TYPE					
CONSTITUENT					ACTION LEVEL CODE	ACTION LEVEL	TESTED CONCENTRATION
CAS 7470	A T	P01					
7439-97-6	Mercury				NY-TAGM	0.1 mg/Kg	g 0.12 mg/Kg
109		12/19/2005	11:45	3.50			
CAS 6010	В Т	P01					
7440-38-2	Arsenic				NY-CUERD	13 mg/Kg	g 66.7 mg/Kg
7440-38-2	Arsenic				NY-RCUPGWD	16 mg/Kg	g 66.7 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16 mg/Kg	g 66.7 mg/Kg
7440-38-2	Arsenic				NY-RCUPRID	16 mg/Kថ	g 66.7 mg/Kg
7440-38-2	Arsenic				NY-RCUPRRD	16 mg/Kg	g 66.7 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5 mg/Kg	g 66.7 mg/Kg
7440-38-2	Arsenic				NY-URCUPHD	16 mg/Kg	g 66.7 mg/Kg
L04		12/13/2005	14:12	1.75			
CAS 6010	B T	P01					
7440-38-2	Arsenic				NY-CUERD	13 mg/Kg	g 21.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPGWD	16 mg/Kg	g 21.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16 mg/Kg	g 21.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRID	16 mg/Kg	g 21.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRRD	16 mg/Kg	g 21.4 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5 mg/Kg	g 21.4 mg/Kg
7440-38-2	Arsenic				NY-URCUPHD	16 mg/Kg	g 21.4 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4 mg/Kg	g 12.7 mg/Kg
7440-47-3	Chromium				NY-TAGM	10 mg/Kg	g 12.7 mg/Kg
7440-50-8	Copper				NY-TAGM	25 mg/Kg	g 44.2 mg/Kg
Q06		12/1/2005	14:20	2.00			
CAS 6010	в т	P01					
7440-38-2	Arsenic				NY-CUERD	13 mg/Kg	g 44.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPGWD	16 mg/Kg	g 44.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16 mg/Kg	g 44.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRID	16 mg/Kg	g 44.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRRD	16 mg/Kg	g 44.4 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5 mg/Kg	g 44.4 mg/Kg
7440-38-2	Arsenic				NY-URCUPHD	16 mg/Kg	g 44.4 mg/Kg
7440-50-8	Copper				NY-CUERD	50 mg/Kg	g 81.9 mg/Kg
7440-50-8	Copper				NY-TAGM	25 mg/Kg	g 81.9 mg/Kg
CAS 7470	A T	P01					

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SAMPLE TYPE:	Soil
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SHE			DATE / TIME	DEP	ін				
LAB	METHO	D PF	RES TYPE						
CONSTITU	UENT					ACTION LEVEL CODE	ACTION L	EVEL	TESTED CONCENTRATION
7439-97	' -6	Mercury				NY-RCUPGWD	0.73	mg/Kg	1.0 mg/Kg
7439-97	-6	Mercury				NY-RCUPRRD	0.81	mg/Kg	1.0 mg/Kg
7439-97	-6	Mercury				NY-TAGM	0.1	mg/Kg	1.0 mg/Kg
7439-97	-6	Mercury				NY-URCUPHD	0.73	mg/Kg	1.0 mg/Kg
S04 CAS	6010B	т	12/13/2005 P01	13:25	2.50				
7440-38	-2	Arsenic	101			NY-TAGM	7.5	ma/Ka	11.0 ma/Ka
7440-43	-9	Cadmium				NY-TAGM	1	ma/Ka	1.9 mg/Kg
7440-47	-3	Chromium				NY-CUERD	0.4	mg/Kg	20.2 mg/Kg
7440-47	-3	Chromium				NY-RCUPGWD	19	mg/Kg	20.2 mg/Kg
7440-47	'- 3	Chromium				NY-TAGM	10	mg/Kg	20.2 mg/Kg
7440-47	-3	Chromium				NY-URCUPHD	19	mg/Kg	20.2 mg/Kg
7440-50	-8	Copper				NY-CUERD	50	mg/Kg	56.3 mg/Kg
7440-50	-8	Copper				NY-TAGM	25	mg/Kg	56.3 mg/Kg
T10 CAS	6010B	Г	12/15/2005 P01	13:14	1.75				
7440-38	-2	Arsenic				NY-CUERD	13	mg/Kg	36.1 mg/Kg
7440-38	-2	Arsenic				NY-RCUPGWD	16	mg/Kg	36.1 mg/Kg
7440-38	-2	Arsenic				NY-RCUPRCD	16	mg/Kg	36.1 mg/Kg
7440-38	-2	Arsenic				NY-RCUPRID	16	mg/Kg	36.1 mg/Kg
7440-38	-2	Arsenic				NY-RCUPRRD	16	mg/Kg	36.1 mg/Kg
7440-38	-2	Arsenic				NY-TAGM	7.5	mg/Kg	36.1 mg/Kg
7440-38	-2	Arsenic				NY-URCUPHD	16	mg/Kg	36.1 mg/Kg
7440-47	-3	Chromium				NY-CUERD	0.4	mg/Kg	9.2 mg/Kg
7440-50	-8	Copper				NY-TAGM	25	mg/Kg	33.8 mg/Kg
CAS	74704	г	D01						
7439-97	7470A	Mercury	FUI			NY-TAGM	0.1	ma/Ka	0.18 ma/Ka
	Ū						011		0.10
V09			12/19/2005	08:30	4.50				
CAS	6010B	T	P01						
7440-43	-9	Cadmium				NY-CUERD	4	mg/Kg	5.0 mg/Kg
7440-43	-9	Cadmium				NY-RCUPRRD	4.3	mg/Kg	5.0 mg/Kg
7440-43	-9	Cadmium				NY-TAGM	1	mg/Kg	5.0 mg/Kg
7440-43	-9	Cadmium				NY-URCUPHD	2.5	mg/Kg	5.0 mg/Kg
7440-47	-3	Chromium				NY-CUERD	0.4	mg/Kg	9.9 mg/Kg

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE		DATE / TIME	DEPT	ſΉ			
LAB METHO	D PF	RES TYPE					
CONSTITUENT					ACTION	ACTION LEVEL	TESTED
					LEVEL CODE		CONCENTRATION
7440-50-8	Copper				NY-TAGM	25 mg/Kg	46.8 mg/Kg
		10/7/2005	1150	0.05			
Y12 CAS 6010B	Т	12/7/2005 P01	14:50	2.25			
7439-92-1	Lead	101			NY-CUERD	63 mg/Kg	328 mg/Kg
7440-38-2	Arsenic				NY-CUERD	13 mg/Kg	31.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPGWD	16 mg/Kg	31.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16 mg/Kg	31.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRID	16 mg/Kg	31.4 mg/Kg
7440-38-2	Arsenic				NY-RCUPRRD	16 mg/Kg	31.4 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5 mg/Kg	31.4 mg/Kg
7440-38-2	Arsenic				NY-URCUPHD	16 mg/Kg	31.4 mg/Kg
7440-43-9	Cadmium				NY-TAGM	1 mg/Kg	2.1 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4 mg/Kg	26.0 mg/Kg
7440-47-3	Chromium				NY-RCUPGWD	19 mg/Kg	26.0 mg/Kg
7440-47-3	Chromium				NY-TAGM	10 mg/Kg	26.0 mg/Kg
7440-47-3	Chromium				NY-URCUPHD	19 mg/Kg	26.0 mg/Kg
7440-50-8	Copper				NY-CUERD	50 mg/Kg	60.3 mg/Kg
7440-50-8	Copper				NY-TAGM	25 mg/Kg	60.3 mg/Kg
CAS 7470A	T	P01					
7439-97-6	Mercury				NY-TAGM	0.1 mg/Kg	0.22 mg/Kg
Z09		12/15/2005	09:12	4.50			
CAS 6010B	Т	P01					
7439-92-1	Lead				NY-CUERD	63 mg/Kg	125 mg/Kg
7440-38-2	Arsenic				NY-CUERD	13 mg/Kg	24.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPGWD	16 mg/Kg	24.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPRCD	16 mg/Kg	24.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPRID	16 mg/Kg	24.5 mg/Kg
7440-38-2	Arsenic				NY-RCUPRRD	16 mg/Kg	24.5 mg/Kg
7440-38-2	Arsenic				NY-TAGM	7.5 mg/Kg	24.5 mg/Kg
7440-38-2	Arsenic				NY-URCUPHD	16 mg/Kg	24.5 mg/Kg
7440-43-9	Cadmium				NY-TAGM	1 mg/Kg	1.2 mg/Kg
7440-47-3	Chromium				NY-CUERD	0.4 mg/Kg	13.6 mg/Kg
7440-47-3	Chromium				NY-TAGM	10 mg/Kg	13.6 mg/Kg
7440-50-8	Copper				NY-TAGM	25 mg/Kg	35.0 mg/Kg

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive

SITE			DATE / TIME	DEPTH			
LAB	METHOD	PF	RES TYPE				
CONSTIT	UENT				ACTION LEVEL CODE	ACTION LEVEL	TESTED CONCENTRATION
CAS	7470A	Т	P01				
7439-97	7-6 Mer	cury			NY-TAGM	0.1 mg/Kg	0.20 mg/Kg

PERIOD:	From 12	/01/2005 thr	u 12/19/2005 - Inclusive
SAMPLE TY	PE:	Soil	

		SAMPLED				TIME	HELD (da	ays)		
SITE	DATE	TIME	DEPTH	SET	C->E	E->A	C->A	R->E	R->A	
* LAB / METHOD / PF/RES TYPE: *	CAS / 6010B /	C / P01			0	0	190	0	0	
4410	12/07/2005	00.38	0.00	1	0	1	100	0	10	
R02	12/07/2005	09.50	9.00	1	0	1	41	0	10	
D03	12/15/2005	14.15	0.25	1	0	1	33	0	10	
B02	12/15/2005	00.20	7.00	1	0	1	32	0	10	
C02	12/06/2005	11.20	4.50	1	0	1	42	0	10	
502 T10	12/06/2005	12.14	1.75	1	0	1	42	0	10	
110	12/15/2005	13.14	1.75	I	0	I	32	0	10	
* LAB / METHOD / PF/RES TYPE:	CAS / 6010B /	T / P01								
*	0,10,00,001,02,	Α		DING TIMES:	0	0	180	0	0	
A03	12/15/2005	09:50	1.50	1	0	1	36	0	10	
AA10	12/07/2005	09:38	9.00	1	0	1	44	0	13	
B03	12/15/2005	09:00	0.25	1	0	1	40	0	17	
C04	12/06/2005	09:10	1.75	1	0	1	45	0	13	
D02	12/15/2005	14:15	7.00	1	0	1	36	0	13	
E04	12/06/2005	09:30	4.50	1	0	1	49	0	17	
E05	12/19/2005	13:10	4.50	1	0	1	36	0	17	
G02	12/06/2005	11:30	1.75	1	0	1	49	0	17	
G04	12/13/2005	12:28	10.50	1	0	1	38	0	13	
H07	12/14/2005	09:10	1.75	1	0	1	41	0	17	
109	12/19/2005	11:45	3.50	1	0	1	39	0	21	
L04	12/13/2005	14:12	1.75	1	0	1	42	0	18	
Q06	12/01/2005	14:20	2 00	1	0	1	54	0	17	
S04	12/13/2005	13:25	2.50	1	0	1	38	0	14	
T10	12/15/2005	13:14	1.75	1	0	1	40	0	17	
V09	12/19/2005	08:30	4.50	1	0	1	32	0	13	
Y12	12/07/2005	14:50	2.25	1	0	1	44	0	10	
Z09	12/15/2005	09:12	4.50	1	0	1	36	0	10	
* LAB / METHOD / PF/RES TYPE:	CAS / 7470A /	C / P01								
*		A	LLOWED HOLD	DING TIMES:	0	0	28	0	0	
AA10	12/07/2005	09:38	9.00	1	0	1	40	0	10	
B03	12/15/2005	09:00	0.25	1	0	1	32	0	10	
D02	12/15/2005	14:15	7.00	1	0	1	32	0	10	
E04	12/06/2005	09:30	4.50	1	0	1	41	0	10	
G02	12/06/2005	11:30	1.75	1	0	1	41	0	10	
T10	12/15/2005	13:14	1.75	1	0	1	32	0	10	
* LAB / METHOD / PF/RES TYPE:	CAS / 7470A /	T / P01			0	0	20	0	0	
۸03	10/15/0005	00.50	1 50	1	0	0	20	0	0	
A A 10	12/15/2005	00.20	0.00	1	0	1	30	0	3	
B03	12/07/2005	09.30	9.00	1	0	1	30	0	7	
505	12/15/2005	09.00	0.25	1	0	1	30	0	/	
				C-> R-> E->/ C->/ R->/	E = Collecti E = Lab Re A = Extraction A = Collecti A = Lab Re	on to Extrac ceipt to Extra on to Analys on to Analys ceipt to Anal	tion act is is ysis			

PERIOD:	From 1	2/01/2005 t	hru 12/19	/2005 -	Inclusive
SAMPLE T	YPE:	Soil			

		SAMPLED				TIME	E HELD (da	ays)		
SITE	DATE	TIME	DEPTH	SET	C->E	E->A	C->A	R->E	R->A	
C04	12/06/2005	09:10	1.75	1	0	1	39	0	7	
D02	12/15/2005	14:15	7.00	1	0	1	30	0	7	
E04	12/06/2005	09:30	4.50	1	0	1	39	0	7	
E05	12/19/2005	13:10	4.50	1	0	1	26	0	7	
G02	12/06/2005	11:30	1.75	1	0	1	39	0	7	
G04	12/13/2005	12:28	10.50	1	0	1	32	0	7	
H07	12/14/2005	09:10	1.75	1	0	1	31	0	7	
109	12/19/2005	11:45	3.50	1	0	1	26	0	7	
L04	12/13/2005	14:12	1.75	1	0	1	31	0	7	
Q06	12/01/2005	14:20	2.00	1	0	1	43	0	7	
S04	12/13/2005	13:25	2.50	1	0	1	32	0	7	
T10	12/15/2005	13:14	1.75	1	0	1	30	0	7	
V09	12/19/2005	08:30	4.50	1	0	1	26	0	7	
Y12	12/07/2005	14:50	2.25	1	0	1	37	0	3	
Z09	12/15/2005	09:12	4.50	1	0	1	30	0	3	
* LAB / METHOD / PF/RES TYPE:	CAS / 8260B /	T / P01								
			ALLOWED HOLL	JING TIMES:	0	0	14	0	0	
AA10	12/07/2005	09:48	13.00	1	0	1	9	0	6	
AA11	12/08/2005	14:30	12.50	1	0	1	12	0	10	
U05	12/08/2005	10:08	6.00	1	0	1	12	0	10	
U06	12/07/2005	13:08	7.00	1	0	1	13	0	10	
* LAB / METHOD / PE/RES TYPE	CAC / 0070C /									
*	CAS/82/0C/	1/P01	ALLOWED HOLD	NG TIMES:	14	40	0	0	0	
AA10	12/07/2005	09.48	13.00	1	0	1	38	0	35	
AA11	12/08/2005	14.30	12.50	1	0	1	37	0	35	
105	12/08/2005	10:08	6.00	1	0	1	37	0	35	
U06	12/07/2005	13:08	7.00	1	0	1	38	0	35	
000	12/01/2000	10.00	1.00	,	U		00	U	55	

C->E = Collection to Extraction
R->E = Lab Receipt to Extract
E->A = Extraction to Analysis
C->A = Collection to Analysis
R->A = Lab Receipt to Analysis

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CASE			PF	ВАТСН	RESULT		SAMPLE	SAMPLE	SAMPLE	BLANK	FIELD SAMPLE	LAB SAMPLE
NO	LAB	METHOD	CODE	NO	TYPE	SITE	DATE	TIME	DEPTH	ID	ID	ID
01	CAS	160.3M	Т	124695	P01	AA10	12/7/2005	09:48	13.00		AA10_12-14	866487
01	CAS	160.3M	Т	124695	P01	AA11	12/8/2005	14:30	12.50		AA11_12-13	866486
01	CAS	160.3M	Т	124695	P01	U05	12/8/2005	10:08	6.00		U05_4-8	866488
01	CAS	160.3M	Т	124695	P01	U06	12/7/2005	13:08	7.00		U06_6-8	866489
01	CAS	160.3M	Т	125153	P01	AA10	12/7/2005	09:38	9.00		AA10_8-10	873210
01	CAS	160.3M	Т	125153	P01	B03	12/15/2005	09:00	0.25		B03_0-0.5	873208
01	CAS	160.3M	Т	125153	P01	C04	12/6/2005	09:10	1.75		C04_0.5-3	873211
01	CAS	160.3M	Т	125153	P01	D02	12/15/2005	14:15	7.00		D02_6-8	873209
01	CAS	160.3M	Т	125153	P01	E04	12/6/2005	09:30	4.50		E04_3-6	873205
01	CAS	160.3M	Т	125153	P01	E05	12/19/2005	13:10	4.50		E05_3-6	873213
01	CAS	160.3M	Т	125153	P01	G02	12/6/2005	11:30	1.75		G02_0.5-3	873206
01	CAS	160.3M	Т	125153	P01	G04	12/13/2005	12:28	10.50		G04_10-11	873215
01	CAS	160.3M	Т	125153	P01	H07	12/14/2005	09:10	1.75		H07_0.5-3	873217
01	CAS	160.3M	т	125153	P01	109	12/19/2005	11:45	3.50		109_2-5	873219
01	CAS	160.3M	Т	125153	P01	L04	12/13/2005	14:12	1.75		L04_0.5-3	873212
01	CAS	160.3M	Т	125153	P01	Q06	12/1/2005	14:20	2.00		Q06_1-3	873218
01	CAS	160.3M	Т	125153	P01	S04	12/13/2005	13:25	2.50		S04_2-3	873216
01	CAS	160.3M	Т	125153	P01	T10	12/15/2005	13:14	1.75		T10_0.5-3	873207
01	CAS	160.3M	Т	125153	P01	V09	12/19/2005	08:30	4.50		V09_3-6	873214
01	CAS	160.3M	Т	125167	P01	A03	12/15/2005	09:50	1.50		A03_0.5-2.5	873969
01	CAS	160.3M	Т	125167	P01	Y12	12/7/2005	14:50	2.25		Y12_0.5-4	873973
01	CAS	160.3M	т	125167	P01	Z09	12/15/2005	09:12	4.50		Z09_3-6	873970
						RESULT	TYPES: PP = 1 PD = PS = 3 BL = 1	Primary Duplicate Splits ∟ab Blank	BF = Field Blank BR = Rinsate Blank BT = Travel Blank BM = Method Blank	SF/SFD = I SL/SLD = I CB/CBD = CK/CKD =	Field Matrix Spike/Duplicate .ab Matrix Spike/Duplicate Blind Control Sample/Duplicat Know Control Sample/Duplicat	e le

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CASE NO	LAB	METHOD	PF CODE	BATCH NO	RESULT TYPE	SITE	SAMPLE DATE	SAMPLE TIME	SAMPLE DEPTH	BLANK ID	FIELD SAMPLE ID	LAB SAMPLE ID
01	CAS	6010B	С	42371	P01	AA10	12/7/2005	09:38	9.00		AA10_8-10	873225
01	CAS	6010B	С	42371	P01	B03	12/15/2005	09:00	0.25		B03_0-0.5	873223
01	CAS	6010B	С	42371	P01	D02	12/15/2005	14:15	7.00		D02_6-8	873224
01	CAS	6010B	С	42371	P01	E04	12/6/2005	09:30	4.50		E04_3-6	873220
01	CAS	6010B	С	42371	P01	G02	12/6/2005	11:30	1.75		G02_0.5-3	873221
01	CAS	6010B	С	42371	P01	T10	12/15/2005	13:14	1.75		T10_0.5-3	873222
01	CAS	6010B	т	2JAN19A	P01	A03	12/15/2005	09:50	1.50		A03_0.5-2.5	873969
01	CAS	6010B	т	2JAN19A	P01	AA10	12/7/2005	09:38	9.00		AA10_8-10	873210
01	CAS	6010B	т	2JAN19A	P01	C04	12/6/2005	09:10	1.75		C04_0.5-3	873211
01	CAS	6010B	т	2JAN19A	P01	D02	12/15/2005	14:15	7.00		D02_6-8	873209
01	CAS	6010B	т	2JAN19A	P01	G04	12/13/2005	12:28	10.50		G04_10-11	873215
01	CAS	6010B	т	2JAN19A	P01	S04	12/13/2005	13:25	2.50		S04_2-3	873216
01	CAS	6010B	т	2JAN19A	P01	V09	12/19/2005	08:30	4.50		V09_3-6	873214
01	CAS	6010B	Т	2JAN19A	P01	Y12	12/7/2005	14:50	2.25		Y12_0.5-4	873973
01	CAS	6010B	т	2JAN19A	P01	Z09	12/15/2005	09:12	4.50		Z09_3-6	873970
01	CAS	6010B	Т	2JAN23A	P01	B03	12/15/2005	09:00	0.25		B03_0-0.5	873208
01	CAS	6010B	т	2JAN23A	P01	E04	12/6/2005	09:30	4.50		E04_3-6	873205
01	CAS	6010B	Т	2JAN23A	P01	E05	12/19/2005	13:10	4.50		E05_3-6	873213
01	CAS	6010B	т	2JAN23A	P01	G02	12/6/2005	11:30	1.75		G02_0.5-3	873206
01	CAS	6010B	т	2JAN23A	P01	H07	12/14/2005	09:10	1.75		H07_0.5-3	873217
01	CAS	6010B	т	2JAN23A	P01	Q06	12/1/2005	14:20	2.00		Q06_1-3	873218
01	CAS	6010B	т	2JAN23A	P01	T10	12/15/2005	13:14	1.75		T10_0.5-3	873207
						RESULT	TYPES: PP = PD = PS = BL = I	Primary Duplicate Splits Lab Blank	BF = Field Blank BR = Rinsate Blank BT = Travel Blank BM = Method Blank	SF/SFD = SL/SLD = L CB/CBD = CK/CKD =	Field Matrix Spike/Duplicate .ab Matrix Spike/Duplicate Blind Control Sample/Duplicat Know Control Sample/Duplicat	e te

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PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CASE NO	LAB	METHOD	PF CODE	BATCH NO	RESULT TYPE	SITE	SAMPLE DATE	SAMPLE TIME	SAMPLE DEPTH	BLANK ID	FIELD SAMPLE ID	LAB SAMPLE ID
01	CAS	6010B	т	2JAN26A	P01	109	12/19/2005	11:45	3.50		109_2-5	873219
01	CAS	6010B	т	8768	P01	L04	12/13/2005	14:12	1.75		L04_0.5-3	873212
01	CAS	7470A	С	JAN_16WHG	P01	AA10	12/7/2005	09:38	9.00		AA10_8-10	873225
01	CAS	7470A	С	JAN_16WHG	P01	B03	12/15/2005	09:00	0.25		B03_0-0.5	873223
01	CAS	7470A	С	JAN_16WHG	P01	D02	12/15/2005	14:15	7.00		D02_6-8	873224
01	CAS	7470A	С	JAN_16WHG	P01	E04	12/6/2005	09:30	4.50		E04_3-6	873220
01	CAS	7470A	С	JAN_16WHG	P01	G02	12/6/2005	11:30	1.75		G02_0.5-3	873221
01	CAS	7470A	С	JAN_16WHG	P01	T10	12/15/2005	13:14	1.75		T10_0.5-3	873222
01	CAS	7470A	т	JAN_13SHG	P01	A03	12/15/2005	09:50	1.50		A03_0.5-2.5	873969
01	CAS	7470A	т	JAN_13SHG	P01	AA10	12/7/2005	09:38	9.00		AA10_8-10	873210
01	CAS	7470A	т	JAN_13SHG	P01	B03	12/15/2005	09:00	0.25		B03_0-0.5	873208
01	CAS	7470A	т	JAN_13SHG	P01	C04	12/6/2005	09:10	1.75		C04_0.5-3	873211
01	CAS	7470A	т	JAN_13SHG	P01	D02	12/15/2005	14:15	7.00		D02_6-8	873209
01	CAS	7470A	т	JAN_13SHG	P01	E04	12/6/2005	09:30	4.50		E04_3-6	873205
01	CAS	7470A	т	JAN_13SHG	P01	E05	12/19/2005	13:10	4.50		E05_3-6	873213
01	CAS	7470A	т	JAN_13SHG	P01	G02	12/6/2005	11:30	1.75		G02_0.5-3	873206
01	CAS	7470A	т	JAN_13SHG	P01	G04	12/13/2005	12:28	10.50		G04_10-11	873215
01	CAS	7470A	т	JAN_13SHG	P01	H07	12/14/2005	09:10	1.75		H07_0.5-3	873217
01	CAS	7470A	т	JAN_13SHG	P01	109	12/19/2005	11:45	3.50		109_2-5	873219
01	CAS	7470A	т	JAN_13SHG	P01	L04	12/13/2005	14:12	1.75		L04_0.5-3	873212
01	CAS	7470A	т	JAN_13SHG	P01	Q06	12/1/2005	14:20	2.00		Q06_1-3	873218
01	CAS	7470A	т	JAN_13SHG	P01	S04	12/13/2005	13:25	2.50		S04_2-3	873216
						RESULT	TYPES: PP = PD = PS = BL = I	Primary Duplicate Splits Lab Blank	BF = Field Blank BR = Rinsate Bla BT = Travel Blank BM = Method Bla	SF/SFD = nk SL/SLD = I k CB/CBD = nk CK/CKD =	Field Matrix Spike/Duplicate Lab Matrix Spike/Duplicate Blind Control Sample/Duplica Know Control Sample/Duplica	ite ate

Poughkeepsie, New York

PERIOD: From 12/01/2005 thru 12/19/2005 - Inclusive SAMPLE TYPE: Soil

CASE NO	LAB	METHOD	PF CODE	BATCH NO	RESULT TYPE	SITE	SAMPLE DATE	SAMPLE TIME	SAMPLE DEPTH	BLANK ID	FIELD SAMPLE ID	LAB SAMPLE ID
01	CAS	7470A	Т	JAN_13SHG	P01	T10	12/15/2005	13:14	1.75		T10_0.5-3	873207
01	CAS	7470A	т	JAN_13SHG	P01	V09	12/19/2005	08:30	4.50		V09_3-6	873214
01	CAS	7470A	Т	JAN_13SHG	P01	Y12	12/7/2005	14:50	2.25		Y12_0.5-4	873973
01	CAS	7470A	Т	JAN_13SHG	P01	Z09	12/15/2005	09:12	4.50		Z09_3-6	873970
01	CAS	8260B	Т	124577	P01	AA10	12/7/2005	09:48	13.00		AA10_12-14	866487
01	CAS	8260B	Т	124577	P01	AA11	12/8/2005	14:30	12.50		AA11_12-13	866486
01	CAS	8260B	Т	124577	P01	U05	12/8/2005	10:08	6.00		U05_4-8	866488
01	CAS	8260B	Т	124577	P01	U06	12/7/2005	13:08	7.00		U06_6-8	866489
01	CAS	8270C	Т	125208	P01	AA10	12/7/2005	09:48	13.00		AA10_12-14	866487
01	CAS	8270C	Т	125208	P01	AA11	12/8/2005	14:30	12.50		AA11_12-13	866486
01	CAS	8270C	Т	125208	P01	U05	12/8/2005	10:08	6.00		U05_4-8	866488
01	CAS	8270C	Т	125208	P01	U06	12/7/2005	13:08	7.00		U06_6-8	866489

RESULT TYPES: PP = Primary PD = Duplicate PS = Splits

BL = Lab Blank

BF = Field Blank BR = Rinsate Blank BT = Travel Blank BM = Method Blank SF/SFD = Field Matrix Spike/Duplicate SL/SLD = Lab Matrix Spike/Duplicate CB/CBD = Blind Control Sample/Duplicate CK/CKD = Know Control Sample/Duplicate



APPENDIX E

FORMER A.C. DUTTON LUMBER FACILITY REMEDIAL INVESTIGATION REPORT

FISH & WILDLIFE RESOURCE IMPACT ANALYSIS

Fish and Wildlife Resource Impact Analysis Former A.C. Dutton Lumber Site

Poughkeepsie, New York

The O'Neill Group - Dutton, LLC

Poughkeepsie, New York

August 2007



Fuss & O'Neill of New York, P.C. 80 Washington Street, Suite 301 Poughkeepsie, New York 12601



Fish & Wildlife Resource Impact Analysis Former A.C. Dutton Site

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1.0 INTRODUCTION

A fish and wildlife exposure assessment has been conducted for the former A.C. Dutton Lumber Site as outlined in the New York State Department of Environmental Conservation's (NYSDEC) Draft DER-10: Technical Guidance for Site Investigation and Remediation. The purpose of a fish and wildlife resources impact analysis (FWRIA) is to identify actual or potential impacts to fish and wildlife resources from site contaminants of ecological concern.

The FWRIA is required for the subject Brownfields Cleanup Program (BCP) site based on the results of the FWRIA Decision Key, provided in <u>Appendix A</u>. According to the FWRIA Decision Key, the guidance for conducting a FWRIA found in DER-10 must be followed based on a number of site characteristics.

Most of the ground surface of the site is covered with concrete or asphalt pavement. There is an abandoned railroad track extending along the river through the site, however most of the railroad tracks have been removed. There is very little vegetation on the site, only occurring as opportunistic weeds and small shrubs growing through cracks in the pavement cover, between the abandoned railroad tracks and along the river edge. The river bank is heavily fortified with bulk heads, concrete blocks or abandoned steel, timber or concrete docking and boat mooring structures. As detailed in the sections below, the site is surrounded by urban development, except for the west side which abuts the Hudson River. The property is surrounded by fencing and there is very limited access to the site. There is a small creek, known as Kidney Creek, that historically extended east to west bisecting the site, however the creek is completely culverted within the site and there is no access to the creek. There are several large steel or masonry buildings at the site, which historically served as processing centers, temporary drying shelters and office buildings. There are also several concrete loading docks along the railroad tracks that once served to offload product from the former glassworks and treated limber.

Prior to 1913, site uses included an iron works and a glass works plant. The former glass works plant was reportedly located at the southern end of the parcel. As part of the glass works, there were several kilns at the site in which glass was fired. Historical and empirical data suggest that solidified kiln ash, periodically cleaned out of the kilns, was used as fill material at the site. Additionally, when the glass works building and loading dock were dismantled, this demolition debris was also utilized as fill. The former A.C. Dutton Lumber Company operated as a wholesale lumber company at the site beginning circa 1913. Pressure treatment of lumber using chromated copper arsenate (CCA) reportedly began in 1966.

At the A.C. Dutton facility, raw lumber material was brought into the site by truck, boat, and rail. Lumber was processed in either of the two on-site treatment plants, known as the northern and southern treatment plants. The lumber stock was then temporarily stored in a sheltered drip pad area and allowed to partially drip dry, and then transferred outside to large, open storage yards for additional drying.

The conventional understanding of this site is that arsenic, copper and chromium, contained in the CCA fluid, was discharged to ground surface as part of the drying process. It has been reported that the large open lumber yard was used to temporarily store freshly treated lumber during drying. While in the yard, CCA fluid likely dripped off the lumber directly to the concrete or asphalt pavement. Collection systems were not in place. The residual liquid



collected on the ground surface and was transported via overland flow to low spots in the site.

The floors in the treatment buildings, and most of the exterior areas of the site, are covered with approximately three inches of concrete and/or asphalt. CCA fluid came into contact with incidental soil and dust on the concrete surfaces, the liquid portion eventually evaporated and residual metals and dust accumulated on the concrete surface. In the treatment buildings, CCA fluid flowed or was swept into floor drains or out onto soil immediately adjacent to the treatment buildings.

Over time, CCA fluids likely absorbed into porous surfaces through cracks or breaks in the asphalt or concrete paving, and have impacted surface and near-surface soils under the concrete. Rainfall, surficial run-off and tide cycles that regularly flood portions of the site, all played roles in the accumulation, transport and leaching of metals from surface and near-surface soils.

2.0 FISH AND WILDLIFE RESOURCES

2.1 Fish & Wildlife Habitats

The area surrounding the subject site does not contain any critical habitats supporting threatened or endangered species. There are no New York State wetlands, or wild, scenic, or recreational rivers within the site boundaries.

The land cover type map provided as <u>Figure 1</u> indicates that emergent herbaceous wetlands exist along a small portion of the southeast shoreline. Additionally, The U.S. Fish & Wildlife Service's ECOS online mapping program shows a tidal wetland along the shoreline of the site (Class R1 and Code R1UBV). However, no wetland areas have been observed during multiple visits to the site. The river shoreline adjacent to the site is completely occupied by concrete, timber or steel bulkheads or abandoned docking structures. No NYSDEC regulated wetlands exist on or in the vicinity of the site.

There are no accessible freshwater streams or ponds present at the site (The culverted Kidney Creek is discussed in Section 1.0 above). There are no commercial fisheries near the site. The Hudson River is utilized almost exclusively as a commercial or recreational boating travel way, and is not used as a commercial fishing area. There are no aquaculture or fish/shellfish breeding operations within at least one half mile of the site. The site is completely surrounded by fencing and has extremely limited access. There is very little vegetation present at the site, and most of the property is covered with concrete or asphalt. Existing vegetation along the property boundaries was not observed to be stressed, dead, or dying. No leachate, other seeps, or exposed waste exists at the site.

The portion of the Hudson River which is adjacent to the subject site is classified as Class A, Standard A by the NYSDEC (Part 858.4, Table 1). The best usages of Class A waters are a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The waters shall be suitable for fish propagation and survival. Although the Hudson River is listed as a Class A Stream, there are active advisories to limit fish and shellfish consumption for the reach of the Hudson River near Poughkeepsie,
NY. These advisories are in place for polychlorinated biphenyl compounds (PCBs) and Dioxins (chemical by-products formed as a result of combustion processes such as waste incineration and burning fuels such as wood and coal), which have been documented to exist in fish in this area, and for cadmium and PCBs which are documented to exist in shellfish. None of these contaminants are a result of historical or current activities taking place at the subject site. No recorded fish kills or other instances of wildlife mortality are known to be associated with the subject site.

The majority of lands north, east and south of the site are developed urban land which would not sustain, nor be expected to sustain fish or other wildlife. The Hudson River, abutting the site to the west, effectively supports fish and wildlife. In addition, the Hudson River is a significantly resource to humans for a number of activities including hunting, recreational fishing, scientific research, and other recreational and economic activities. The City of Poughkeepsie, among multiple other municipalities, uses the Hudson River as a source of potable water.

The topographic map provided as <u>Figure 1</u> has been prepared to show fish and wildlife resources within one-half mile of the site. According to the NYS Department of State (DOS) Division of Coastal Resources, the only significant coastal fish and wildlife habitat within a one-half mile radius of the site is the Poughkeepsie Deepwater Habitat, which is located within the Hudson River between Hyde Park, NY and Marlboro, NY. The habitat exists at depths of 30 feet below the river surface to the river bottom, which in some places can reach 125 feet. The deepwater areas are known to provide a wintering habitat for shortnose sturgeon. A variety of other estuarine and marine species appear in numbers in this habitat, including bay anchovies, silversides, bluefish, weakfish, and hogchokers. A Coastal Fish & Wildlife Habitat Rating Form, published by the DOS Department of Coastal Resources, is provided as <u>Appendix B</u>.

2.2 Land Cover Within One-Half Mile of the Site

A 2001 National Land Cover Database (NLCD) cover type map obtained from the Multi-Resolution Land Characteristics (MRLC) Consortium viewer shows that the A.C. Dutton property is comprised of developed open space, developed medium intensity and developed high intensity areas. Adjoining lands within one-half mile of the site include open water, developed open space, developed low intensity, developed medium intensity, developed high intensity, pasture/hay, and emergent herbaceous wetlands. The map is provided as <u>Figure 2</u>. Descriptions of these land cover types are as follows:

Developed, Open Space – This land cover designation represents areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20 percent of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.

Developed, Medium Intensity – This land cover includes areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50-79 percent of the total cover. These areas most commonly include single-family housing units.



Developed, High Intensity - Includes highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses and commercial/industrial. Impervious surfaces account for 80 to100 percent of the total cover.

Emergent Herbaceous Wetlands - Areas where perennial herbaceous vegetation accounts for greater than 80 percent of vegetative cover and the soil or substrate is periodically saturated with or covered with water. There are limited areas of this cover type indicated on various wetland maps, however no wetland areas have been observed at or near the site. There is a small area at the end of Hoffman Street near the A.C. Dutton entrance driveway that is at a low elevation. The area is sometimes flooded during high tide during the spring time or if heavy precipitation has recently occurred. However the area is covered with asphalt and does not contain vegetation.

Open Water - Areas of open water, generally with less than 25% cover of vegetation or soil. The Hudson River abuts the subject site to the west.

Developed, Low Intensity - Includes areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20-49 percent of total cover. These areas most commonly include single-family housing units.

Pasture/Hay - Areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20 percent of total vegetation. A very limited area northeast of the site consists of pasture/hay.

The area surrounding the subject site does not contain woodland habitats, fields, shellfish beds, or weed beds.

2.3 <u>Ecological Communities Within One-Half Mile of the Site</u>

According to "Draft Ecological Communities of New York State (Edinger et al. 2002), the A.C. Dutton Site is believed to be comprised of the following ecological communities, which are rated as shown:

System	Subsystem	Community	Global/State Element Rarity Rank	Significant Habitat?
Estuarine	Subtidal	Tidal River	G4/S3	Yes in Specific Areas
Estuarine	Cultural	Estuarine Riprap/ Artificial Shore	G5/S5	Not Likely
Terrestrial	Cultural	Railroad	G5/S5	Not Likely
Terrestrial	Cultural	Paved Road/Path	G5/S5	Not Likely
Terrestrial	Cultural	Urban Vacant Lot	G5/S5	Not Likely
Terrestrial	Cultural	Urban Structure Exterior	G5/S5	Not Likely

System	Subsystem	Community	Global/State Element Rarity Rank	Significant Habitat?
Terrestrial	Cultural	Mowed Lawn	G5/S5	Not Likely
Terrestrial	Cultural	Mowed Roadside	G5/S5	Not Likely

The most notable ecological community in the vicinity of the subject site is the Tidal River, or the Hudson River. Deepwater portions of the river are considered significant fish and wildlife habitats. Other ecological communities present within one-half mile of the site are those commonly associated with urban developed areas, including roads, railroads, mowed lawn, etc. It is not likely that any estuarine freshwater sub-tidal aquatic beds exist in the vicinity of the subject site, as the historically industrial area has deepwater shorelines.

The communities associated with urban areas generally have sparse or no vegetation. Examples of species that possibly exist in the other communities are as follows:

Community	Characteristic Species
Tidal River	Deepwater Fishes — Atlantic tomcod, hogchoker, rainbow smelt. Rare deepwater species — sturgeon. Shallow water fishes — striped bass, American shad, banded killifish, spottail shiner, tessellated darter, and pumpkinseed. Other fishes — bay anchovy, blueback herring, white perch, alewife.
Estuarine Riprap/ Artificial Shore	Sparse or none
Railroad	Sparse or none
Paved Road/Path	Sparse or none
Urban Vacant Lot	Trees, often naturalized exotic species – Norway maple, white mulberry, tree of heaven
Urban Structure Exterior	Birds – common nighthawk, American robin, rock dove, house sparrow
Mowed Lawn	Clipped grasses, less than 30% trees, less than 50% ornamental or native shrub cover. Birds — American robin, upland sandpiper, killdeer.
Mowed Roadside	Grasses, sedges and rushes; or forbs, vines, and low shrubs.

3.0 CONTAMINANTS OF ECOLOGICAL CONCERN

The contaminants present at the former A. C. Dutton site consist of metals including arsenic and chromium that were contained in the CCA fluid used to treat lumber. The NYSDEC's Draft DER-10 guidance document defines contaminants of ecological concern as site contaminants that meet any of the following criteria:

1. Exceed the NYSDEC Technical Guidance for Screening Contaminated Sediments;



- Exceed the NYSDEC surface water criteria in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 for type A(A), A(C), H(FC) or W waters;
- 3. Are known to bioaccumulate or biomagnify in the aquatic, marine or terrestrial food chain;
- 4. Exist at levels which result in toxic effects in biota; or
- 5. May contribute to the need for a health advisory for the consumption of fish or wildlife.
- 3.1 Contaminants in On-Site Soils

Analytical results for soils within the A.C. Dutton property were compared against restricted use soil cleanup objectives as outlined in ECL Part 375-6. The results are provided in <u>Table 1</u>. Several samples are in exceedance of the cleanup objectives for some metals; and some samples exceed for multiple metals. Since the intended remedial action for the property will mitigate all exposure pathways for metals in soils, the future impact to ecological resources will be eliminated or substantially reduced.

During the remedial investigation, limited areas of petroleum impacts were observed in site soils. These areas were limited to the vicinity of known above-ground and underground fuel storage tanks (USTs). The petroleum impacts were delineated horizontally and vertically by advancing test pits or soil borings around the suspected areas.

Only very low levels of volatile and semi-volatile organic compounds were detected in soil samples in limited areas of the site. For compounds where cleanup objectives were specified, the concentrations of contaminants detected are well below the cleanup objective (e.g. 36 ppb benzene in ACD-AA10 versus a cleanup objective of 70,000 ppb). For other contaminants, cleanup objectives were not derived based on the insignificant concentrations detected. As with the most significantly impacted metals in soils, the intended remedial action for the property will mitigate all exposure pathways for metals in soils, the future impact to ecological resources will be eliminated or substantially reduced.

3.2 <u>Contaminants in Sediment Adjacent to the Site</u>

Sediment contaminants of ecological concern primarily consist of heavy metals and persistent organic compounds (EPA, 1990). Metals originating from the former A. C. Dutton site include arsenic, chromium and copper that were contained in the CCA fluid used to treat lumber.

Chromium and copper were measured in site soils and sediments as total mass concentrations. For the five shallow sediment samples collected along the shoreline of the A.C. Dutton site, analytical results indicate that samples exhibited concentrations of metals including arsenic, cadmium, copper and lead that only slightly exceeded the lowest effect level (LEL) screening criteria. Four samples obtained exhibit concentrations of chromium and mercury that slightly exceeded the LEL. No results exceed the SEL criteria, or even reach 50% of the SEL.

Based on the historical and continuous use of the Hudson River for commercial and recreational boat traffic, it is likely that background concentrations of these metals in the Hudson River are at levels that already exceed SCG standards. Although there are

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concentrations of arsenic, chromium and copper that exceeded sediment criteria, there are also metals concentrations that exceed these standards that are not known to come from the A.C. Dutton site (cadmium, lead and mercury). The waterfront including and surrounding the site has been used for industrial purposes since its development, which over the long term may have resulted in generally elevated metal concentrations in sediment over the length of the Poughkeepsie waterfront.

A number of semi-volatile organic compounds (SVOCs) were detected in each of the sediment samples, specifically polycyclic aromatic hydrocarbons (PAHs). Of the PAHs detected, at least one compound from each of the samples was in exceedance of the chronic toxicity screening criteria. In four out of five samples, the concentration of benzo(a)anthracene is in exceedance of the acute toxicity screening criteria. Therefore, exposure to SVOC contaminants could occur. Exposure routes would include dermal contact or incidental ingestion. However, the likelihood of exposure is considered minimal due to the industrial nature of the site and limited access for use of the near shore area. It is expected that the sediment throughout the Hudson River may be impacted by contaminants commonly associated with other possible sources including the existing MGP site adjacent to the A.C. Dutton property, urban stormwater runoff and other unidentified sources along the river.

3.3 Surface Water Bodies

As detailed in Section 1.0, there is a small creek, known as Kidney Creek, that extends east to west across the site. Kidney Creek is completely culverted within the site boundaries (the creek is culverted through most of the City of Poughkeepsie). There is no access to and it is impossible for fish or wildlife to come into contact with the creek within the property boundaries. No surface water samples were obtained from the creek. There are no other creeks or ponds within or in the vicinity of the site.

4.0 MIGRATION AND EXPOSURE PATHWAYS

Migration of surficial dust or soil that is impacted with metals could occur by the mobilization of these soils in surface rainfall runoff or inundation by tidal overflow over portions of the site. Information obtained during the remedial investigation indicated that metals in site soils may have leached to groundwater only in limited areas of the site, in the vicinity of the southern treatment plant building.

Volatile and semi-volatile organic compounds related to site uses were observed in site soils. These areas were limited to the vicinity of known above-ground and underground fuel storage tanks (USTs). Volatile and semi-volatile organic compounds could be transported via groundwater toward the Hudson River, however the petroleum impacts were delineated horizontally and vertically by advancing test pits or soil borings around the suspected areas. The extent of petroleum impacts was defined and did not approach the river edge.

As detailed in Section 3.1, the intended remedial action for the property will mitigate all exposure pathways for metals in site soils and the future impact to ecological resources will be eliminated or substantially reduced.



Fish Exposure Pathways: Fish could be exposed to site contaminants via ingestion of, or contact with impacted sediment. However, as detailed above, there are no surface water features within the site boundaries. The Hudson River is adjacent to the site, but not part of the property. Contaminants detected in sediments adjacent to the site were found at concentrations that most likely would not result in adverse impacts to fish or wildlife. Metals concentrations only slightly exceeded the LEL criteria, and were well below the SEL levels. Samples for organic compounds did exhibit concentrations that exceeded criteria for benthic organisms, however these compounds were detected in samples from very shallow sediments. The presence of these compounds is most likely from the continuous use of the Hudson River as a commercial boating traffic way, and these compounds are not directly attributable to historic activities at the subject site.

Wildlife Exposure Pathways: Transient wildlife could possible come in contact with surficial dust or soils that are impacted with metals. Exposure could result from incidental ingestion or dermal contact. However, as detailed in Section 2.1, the site is nearly completely cut off from all access. The property is surrounded by chain-link fencing, and is bordered on the east by a steep slope. The property is surrounded by urban lands, which exhibit very little wildlife.

5.0 CONCLUSIONS

The Remedial Investigation and FWRIA have indicated that there are only limited pathways through which fish or wildlife could be exposed to potential contaminants of ecological concern related to former site activities.

Comparison of soil and sediment analytical data may suggest that site-related contaminants of ecological concern could pose a risk to fish and wildlife; however, the potential risk from these contaminants is not significant for a number of reasons. Exposure frequency, chemical concentration, mechanism of exposure, and duration of exposure determines risk of impact. The site and immediate surrounding area are residential, commercial or industrial properties. The commercial and industrial areas have minimal habitat in the form of small trees or brush that would not support a wildlife population. Residential areas are comprised of single-family and multi-unit properties surrounded primarily by mowed lawns. These areas experience constant physical disturbance preventing development of significant wildlife populations. Because only transient species and a few individual wild animals would use this area, the frequency and duration of exposure is limited. The future use of the site, restricted residential development, is expected to be of a type that will not provide a significant wildlife habitat.

According to this FWRIA, fish and wildlife in the vicinity of the subject site are not expected to be impacted by environmental conditions caused by contaminants of concern at the A.C. Dutton site.



TABLES

The O'Neill Group – Dutton, LLC A.C. Dutton FWRIA



Former A. C. Dutton Lumber Facility Fish & Wildlife Resource Impact Analysis TABLE 1 Volatile Organic Compounds in Soils

Compound (µ g/kg)	ACD-SS-X7	ACD-SS-B8-R	ACD-SS-AA11	ACD-SS-AA10	ACD-SS-U5	ACD-SS-U6	Part 375-6 Soil Cleanup Objectives**
(depth, ft. bgs)	8.0-10.0'	4.5-5.2'	12.0-13.0'	12.0-14.0'	4.0-8.0'	6.0-8.0'	(µg/kg)
Acetone	ND	ND	5.7 *	32.0 *			2200
Benzene	ND	ND	0.9 *	36.0	ND	ND	70000
Bromodichloromethane	ND	ND	ND	ND			NS
Bromophorm	ND	ND	ND	ND			NS
Bromomethane	ND	ND	ND	ND			NS
2-butanone (MEK)	ND	ND	ND	ND			NS
sec-Butylbenzene			ND	ND	ND	ND	NS
n-Butylbenzene			ND	ND	ND	ND	NS
tert-Butylbenzene			ND	ND	ND	ND	NS
Carbon disulfide	ND	ND	1.0 *	4.2 *			NS
Carbon tetrachloride	ND	ND	ND	ND			NS
Chlorobenzene	ND	ND	ND	ND			40000
Chloroethane	ND	ND	ND	ND			NS
Chloroform			ND	ND			12000
Chloromethane	ND	ND	ND	ND			NS
Dibromochloromethane	ND	ND	ND	ND			NS
1,1-dichloroethane	ND	ND	ND	ND			NS
1,2-dichloroethane	ND	ND	ND	ND			10000
1,1-dichloroethene	ND	ND	ND	ND			NS
cis-1,2-dichloroethene	ND	ND	ND	ND			NS
trans-1,2-dichloroethene	ND	ND	ND	ND			NS
1,2-dichloropropane	ND	ND	ND	ND			NS
cis-1,3-dichloropropene	ND	ND	ND	ND			NS
trans-1,3-dichloropropene	ND	ND	ND	ND			NS
Methyl-tert-butyl-ether (MTBE)			ND	ND	ND	ND	NS
Ethylbenzene	ND	ND	ND	ND	ND	ND	NS
2-hexanone	ND	ND	ND	ND			NS
Isopropyl benzene			ND	ND	ND	ND	NS
p-Isopropyltoluene			ND	ND			NS
Methylene chloride	ND	ND	9.9	110.0			12000
Naphthalene			ND	ND	ND	ND	NS
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND			NS
n-Propylbenzene			ND	ND	ND	ND	NS
Styrene	ND	ND	ND	ND			NS
1,1,2,2-Tetrachloroehtane	ND	ND	ND	ND			NS
Tetrachloroethene	ND	ND	ND	ND			2000
Toluene	ND	ND	ND	1.8 *	ND	ND	36000
1,1,1-trichloroethane	ND	ND	ND	ND			NS
1,1,2-trichloroethane	ND	ND	ND	ND			NS
Trichloroethene	ND	ND	ND	ND			2000
1,3,5-Trimethylbenzene			ND	ND	ND	ND	NS
2,4,6-Trimethylbenzene			ND	ND	ND	ND	NS
Vinyl Chloride	ND	ND	ND	ND			NS
o-xylene	ND	ND	ND	ND	ND	ND	260
m-xylene, p-xylene	ND	ND	ND	ND	ND	ND	200

NS - Not Specified * - Value is estimated by the laboratory. ** - Soil Cleanup Objectives specified are for the protection of ecological resources.



Former A. C. Dutton Lumber Facility Fish & Wildlife Resource Impact Analysis TABLE 1 Semi-volatile Organic Compounds in Soils

Compound (µg/kg)	ACD-SS-X7 8270C STARS	ACD-SS-B8-R 8270C STARS	ACD-SS-AA11 8270C STARS	ACD-SS-AA10 8270C STARS	ACD-SS-U5 8270C STARS	ACD-SS-U6 8270C STARS	Part 375-6 Soil Cleanup Objectives*
(depth, ft. bgs)	8.0-10.0'	4.5-5.2'	12.0-13.0'	12.0-14.0'	4.0-8.0'	6.0-8.0'	(µg/kg)
Acenaphthene	ND	ND	ND	ND	ND	ND	20000
Anthracene	ND	ND	ND	ND	ND	ND	NS
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	NS
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	2600
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	NS
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	NS
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	NS
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	NS
Chrysene	ND	ND	ND	ND	ND	ND	NS
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	NS
Fluoranthene	ND	ND	ND	400	ND	ND	NS
Fluorene	ND	ND	ND	ND	ND	ND	30000
Naphthalene	ND	ND	ND	ND	ND	ND	NS
Phenanthrene	ND	5000	ND	ND	ND	ND	NS
Pyrene	ND	ND	ND	990	ND	ND	NS

* - Soil Cleanup Objectives specified are for the protection of ecological resources.

NS - Not Specified



Former A. C. Dutton Lumber Facility Fish & Wildlife Resource Impact Analysis TABLE 1 Metals in Soils

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			m	april 19	prii /		m m	J. RT		ppm /
		nice	III	ler mun	miun		(Bb)	CUN	nium	, ¹ Bb
		ALSS'	Ballo	Cadir	CULO BOL	COBA	Cear	Merc	Lever.	Silver
Part 375 Ecologica	al Resources:	13	433	4	1	50	63	0.18	3.9	2
Sample ID	Depth	212.00	ED 70	0.571	171 00	100.00	11.00			
	0.0-0.2	212.00	52.70	0.571	1/1.00	109.00	11.80	ND < 0.0355	ND < 2.07	ND < 1.07
ACD-33-02 ACD-SS-K2	0.0-0.5	24.20	100.00	ND < 2.24	21.70	37.80	29.00	0.0866	ND < 1.12	ND < 1.12
	0.0-0.5	39.50	199.00	ND < 23.7	20.40	80.40 12.90	22.20	0.2440	04.70	ND < 100
	0.0-0.5	35 50	02 70	ND < 2.01	12.10	27.00	23.20 ND < 52.6	ND < 0.0002	115 00	ND < 107
ACD-SS-02	0.0-0.5'	17 10	57.80	ND < 208	12.10	12.00	76.80	0.1000	ND < 104	ND < 10.7
ACD-SS-U6	0.0-0.5'	8.60	8 54	ND < 2.00	10.00	9.24	28.20	ND < 0.0501	ND < 1.04	ND < 1.04
ACD-SS-AA10	0.0-0.5'	83.80	50.60	ND < 2.12	23.20	53.30	130.00	0.1360	ND < 1.00	ND < 1.00
ACD-SS-B3	0.0-0.5'	18.20	63.00	ND < 1.12	13.90	20.30	19.60	0.0488	ND < 4.48	ND < 2.24
ACD-SS-Y6	0.0-0.5'	13.70	42.00	1.13	20.90	42.00	54.30	ND < 0.0600	ND < 3.00	2.23
ACD-SS-X9	0.0-0.5'	28.40	45.50	ND < 0.543	19.40	24.80	34.70	ND < 0.0543	ND < 2.71	ND < 1.09
ACD-SS-O5	0.0-0.5'	55.00	94.20	ND < 2.88	13.80	19.80	ND < 57.5	0.1140	ND < 14.4	ND < 5.75
ACD-SS-D4	0.0-0.5'	70.00	54.10	1.060	70.60	83.60	42.50	0.1170	ND < 2.74	1.58
ACD-SS-A8	0.0-0.5'	24.20	123.00	0.811	25.40	46.20	44.20	0.3230	ND < 2.92	1.24
ACD-SS-L4	0.0-0.5'	33.10	88.40	ND < 2.81	17.60	54.20	28.40	ND < 0.0374	ND < 14.0	ND < 5.61
ACD-SS-L9	0.0-0.5'	56.80	255.00	ND < 17.6	ND < 35.5	ND < 70.5	ND < 176	ND < 0.0391	ND < 88.1	ND < 35.3
ACD-SS-G6	0.0-0.5'	95.80	11.70	ND < 0.520	80.70	72.10	21.80	ND < 0.0346	ND < 2.60	ND < 1.04
ACD-SS-G4	0.0-0.5'	20.20	27.10	ND < 0.535	24.10	21.10	9.88	ND < 0.0356	ND < 2.67	ND < 1.07
ACD-SS-E8	0.0-0.5'	37.10	70.90	ND < 0.543	40.20	46.00	64.20	0.2610	ND < 2.71	ND < 1.09
ACD-SS-18	0.0-0.5'	8.32	32.40	ND < 0.518	16.70	36.50	23.80	ND < 0.0345	ND < 2.59	ND < 1.04
ACD-SS-C6	0.0-0.5'	23.50	63.40	ND < 0.543	25.80	41.90	19.50	ND < 0.0362	ND < 2.71	ND < 1.09
ACD-SS-3SS13R	0.0-0.7	19.60	54.20	2.000	24.10	108.00	64.20	ND < 0.0556	ND < 2.78	2.09
ACD-SS-3SS14R	0.0-0.7	31.90	68.90	0.846	29.10	34.20	/0.00	0.0857	ND < 2.98	ND < 1.19
ACD-SS-3HB8R	0.0-0.7	7.94	63.10	0.734	33.90	32.10	16.80	ND < 0.0359	ND < 2.70	I.59
	0.0-1.0	9.50	47.60	ND < 2.17	15.90	33.40	40.30	ND < 0.0543	ND < 1.09	ND < 1.09
	0.0-1.0	ND < 10.6	103.00	ND < 21.2	18.00	46.70	ND < 53.0	0.3280	ND < 5.3	ND < 10.6
	0.0-1.0	15.80	275.00	ND < 21.9	17.90	ND < 21.9	72 50	1.4400	ND < 5.48	ND < 11.0
ACD-55-00 ACD-55-712	0.0-1.0	23.20	57.90	2.09 ND < 2.12	18.70	42.50	72.00 52.20	1.0000 ND < 0.0520	ND < 1.14	ND < 1.14
ACD-SS-08	0.0-1.0	48.50	113.00	ND < 2.12 ND < 2.91	12.20	38.10	46.00	0.1540	ND < 14.6	ND < 5.82
ACD-SS-S10	0.0-1.0'	14.20	69.80	0.607	12.20	77.90	27.10	0.0788	ND < 2.82	1.24
ACD-SS-O8	0.0-3.0'	59.30	117.00	ND < 11.7	ND < 23.4	ND < 46.8	ND < 117	ND < 0.0390	ND < 58.5	ND < 23.4
ACD-SS-B2R	0.2-1.3'	77.40	224.00	ND < 17.0	ND < 34.1	ND < 68.2	ND < 170	ND < 0.0378	ND < 85.2	ND < 34.1
ACD-SS-3HB6R	0.3-1.4'	7.87	55.50	0.740	21.40	32.40	14.00	ND < 0.0346	ND < 2.60	1.89
ACD-SS-A3	0.5-2.5'	7.24	20.40	1.22	15.50	40.30	20.50	0.1090	ND < 2.12	ND < 1.06
ACD-SS-L9	0.5-2.5'	15.90	52.80	ND < 1.04	12.70	15.80	26.60	0.1170	ND < 5.19	ND < 2.08
ACD-SS-G2	0.5-3.0'	811.00	33.90	0.878	469.00	876.00	30.50	0.1260	ND < 2.23	ND < 1.12
ACD-SS-T10	0.5-3.0'	36.10	121.00	ND < 1.37	9.23	33.70	40.30	0.1840	ND < 5.46	ND < 2.73
ACD-SS-C4	0.5-3.0'	7.79	32.80	1.13	8.47	50.20	33.00	0.1230	ND < 2.18	ND < 1.09
ACD-SS-L4	0.5-3.0'	21.50	93.00	ND < 2.82	12.80	44.20	55.10	0.0443	ND < 5.65	ND < 5.65
ACD-SS-H7	0.5-3.0'	19.50	59.00	ND < 5.56	16.70	28.70	ND < 55.6	0.1210	ND < 22.2	ND < 11.1
ACD-SS-Z9	0.5-3.0'	65.40	63.00	0.603	29.50	50.20	67.10	0.0624	ND < 2.90	ND < 1.16
ACD-SS-P3	0.5-3.0'	15.80	94.30	1.320	16.50	26.20	31.30	0.1030	ND < 5.82	ND < 2.33
	0.5-3.0	48.00	184.00	ND < 11.9	10.723.8	INU < 47.6	ND < 119	ND < 0.0396	ND < 59.5	ND < 23.8
	0.5-3.0	32.10	111.00	ND < 2.82	10.60	29.40	1820.00	0.1100	ND < 14.1	ND < 5.64
400-33-K0	0.5-3.0	40.90	107.00	0.702	20.80	32.50	44.00	0.1120	ND < 2.99	ND < 1.20
ACD-33-112	0.0-4.0	120.00	2/12 00	2.00	53.00	61.70	320.U	0.2100 ND ~ 0.0272	ND ~ 56 1	ND < 1.41
ACD-55-55/K	0.0-1.4	20.50	240.00 117 00	ND < 0.5/2	19 20	45 50	140.00	0.0373	ND < 271	ND < 100
ACD-SS-1.8	1 0-2 0'	20.30	77 30	0.805	14 00	47.60	76.00	0.5570	ND < 311	1 38
ACD-SS-06	1.0-3.0'	44.50	142.00	ND < 12.2	ND < 24 3	81.90	ND < 122	1,0000	ND < 48.6	ND < 24 3
ACD-SS-S2	1.0-3.0'	40.40	69.30	1.360	29.00	58.70	73.80	0.1290	ND < 2.91	1.57
ACD-SS-V8	1.0-3.0'	21.80	65.80	1.700	15.60	27.80	40.90	ND < 0.0562	ND < 2.81	1.60
ACD-SS-X7	1.0-3.0'	10.60	87.10	0.801	22.00	58.50	63.00	0.0743	ND < 2.84	1.95
ACD-SS-E5	1.0-3.0'	94.50	255.00	ND < 18.0	ND < 36.0	ND < 71.9	ND < 180	0.5200	ND < 89.9	ND < 36.0
ACD-SS-S4	2.0-3.0'	11.00	22.10	1.87	20.30	56.30	19.10	0.0840	ND < 2.25	ND < 1.13
ACD-SS-19	2.0-5.0'	66.70	175.00	ND < 13.9	ND < 25.9	ND < 51.9	ND < 130	ND < 0.0432	ND < 25.9	ND < 25.9
ACD-SS-M2	2.0-5.0'	148.00	40.70	ND < 5.81	ND < 11.6	ND < 23.3	ND < 58.1	ND < 0.0581	ND < 29.1	ND < 11.6
ACD-SS-E8	3.0-3.5'	36.30	62.90	1.230	29.60	47.70	97.10	0.1740	ND < 2.74	2.62
ACD-SS-B3	3.0-5.5'	10.50	88.10	ND < 0.539	16.30	39.30	17.30	0.1000	ND < 2.69	ND < 1.08
ACD-SS-E4	3.0-6.0'	44.20	106.00	ND < 6.14	19.70	ND < 24.6	77.10	ND < 0.0409	ND < 24.6	ND < 12.3
ACD-SS-E5	3.0-6.0'	ND < 121	383.00	ND < 60.5	ND < 121	ND < 242	ND < 605	ND < 0.0403	ND < 242	ND < 121
ACD-SS-V9	3.0-6.0'	6.15	34.00	5.02	9.87	46.80	26.50	0.0392	ND < 2.24	1.23

ACD-SS-Q3	3.0-6.0	19.10	60.70	1.19	12.70	28.50	ND < 28.3	ND < 0.0566	ND < 2.83	1.19
ACD-SS-M6	3.0-6.0'	34.60	130.00	ND < 5.75	ND < 11.5	28.40	110.00	ND < 0.0575	ND < 28.7	ND < 11.5
ACD-SS-U6	3.0-6.0'	21.90	97.90	ND < 2.55	21.20	47.90	ND < 25.5	ND < 0.0339	ND < 12.7	ND < 5.10
ACD-SS-Y7	3.0-8.0'	8.73	715.00	0.655	18.60	34.90	650.00	ND < 0.0561	ND < 2.81	1.57
ACD-SS-AA11	3.0-8.0'	21.20	695.00	1.780	17.70	47.20	431.00	0.8650	ND < 3.08	ND < 1.23
ACD-SS-B8R	4.0-4.5'	105.00	189.00	ND < 11.8	69.70	ND < 47.3	ND < 118	0.1210	ND < 59.1	ND < 23.6
ACD-SS-SS9R	4.0-5.3'	14.60	23.30	ND < 0.548	28.30	52.20	14.60	0.0597	ND < 2.74	ND < 1.10
ACD-SS-D2	6.0-8.0'	6.04	22.20	1.35	15.90	33.20	13.80	ND < 0.0386	ND < 2.32	ND < 1.16
ACD-SS-V9	6.0-8.0'	11.30	45.20	2.27	31.50	43.00	17.30	0.0389	ND < 13.9	3.19
ACD-SS-Q3	6.0-8.0'	7.71	42.20	0.710	20.60	34.90	11.70	ND < 0.0596	ND < 2.98	1.82
ACD-SS-T7	6.0-8.0'	24.40	54.80	0.701	20.30	321.00	61.40	ND < 0.0412	ND < 3.09	2.32
ACD-SS-X7	6.0-8.0'	21.10	56.10	1.370	27.80	63.70	35.20	0.0717	ND < 2.78	2.49
ACD-SS-AA10	8.0-10.0'	7.10	45.50	1.50	20.40	44.20	18.40	0.0595	ND < 2.30	ND < 1.15
ACD-SS-F2	8.0-10.0'	10.60	31.10	0.927	24.40	40.30	18.70	0.0512	ND < 2.96	2.27
ACD-SS-3HB6R	8.0-10.1'	12.10	24.90	0.893	33.60	39.00	7.13	ND < 0.0571	ND < 2.86	2.32
ACD-SS-G4	10.0-11.0'	9.16	87.20	1.15	21.20	30.60	78.60	0.6590	ND < 2.76	ND < 1.38

13.60

35.00

125.00

0.1970 ND < 2.47 ND < 1.24

Bold shaded values indicate results that exceed the Part 375-6 soil cleanup objectives.

24.50

117.00

1.20

3.0-6.0'

ACD-SS-Z9



Former A. C. Dutton Lumber Facility Fish Wildlife Resource Impact Analysis TABLE 2 Metals in Sediment

Compound (mg/kg)	SED-01 329060120-04	SED-02 329060120-05	SED-03 329060120-06	SED-04 329060120-07	SED-05 329060120-08	Sediment SCGs Lowest Effect Level (mg/kg)	Sediment SCGs Severe Effect Level (mg/kg)
Arsenic	9.8	9.4	10.4	10.2	14.4	6.0	33.0
Barium	153.0	150.0	39.4	119.0	111.0	N/A	N/A
Cadmium	1.8	1.7	1.6	1.7	1.8	0.6	9.0
Chromium	40.7	39.8	17.2	40.6	30.4	26.0	110.0
Copper	49.3	47.6	28.8	46.6	43.4	16.0	110.0
Lead	43.6	44.3	47.3	57.5	41.6	31.0	110.0
Mercury	0.19	0.19	ND < 0.04	0.18	0.15	0.15	1.3
Selenium	ND < 2.9	4.3	2.1	ND < 2.4	3.2	N/A	N/A
Silver	ND < 2.9	ND < 3.0	ND < 1.3	ND < 2.4	ND < 2.4	1.0	2.2

SCGs were obtained from from the NYSDEC's Technical Guidance for Screening Contaminated Sediments.

Bold values indicate results that exceed the Lowest Effect Level criteria.

N/A - no guidance available.



Former A. C. Dutton Lumber Facility Fish & Wildlife Resource Impact Analysis TABLE 2 Semi-Volatile Organic Compounds in Sediment

	SED-14	SED-13	SED-12	SED-11	SED-10	Benthic Aquatic Life	Benthic Aquatic Life
Compound	329060120-04	329060120-05	329060120-06	329060120-07	329060120-08	Acute Loxicity	
∆cenanbthene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	(µg/kg)	<u>(µg/ kg)</u> 407.4
Acenaphthylene	ND < 2900	ND < 3000	ND < 8800	650*	280*	N/A	N/A
Anthracene	ND < 2900	520*	ND < 8800	690*	360*	2869.26	311.37
Benzo(a)anthracene	470*	1900*	ND < 8800	1800*	1000*	273.54	34.92
Benzo(a)pyrene	490*	1800*	ND < 8800	2100*	960*	N/A	N/A
Benzo(b)fluoranthene	410*	1500*	ND < 8800	1300*	740*	N/A	N/A
Benzo(g,h,i)perylene	370*	1100*	ND < 8800	1400*	650*	N/A	N/A
Benzo(k)fluoranthene	390*	1500*	ND < 8800	1500*	840*	N/A	N/A
Benzyl alcohol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
butyl benzyl phthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
DI-n-Butyiphthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Ladono(1,2,2,cd)pyrono	220×	1000*	ND < 8800	1100*	540*	N/A	N/A
4-chloroaniline	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A N/A	N/A N/Δ
Bis(-2-chloroethoxy)methane	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Bis(2-chloroethyl)ether	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2-chloronaphthalene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2-chlorophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2,2'-oxybis(1-chloropropane)	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Chrysene	660*	1900*	ND < 8800	2100*	1300*	N/A	N/A
Dibenzo(a,h)anthracene	ND < 2900	400*	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Dibenzofuran	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
1,3-dichlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	349.2	34.92
1,2-dichlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	349.2	34.92
1,4-dichlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	349.2	34.92
3,3'-dichlorobenzidine	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2,4-dichiorophenoi	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Directly/philinalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2 4-dimethylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2.4-dinitrophenol	ND < 15000	ND < 16000	ND < 45000	ND < 2200	ND < 12000	N/A N/A	N/A N/Δ
2 4-dinitrotoluene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2,6-dinitrotoluene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Bis(2-ethylhexyl)phthalate	400*	400*	ND < 8800	ND < 4200	310*	N/A	580.545
Fluoranthene	870*	3600	1200*	3300*	2100*	N/A	2968.2
Fluorene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	212.43	23.28
Hexachlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	26425.71	16208.7
Hexachlorobutadiene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	160.05	16.005
Hexachlorocyclopentadiene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	128.04	12.804
Hexachloroethane	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2 mothylpaphthalopo	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	IN/A 09.04
4 6-dinitro-2-methylphenol	ND < 2900	ND < 3000	ND < 6000	ND < 2200	ND < 12000	NI/A	70.74 NI/A
4-chloro-3-methylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2-methylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
4-methylphenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
naphthalene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	750.78	87.3
2-nitroaniline	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	N/A	N/A
3-nitroaniline	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	N/A	N/A
4-nitroaniline	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	N/A	N/A
nitrobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2-nitrophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
4-nitropnenoi	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	N/A	N/A
N-mitrosodinhonylamino	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Di-N-octyl phthalate	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A N/A	N/A N/Δ
Pentachlorophenol	ND < 15000	ND < 16000	ND < 45000	ND < 22000	ND < 12000	291	116.4
Phenanthrene	540*	1700*	980*	2000*	1500*	N/A	349.2
Phenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	1.455
4-bromophenyl-phenylether	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
4-chlorophenyl-phenylether	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
N-nitroso-Di-N-propylamine	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
Pyrene	930*	3300	1100*	3400*	2100*	25535.25	2796.51
1,2,4-trichlorobenzene	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	4746.21	541.26
2,4,6-trichlorophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A
2,4,5-trichlorophenol	ND < 2900	ND < 3000	ND < 8800	ND < 4200	ND < 2400	N/A	N/A

Bold values are in exceedance of chronic toxicity screening criteria

Bold Shaded values are in exceedance of acute toxicity screening criteria

Values are estimated by the laboratory.

** Screening criteria is based on sediment organic carbon content of 2.91 g/kg.



FIGURES

The O'Neill Group – Dutton, LLC A.C. Dutton FWRIA

MS VIEW:





A.C. Dutton: NLCD 2001 Land Cover Types



POUGHKEEPSIE

GRAPHIC SCALE



WWW.FandO.COM

THE O'NEILL GROUP - DUTTON, LLC FORMER A.C. DUTTON LUMBER FACILITY LAND COVER MAP 2 HOFFMAN STREET PROJ. No.: 20040764.A1N DATE: AUGUST 2007

FIG. 2

NEW YORK

11

MS VIEW:



APPENDIX A

The O'Neill Group – Dutton, LLC A.C. Dutton FWRIA

FWRIA DECISION KEY

F:\P2004\0764\A1N\FWRIA\AC Dutton FWRIA Report.doc

APPENDIX 3C

Fish and Wildlife Resources Impact Analysis Decision Key

		If YES Go to:	If NO Go to:
1.	Is the site or area of concern a discharge or spill event?	13.	2.
2.	Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13.	3
3.	Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4.	9.
4.	Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5.
5.	Has the contamination gone off site?	6.	14.
6.	Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7.	14.
7.	Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8.
8.	Does contamination exist at concentrations that could exceed SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14.
9.	 Does the site or any adjacent or downgradient property contain any of the following resources? a. Any endangered, threatened or special concern species or rare plants or their habitat b. Any NYSDEC designated significant habitats or rare NYS Ecological Communities c. Tidal or freshwater wetlands d. Stream, creek or river e. Pond, lake, lagoon f. Drainage ditch or channel g. Other surface water feature h. Other marine or freshwater habitat i. Forest j. Grassland or grassy field k. Parkland or woodland l. Shrubby area 		
	m. Urban wildlife habitatn. Other terrestrial habitat	11.	10.
10.	Is the lack of resources due to the contamination?	Section 3.10.1	14.
11.	Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14.	12.
12.	Does the site have widespread soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	13.
13. 14.	Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact NYSDEC for information regarding endangered species.) No Fish and Wildlife Resources Impact Analysis needed.	Section 3.10.1	14.



APPENDIX B

The O'Neill Group – Dutton, LLC A.C. Dutton FWRIA

POUGHKEEPSIE DEEPWATER HABITAT RATING FORM

COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: Poughkeepsie Deepwater Habitat

Designated: November 15, 1987

County(ies): Dutchess; Ulster

Town(s): Hyde Park, Poughkeepsie, Wappinger; Esopus, Lloyd, Marlboro

7¹/₂ Quadrangle(s): Hyde Park, NY; Poughkeepsie, NY; Wappingers Falls, NY

<u>Score</u>	Criterion
40	Ecosystem Rarity (ER) An extensive area of deep, freshwater, estuarine habitat; rare in New York State, but somewhat common in the Hudson River. Geometric mean: $(25 \times 64)^{\frac{1}{2}} = 40$.
36	Species Vulnerability (SV) Shortnose sturgeon (E) wintering area.
0	Human Use (HU) No significant fish or wildlife related human use of the area.
16	Population Level (PL) Concentrations of sturgeon and other estuarine species are unusual in New York State.
1.2	Replaceability (R) Irreplaceable.

SIGNIFICANCE VALUE = [(ER + SV + HU + PL) X R]

= 110

DESIGNATED HABITAT: POUGHKEEPSIE DEEPWATER HABITAT

HABITAT DESCRIPTION:

The Poughkeepsie Deepwater Habitat encompasses a fourteen mile stretch of the Hudson River extending from the Villages of West Park in Ulster County and Hyde Park in Dutchess County south to the hamlet of Marlboro in Ulster County. Towns with jurisdiction included in the area are Hyde Park, Poughkeepsie, and Wappinger, Dutchess County; and Esopus, Lloyd and Marlborough, Ulster County (7.5' Quadrangle: Hyde Park, N.Y., Poughkeepsie, N.Y., and Wappingers Falls, N.Y.). The important fish and wildlife habitat is a nearly continuous river bottom trench, from 30 feet deep to the bottom. Most of this area has water depths of 50 feet or greater including a small area in the "Crum Elbow" section of the river which exceeds 125 feet in depth.

FISH AND WILDLIFE HABITAT:

Deepwater estuary areas such as the Poughkeepsie Deepwater Habitat are rare in the eastern United States. The Hudson River is the only river in New York State that contains this ecosystem type.

Deepwater areas provide wintering habitat for shortnose sturgeon (E), and support an unusual diversity of marine species in the Hudson River. Shortnose sturgeon also use this area as spawning grounds. Yolk-sac shortnose sturgeon larvae have been collected from this region at depths of 45 feet to 120 feet. Although habitat requirements of this species in the Hudson River are not well known, it is believed that these deepwater areas may be critical throughout the year. A variety of estuarine and marine species appear in numbers in this area, including bay anchovies, silversides, bluefish, weakfish, and hogchokers.

The abundance of shortnose sturgeon and these other estuarine species is unusual in New York State. However, commercial or recreational uses of fish and wildlife in this area are not known to be significant.

IMPACT ASSESSMENT:

A habitat impairment test must be met for any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific habitat impairment test that must be met is as follows.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

- destroy the habitat; or,
- significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

- 1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;
- 2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,
- 3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

Activities that would substantially degrade water quality, including changes in temperature, turbidity, or freshwater to saline distribution, would result in significant impairment of the habitat. This area may be especially sensitive to discharges of municipal or industrial wastewater, sewage effluents, and agricultural runoff.

Major reduction in overall depths along this deepwater trench would also have adverse effects on the endangered shortnose sturgeon utilizing the area. Of particular concern is a past practice of using portions of the deepwater trench as a dredge spoil dumping site. Activities such as this must be controlled to avoid interference with use of the area by shortnose sturgeon. Impingement of shortnose sturgeon on water intake screens could affect the population status of this endangered species.