

January 8, 2007

**ALTERNATIVES ANALYSIS REPORT/
REMEDIAL ACTION WORK PLAN
FOR OPERABLE UNIT 1**

**ExxonMobil Former Buffalo Terminal
Buffalo, New York**

Prepared for:

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1.0 INTRODUCTION

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C (Remedial Engineering), have prepared this Revised Alternatives Analysis Report (AAR)/Remedial Action Work Plan (RAWP) for the properties owned by ExxonMobil Oil Corporation (ExxonMobil) located north of Elk Street (which are located within Operable Unit 1 [OU-1]) on behalf of ExxonMobil. This Revised AAR/RAWP evaluates remedial alternatives and describes the proposed remedial action to address an area of impacted soil from a historic petroleum release at the Former ExxonMobil Buffalo Terminal, as well as impacts from background influences (i.e., residential uses, previous and current property owner usage, regional industrial influences, nearby highways, and urban fill) on portions of these properties. The alternatives evaluated and remedial action selected took into consideration:

- The current zoning of the OU-1 as M-1, light industrial;
- The historic use of the OU-1 as residential and vacant land; and
- There has been no interest from third parties for the parcels in OU-1, therefore, the current, and reasonably anticipated future use of the property as vacant land surrounded by perimeter fencing.

The former ExxonMobil Buffalo Terminal and offsite areas currently and formerly owned by ExxonMobil located at 625 Elk Street, Buffalo, New York are shown on Figure 1.

This Revised AAR/RAWP includes the results of the following additional investigation activities requested by New York State Department of Environmental Conservation (NYSDEC):

- Additional investigation requested in a letter regarding the ExxonMobil Former Buffalo Terminal Remedial Action Work Plan for OU-1 dated May 12, 2006 and discussed in a meeting at the NYSDEC offices in Buffalo, New York on June 26, 2006.
- Additional investigation activities requested in an October 30, 2006 email regarding the AAR/RAWP dated October 17, 2006.

This document replaces the RAWP for OU-1 dated May 12, 2006 and the AAR/RAWP dated October 17, 2006 and addresses the NYSDEC comments on these two documents. It includes a summary of all investigation data, an evaluation of potential remedial alternatives for OU-1, a description of the selected alternative, and a work plan for completing the selected remedial alternative for OU-1.

In order to address the environmental conditions, ExxonMobil entered into a Brownfield Site Cleanup Agreement with the NYSDEC on April 3, 2006. Under this agreement, the Site entered into New York State's Brownfield Cleanup Program (BCP). The "Site" is defined, for the purposes of the BCP, as the area within the limits of the five Operable Units (OUs) as shown in Figure 2. In addition, the Site was divided into nine geographic areas for the purpose of assessing environmental conditions and reporting the results of area-specific activities (Figure 3). These geographic areas were designated according to the historical primary operations that occurred in each portion of the Site. The properties owned by ExxonMobil north of Elk Street that are the subject of this AAR/RAWP are located within Operable Unit 1 (OU-1) within the area previously designated as the Elk Street Properties Area (ESPA). OU-1 is comprised of Parcel Nos. 4 and 5 that are owned by ExxonMobil and are shown on Figure 4.

A portion of the Site south of Elk Street is currently operating as a petroleum products storage and distribution facility owned and operated by Buckeye Terminals, LLC (Buckeye) with the surrounding non-operating area (formerly part of historic operations) owned by ExxonMobil. The requirements and recommendations of the NYSDEC guidance document, Draft Brownfield Cleanup Program Guide (May 2004), were incorporated into this AAR/RAWP, in addition to the requirements and recommendations of the NYSDEC "Draft DER-10 Technical Guidance for Site Investigation and Remediation (DER-10)," dated December 25, 2002. It is our intention to conduct the remediation of OU-1 in accordance with the Draft BCP Guide, Draft DER-10 and Title 6 of the New York Code of Rule and Regulations (6 NYCRR) Part 375, Subparts 375-1 to 375-4 & 375-6 (Part 375) dated December 14, 2006.

The AAR portion of the AAR/RAWP has been prepared in accordance with Section 4.8 of the Draft BCP Guide and Section 4.3[c] of DER-10. The RAWP portion of the AAR/RAWP has been prepared in accordance with the requirements of Section 5 DER-10 for a Remedial Action Work Plan and Remedial Design since the complexity of the planned remedial action does not warrant full design plans.

The remainder of this AAR/RAWP is organized as follows:

- Section 2.0 provides a summary of the history of OU-1, including ownership, current zoning, current and future land use, past and present operations (i.e., buildings, tanks, etc), and spills or releases;

- Section 3.0 provides a summary of environmental conditions based upon the results of all investigations completed in OU-1;
- Section 4.0 identifies remedial goals and remedial action objectives;
- Section 5.0 describes the alternative analysis and remedy selection process;
- Section 6.0 describes the selected remedy;
- Section 7.0 describes the Remedial Action Report;
- Section 8.0 describes Operation, Maintenance and Monitoring;
- Section 9.0 describes institutional and engineering controls;
- Section 10.0 describes the Citizen Participation Plan (CPP); and
- Section 11.0 describes the project schedule.

Included with the AAR/RAWP are the following appendices:

- Appendix A: Well Construction and Soil Boring Logs
- Appendix B: Data Usability Summary Report
- Appendix C: Community Air Monitoring Plan for Operable Unit 1 AAR/RAWP
- Appendix C: Technical Specifications and Details
- Appendix D: Quality Assurance Project Plan for Operable Unit 1 AAR/RAWP

2.0 SITE SETTING AND HISTORY

The historical information presented in this Section was obtained from the document entitled “History of Operations at Buffalo Terminal” (Roux Associates, 2000).

The Site refinery and terminal operations occurred south of Elk Street in an area of approximately 89 acres. The petroleum refining operations at the Site began during 1880. The majority of the Site was purchased by Standard Oil Company of New York (SOCONY), ExxonMobil’s predecessor, in 1892. Throughout the Site’s history, the areal extent of property owned by ExxonMobil changed as portions of property were acquired or sold for various reasons. In May 1981, the Site terminated all refinery operations. The Site continued as an ExxonMobil distribution terminal, receiving product via a pipeline and barge until May 2005. The active petroleum products storage and distribution terminal portion of the Site was sold on May 4, 2005 and is now owned and operated by Buckeye. The area of Buckeye’s active terminal is approximately 35.8 acres. The area within the current ExxonMobil property boundary is approximately 43.6 acres.

2.1 General History of the OU-1

There are two parcels associated with OU-1, which are located on the north side of Elk Street (Figure 2). The total area of OU-1 is 1.8 acres. The following is a description of Parcels No. 4 and No. 5 of OU-1, including locations of the parcels and the previous and current structures located on these parcels.

- Parcel No. 4. This parcel measures 106 feet by 115 feet (0.28 acres) and is located on the northwest corner of Elk Street and Winona Street. Prior to 1976, this parcel was occupied by residential structures. Parcel No. 4 was purchased by Mobil following a product release from Tank 60, which occurred on March 12, 1976 and is described in detail in Section 2.3. The residential structures were demolished following the release. Since 1976, Parcel No. 4 has remained vacant; however, it was being used for parking during portions of this time period. The History Document indicated that Parcel No. 4 of OU-1 was occupied by Trico Products Corp.; however, it is currently vacant and enclosed by a fence installed by ExxonMobil in July 2000.
- Parcel No. 5. This parcel measures 208 feet wide and 325 feet long on its eastern boundary with Bradford Street and 295 feet long on its western boundary with Winona Street (1.5 acres). Parcel No. 5 is located on the north side of Elk Street between Winona Street and Bradford Street. Prior to 1976, this parcel was partially occupied by residential structures. Parcel No. 5 was purchased by Mobil following a product release

from Tank 60, which occurred on March 12, 1976 and is described in detail in Section 2.3. The residential structures were demolished following the release. Since 1976, Parcel No. 5 has remained vacant; however, it was being used for parking during portions of this time period. The property is currently vacant and enclosed by a fence installed by ExxonMobil in July 2000.

Based upon the historic uses, only Parcels No. 4 and No. 5 were included in the BCP and are therefore the focus of this document.

Also located north of Elk Street are three parcels (Parcels Nos. 1, 2 and 3) that were formerly but are no longer owned by ExxonMobil. These parcels were never used for refining or storage of petroleum products and were not involved in the historic release from former Tank 60 in 1976. These parcels are not part of OU-1 and are not included in the BCP. The following is a brief description of the locations and the previous and current structures located on these parcels.

- Parcel No. 1. This parcel measures 110 feet by 100 feet (0.25 acres) and is located on the northeast corner of Elk Street and Babcock Street. Prior to 1912, this property was undeveloped. In 1912, a private garage was constructed by SOCONY to house wagons and a repair shop. Between 1940 and 1950, Parcel No. 1 was sold to Trico Products Corporation. This parcel was never used for the refining or storage of petroleum products.
- Parcel No. 2. This parcel measures 101 feet by 100 feet (0.23 acres) and is located on the northwest corner of Elk Street and Gorham Street. Prior to 1921, Parcel No. 2 was occupied by residential structures. In 1921, Parcel No. 2 was purchased by SOCONY and subsequently developed with an additional private garage and a watchman's station. Between 1940 and 1950, Parcel No. 2 was sold to Trico Products Corporation. This parcel was never used for the refining or storage of petroleum products.
- Parcel No. 3. This parcel measures 101 feet by 171 feet (0.40 acres) and is located directly north of Parcel No. 2. Prior to 1925, Parcel No. 3 was occupied by residential structures. This parcel was developed with an extension of the garage on Parcel No. 2 in 1925. Between 1940 and 1950, Parcel No. 3 was sold to Trico Products Corporation. This parcel was never used for the refining or storage of petroleum products.

2.2 Former and Current Structures on Parcels No. 4 and No. 5

Following the release incident from former Tank 60 in 1976, ExxonMobil purchased and demolished the residential structures present on Parcels No. 4 and No. 5. The structure that had existed to the north of the northwest portion of Parcel No. 5 was demolished at some point between 1974 and October 1976, but was not related to the ExxonMobil purchase and demolition due to the release incident. Figure 4 shows the buildings present at the time of the release that

were subsequently demolished and buildings that are still present. Information on Figure 4 was developed based on a 1974 aerial photograph and a 1976 aerial photograph. Since 1976, Parcels No. 4 and No. 5 have remained vacant; however, they were used for parking during portions of this time period.

Currently, Parcels No. 4 and No. 5 are vacant and are enclosed by a chain link fence installed by ExxonMobil (shown on Figure 4).

2.3 Zoning and Land Use of OU-1

The zoning of OU-1 is M1 (light industrial district). A figure obtained from the City of Buffalo website showing the zoning for OU-1 is provided as Figure 5. Based upon an inquiry to the City of Buffalo zoning department in June 2006, the use of OU-1 for residential purposes occurred prior to any zoning ordinance taking effect.

ExxonMobil has no current plans for OU-1. The reasonably anticipated future use of OU-1 will be vacant land surrounded by a fence, which is consistent with the zoning of the property.

2.4 Spills/Releases

Only one release has been documented to have impacted OU-1 (Table 1). The information and documentation for this release were provided by current and/or former ExxonMobil employees, contractors, residents, photographs taken at the time, and NYSDEC Spill Report Form for Spill No. 9314016, dated February 1, 1994.

The release occurred on March 12, 1976. The roof of Tank 60 ruptured when hot cracking stock for the Thermoform Catalytic Cracking (TCC) unit entered the tank from the crude unit. The hot product contacted ice in the bottom of the tank, causing it to expand, increase the pressure within the tank, and damage the roof. The cracking stock spilled onto Elk Street and Parcels No. 4 and No. 5. At that time, Parcels No. 4 and No. 5 were partially occupied by residential structures, as described above. The structures present were affected by the release. ExxonMobil cleaned up the cracking stock by vacuuming off excess product and then mixing the remaining material with sand, excavating the material, and disposing of it offsite. Subsequently, ExxonMobil purchased Parcels No. 4 and No. 5 and demolished the structures present. Property and structures located

to the north of Parcels No. 4 and No. 5 were not impacted by the release and, therefore, were not purchased by ExxonMobil (Figure 4). Soil sampling was not conducted as part of the cleanup or demolition effort in 1976.

3.0 SUMMARY OF ENVIRONMENTAL CONDITIONS

Data regarding environmental conditions on OU-1 were obtained from a review of the results of previous investigations, the additional investigations completed in August and November 2006 in response to the NYSDEC requests and the ongoing monitoring program at the Site. Figure 4 presents sampling locations from all investigations completed in OU-1, currently existing buildings that were present during the incident at former Tank 60, and former buildings that were present prior to the Tank 60 incident and subsequently demolished. This Section includes a summary of the major findings and conclusions of the investigations completed in OU-1.

3.1 Previous Investigations to Delineate Impacts from the 1976 Release at Former Tank 60

Investigation activities performed during the 1993 GTI Site Assessment, the 1998 Site Facility Investigation (SFI), the 1999 Site Facility Investigation Completion (SFI Completion), and the 2001 ESPA (OU-1) Investigation Completion completed the delineation of the impacts on Parcels No. 4 and No. 5 of OU-1 resulting from the 1976 release at former Tank 60. The scope of work for the various investigations is described briefly below.

Environmental Site Assessment, conducted by Groundwater Technology, Inc. (GTI) in October 1993 (GTI, 1994)

This Site assessment included:

- Installation of 15 shallow and five deep soil borings;
- Collection and inspection of soil samples from the upper two feet of each boring;
- Analysis of one composite soil sample from the one to two foot below grade depth interval (designated SS#1 through SS#4) from four groups of five borings for total petroleum hydrocarbons (TPH) by Gas Chromatograph Flame Ionization Detector (GC-FID), chloride, and metals (a different color symbol is used on Figure 4 to represent each group of five borings that contributed to the four composite samples analyzed);
- Installation of temporary well points at the five deep soil boring locations (TWP-01 through TWP-05); and
- Groundwater sampling at four of the five temporary well locations (TWP-02 through TWP-05) for TPH, chloride, and metals.

***Site Facility Investigation conducted by
Groundwater & Environmental Services, Inc.
from June through August 1998 (Roux Associates, Inc., 1998)***

This investigation included:

- Completion of 12 soil borings (ESL-1 through ESL-12);
- Collection of 12 surface soil samples from ESL-1 through ESL-12 from 0-0.5 feet below any surface concrete, asphalt, or debris present and analysis for semivolatile organic compounds (SVOCs) and metals;
- Collection of three soil samples from 1.5-2 feet below surface material at ESL-4, ESL-8/ESL-W1, ESL-12, and analysis for volatile organic compounds (VOCs);
- Collection of one soil sample from 8-10 feet below land surface (bls) at ESL-8/ESL-W1 and analysis for SVOCs, VOCs and metals; and
- Installation and groundwater sampling of one soil boring/temporary well (ESL-8/ESL-W1) and analysis for SVOCs and VOCs. ESL-8/ESL-W1 was abandoned by removing the screen and casing and grouting the hole following the completion of the SFI.

***Site Facility Investigation Completion conducted by
Groundwater & Environmental Services, Inc. and
Roux Associates from July through October 1999 (Roux Associates, Inc., 1999)***

This investigation included:

- Completion of eight soil borings, ESL-13 through ESL-20 (five borings on OU-1 and three borings on properties to the north of OU-1), to depths up to four feet bls; and
- Collection of soil samples in three depth ranges (0-0.5 feet, 1-2 feet, and 2-3 feet below any concrete, asphalt, or debris material present at the boring location) and analysis for SVOCs and metals.

***Elk Street Properties Area Investigation Completion conducted by
Groundwater & Environmental Services, Inc. and
Roux Associates on December 14, 2001 (Roux Associates, Inc., 2002)***

This investigation included:

- Completion of six soil borings, ESL-21 through ESL-26 (three borings on Parcel No. 4 and three borings to the north of Parcel No. 5), from land surface to three feet bls;
- Collection of soil samples in two depth ranges (0-0.5 feet and 2-3 feet below any concrete, asphalt, or debris material present at the boring location) and analysis for SVOCs and reduced Target Analyte List (TAL) metals for cadmium, chromium, lead, mercury, nickel, selenium, thallium, and vanadium; and

- Samples were not analyzed for VOCs based on previous sample results.

3.2 Additional Investigation Completed in August 2006

The following section describes additional soil and groundwater sampling activities in OU-1 that were completed in August 2006 in response to the comments contained in the NYSDEC letter dated June 1, 2006 regarding the RAWP for OU-1 dated May 12, 2006 and that were discussed during the meeting held at NYSDEC offices in Buffalo on June 26, 2006. The additional investigation work was conducted in accordance with the Work Plan for Additional Investigation in OU-1, Site #C915201 dated July 12, 2006 and subsequent letter regarding Modifications to the Work Plan for Additional Investigation in OU-1 dated July 24, 2006. The goal of the additional investigation completed in August 2006 was to complete the delineation of constituents that were not analyzed during previous investigations (selected metals, PCBs, pesticides, herbicides) and for delineation of VOCs that were only analyzed to a limited extent during previous investigations.

3.2.1 Temporary Monitoring Wells

Three temporary groundwater-monitoring wells were installed on August 9, 2006, in the locations shown on Figure 4. One well was installed in Parcel No. 4 and two wells were installed in Parcel No. 5 of OU-1. The wells were designated MW-OU1-1, MW-OU1-2, and MW-OU1-3, as shown on Figure 4.

In accordance with ExxonMobil and Roux Associates' ground disturbance protocols, each location was cleared to a depth of five feet bls using an ExxonMobil approved method (i.e., hand auger). The monitoring wells were drilled using a hollow-stem auger drill rig with 4.25-inch augers. Continuous split-spoon sampling was performed from five feet bls to up to 13 bls, depending upon the conditions observed, as described below. Split spoon soil samples were field-screened for VOCs using a portable photoionization detector (PID) and logged for lithology.

Proposed monitoring wells were constructed of 2-inch diameter polyvinylchloride (PVC) casing and riser with five feet of 2-inch diameter PVC screen. The screen slot size was 0.010 inches (10 slot). Well construction logs are provided in Appendix A.

In accordance with the work plan, since saturated conditions were not observed above the clay layer, the entire five-foot screen was set within the clay. The bottom of the well was set at 10.5 to 13 feet bls. A gravel pack consisting of number 0 size Morie gravel extended to one foot above the top of the screen. The well annulus was sealed with bentonite pellets to the top of the clay to seal the clay layer off from the geologic units above. The remainder of the borehole was backfilled with drill cuttings from the top of the clay to land surface.

Since the wells are located within the fully fenced areas of OU-1 and since the wells are temporary, protective casings were not installed over the PVC stickups. However, a locking cap was provided for each well. The temporary wells were surveyed for measuring point and horizontal location on August 25, 2006.

The temporary monitoring wells were developed on August 11, 2006 by bailing until dry. Approximately five gallons of water were removed from MW-OU1-1 and approximately 1 gallon each was removed from MW-OU-2 and MW-OU-3 during development.

3.2.2 Soil Sampling

Up to three soil samples were collected from each of the three temporary monitoring well locations and each of the three soil boring locations shown on Figure 4.

The following samples were collected from each of the following depth intervals, above the clay layer:

- Zero to one foot bls at all six locations;
- One to two feet bls at all six locations; and
- Greater than two feet bls at SB-OU1-2 (two to three feet bls) and SB-OU1-3 (three to four feet bls).

At MW-OU-1 through MW-OU1-3 and SB-OU1-1, the clay layer was encountered at shallower than three to four feet bls, therefore only two samples were collected.

The samples were analyzed for all parameters shown in “Table 375-6.8(b): Restricted Use Soil Cleanup Objectives” of Part 375 dated December 14, 2006 according to the following methods:

- Herbicides by United States Environmental Protection Agency (USEPA) method SW-846-8151A.
- Pesticides and polychlorinated biphenyls (PCBs) by USEPA methods SW-846-8081A/8082.
- VOCs by USEPA method SW-846-8260.
- SVOCs by USEPA method SW-846-8270.
- Arsenic, barium, beryllium, cadmium, copper, cyanide, lead, manganese, nickel, selenium, silver, thallium, vanadium, and zinc by USEPA method SW-846-6010B).
- Total mercury by USEPA method SW-846-7471.
- Total chromium, hexavalent chromium, and trivalent chromium method SW-846-7196A.

The samples for all analytical parameters except VOCs were collected as a composite of each interval. VOCs were collected as a grab sample from the top of the interval since no PID readings or petroleum-related impacts (i.e., staining, sheen, odor) were observed. In accordance with the Quality Assurance Project Plan (QAPP) for Additional Investigation in OU-1 for the investigation that was included as Attachment 1 to the letter regarding Modifications to the Work Plan for Additional Investigation in OU-1 dated July 24, 2004, the samples were sent under chain of custody to TestAmerica Analytical Testing Corporation in Nashville, Tennessee for analysis.

Quality Assurance/Quality Control (QA/QC) samples, including duplicates, trip blanks and matrix spike/matrix spike duplicate (MS/MSD) samples were collected in accordance with the QAPP. The field blank was inadvertently omitted.

3.2.3 Water Level Gauging

Water levels within the newly installed temporary groundwater monitoring wells in the clay were gauged prior to and following sampling on August 14, 2006 and August 31, 2006, respectively. The gauging data is presented in Table 2. In addition, three monitoring wells (B-1MW, MW-34, and MW-35) on the main portion of the former Buffalo Terminal property south of Elk Street

were gauged at the same time to provide an indication of the groundwater flow direction in the vicinity of OU-1.

3.2.4 Groundwater Sampling

Groundwater was sampled from each temporary well. One unfiltered sample and one filtered sample (through a 0.45-micron pore size filter) were collected from each well. The filtered samples were intended to remove suspended particulate matter that may contain or carry the target parameters. Each groundwater sample was analyzed for the same list of parameters as the soil samples. As noted in the work plan, the filtered samples will not be analyzed for VOCs.

QA/QC samples, including duplicates, trip blanks, field blanks and MS/MSD samples were collected in accordance with the QAPP for Additional Investigation in OU-1.

3.2.5 Data Usability Summary Report

A data usability summary report (DUSR) was completed for the additional investigation samples conducted in August 2006 by Data Validation Services (DVS) of North Creek, New York. The DUSR was submitted under separate cover as Addendum No. 1 to the AAR/RAWP and was dated November 14, 2006 and is included in this Revised AAR/RAWP as Appendix B. In the instances where DVS suggested adding a qualifier to the laboratory data or that data be rejected, the summary tables were modified to reflect that qualification and resubmitted with the DUSR. The revised tables, where applicable, are included in this report and are noted as “revised” in the title. A thorough description of the rationale related to the data validation is provided in the narrative of the DUSR included as Appendix B.

3.3 Additional Investigation Completed in November 2006

The following section describes additional soil sampling activities in OU-1 that were completed in November 2006 in response to the comments contained in the NYSDEC email dated October 30, 2006 regarding the AAR/RAWP for OU-1 dated October 17, 2006. The additional investigation work was conducted in accordance with the Work Plan for Additional Investigation in OU-1, Site #C915201, dated July 12, 2006 and Addendum No. 1 to Work Plan for Additional Investigation in OU-1, Site #C915201, dated November 7, 2006. The goal of the additional investigation completed in November 2006 was to aid in the evaluation of a Track 2

cleanup scenario for OU-1, as requested by NYSDEC. The additional investigation activities in OU-1 were intended to help to better define the amount of soil exceeding the proposed restricted commercial criteria for arsenic and lead in the one to two foot below grade interval, thus potentially reducing the amount of soil that would need to be removed to achieve a Track 2 cleanup. The recent discrete sampling data collected in August and November 2006 supersedes the composite data collected in 1993 in the one to two foot depth interval by GTI.

3.3.1 Soil Sampling

One soil sample in the one to two foot below grade interval was collected from each of the six soil boring locations shown on Figure 1. The locations were selected to provide additional data in portions of Parcels No. 4 and No. 5 where only composite sample data from the 1993 GTI investigation was available.

The samples were collected as a composite of the one to two foot depth interval. The two samples in Parcel No. 4 (OU-1 SS-5 and OU-1 SS-6) and the two samples in the middle third of Parcel No. 5 (OU-1 SS-3 and OU-1 SS-4) were analyzed for arsenic and lead only by USEPA method 6010 since these were the only parameters that exceeded the proposed restricted commercial criteria in the composite samples in these locations. The two samples in the southern third of Parcel No. 5 (OU-1 SS-1 and OU-1 SS-2) were analyzed for arsenic only since this was the only compound that exceeded the proposed restricted commercial criteria in the composite sample at this location. Quality Assurance/Quality Control samples were collected in accordance with the QAPP.

3.4 Results of All Investigations in OU-1

The following sections provide a summary of all investigations completed in OU-1.

3.4.1 Geology

The former Buffalo Terminal is located within the Erie-Ontario Lowland physiographic region of the Interior Plains Division. In general, the region is underlain by Silurian and Devonian age interbedded shales, siltstones, sandstones, limestones, and dolomites, dipping approximately 0.50 degrees to the south.

According to data from the well and soil boring logs from previous investigations, three unconsolidated deposits exist at OU-1. The first is a fill layer that consists of black cinders, silt, gravel, sand, slag, brick, coal, and wood. The second unit consists of alluvial deposits of silts, silts and clays, sands, and sands and gravel. The third unit is a gray to brown glacio-lacustrine clay. Based upon the boring log from ESL-8/ESL-W1, which was completed to a depth of 16 feet bls, the fill layer was approximately two-feet thick and was underlain by a layer of silt and clay from 2-4 feet bls and clay from 4-16 feet bls. Based upon the boring logs from ESL-13 through ESL-26, which were completed to depths up to four feet bls, fill thickness ranged from one foot to four feet. Fill was underlain by silts, sands, and gravel intermixed with clay. Bedrock was not encountered in any of the borings installed in OU-1 prior to August 2006.

The more recent monitoring wells and soil borings installed in August 2006 to depths up to 13 feet bls indicate that topsoil/fill ranged in thickness from 0.5 to two feet and is underlain by a gray to brown silty clay (MW-OU1-1, MW-OU1-2 and SB-OU1-1 through SB-OU1-3) ranging in thickness from zero to 10.5 feet or gray to brown clay (MW-OU1-3) approximately 3.5 feet thick. At MW-OU1-3, the gray to brown clay was underlain by 5.5 feet of silty clay and finally by 1.5 feet of gravel and sand from nine to 10.5 feet bls. Bedrock may have been encountered at 10.5 feet bls at MW-OU1-3 where refusal was occurred and dark limestone with white crystals was present in the drill cuttings.

3.4.2 Hydrogeology

The water table was encountered at approximately five feet bls at ESL-8/ ESL-W1 during its installation. No additional depth to water measurements were recorded at this well. This temporary well was abandoned by removing the screen and casing, and grouting the hole following the completion of the SFI.

The water table was encountered at approximately five feet bls at MW-OU1-1, at between 7.5 and nine feet bls at MW-OU1-2 and between 7 and 8 feet bls at MW-OU1-3. The water table elevations on OU-1 range from 577 to 579 feet above mean sea level and suggest a hydraulic gradient toward the east. However, based upon the direct observation of the lithology and the limited yield of the wells on OU-1, it is clear that the clay layer beneath OU-1 is not a significant water bearing formation. MW-OU1-1 produced only 5 gallons of water before it was bailed dry.

and MW-OU1-2 and MW-OU1-3 each produced only 1 gallon before they were bailed dry. Recharge in all of these wells was extremely slow, with MW-OU1-2 and MW-OU1-3 requiring sampling over three work days to accumulate sufficient water to collect the necessary groundwater sample volume. Attempting to draw meaningful conclusions regarding flow direction beneath OU-1 based on the available water level data from these wells would be questionable.

As discussed in prior reports, groundwater flow beneath the area is generally expected to be toward the Buffalo River. The water table elevations in the three wells measured on the northern portion of the Site south of Elk Street (B-1MW, MW-34 and MW-35) range from 584 to 585 feet above mean sea level. Due to the differences in construction of the new wells on OU-1 (i.e., wells were screened entirely within the clay) compared to the existing wells on the main portion of the Site (wells were installed with screens straddling the fill layer and the clay layer), a direct comparison of water level elevations is not appropriate.

3.4.3 Soil Quality

Tables 3 through 7 summarize analytical results for SVOCs, metals, VOCs, PCBs and pesticides/herbicides, respectively, for the soil samples collected during all investigations on OU-1. Soil quality data from all investigations has been compared to the restricted commercial and restricted industrial soil quality criteria presented in Table 8, which are each protective of human health and the environment and which are consistent with the restricted commercial and restricted industrial criteria presented in Part 375 dated December 14, 2006. This comparison enables identification of areas that may pose a potential risk under a restricted commercial land use scenario, which is an upgrade to the current zoning and reasonably anticipated future use of OU-1 or a restricted industrial land use scenario, which is consistent with the zoning and reasonably anticipated future use of OU-1.

A summary map (Plate 1) was prepared using the analytical database and MapInfo™ Geographic Information System (GIS) Software to show soil concentration data any compound from previous investigations that exceeded the proposed restricted commercial and/or restricted industrial cleanup criteria. The maps only present data for the target analytes that exceeded the proposed restricted commercial and/or restricted industrial criteria in at least one sample. The

only compounds that exceeded the criteria were six SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, chrysene, dibenzo[a,h]anthracene and indeno[1,2,3-cd]pyrene) and three metals (arsenic, cadmium and lead).

As discussed previously, the goal of the investigations completed on Parcels No. 4 and No. 5 of OU-1 prior to August 2006, was to delineate the nature and extent of soil impacts from the historic release of product from former Tank 60 in 1976. The goal of the additional investigation completed in August and November 2006 was to complete the delineation of constituents that were not analyzed during previous investigations (selected metals, PCBs, pesticides, herbicides), for delineation of VOCs that were only analyzed to a limited extent during previous investigations, and to provide additional data for arsenic and/or lead in portions of Parcels No. 4 and No. 5 where only composite sample data from the 1993 GTI investigation was available and exceeded the proposed criteria.

The major findings regarding soil quality throughout Parcels No. 4 and 5 of OU-1 and properties to the north of Parcel No. 5 are summarized below.

- VOCs were not detected above the proposed restricted commercial or restricted industrial criteria in any of the samples collected.
- Consistent with the type of product released during the historic 1976 incident (i.e., heavy end cracking stock), SVOCs were detected above the proposed restricted commercial and/or restricted industrial criteria in the northeast portion of Parcel No. 5 (ESL-12, ESL-13, ESL-14, and ESL-15). Exceedances of these criteria were generally an order of magnitude higher in this area than at the other locations. The only SVOC with exceedances of the restricted commercial or restricted industrial criteria outside of the northeast portion of Parcel No. 5 is benzo[a]pyrene. The exceedances of benzo[a]pyrene are randomly distributed and are indicative of background influences (i.e., residential uses, previous and current property owner usage, regional industrial influences, nearby highways, and urban fill).
- Concentrations of SVOCs decrease with depth. Outside the northeast portion of Parcel No. 5, no exceedances of the proposed restricted commercial and/or restricted industrial criteria were observed below 1 foot indicating that impacts due to background influences are confined to the upper one foot of soil. However, in the northeast portion of Parcel No. 5, elevated SVOC concentrations extended deeper than in other areas. In the northeast portion of Parcel No. 5 in the greater than two feet bls interval, higher SVOC concentrations (up to an order of magnitude greater) exceeding the proposed restricted commercial and/or industrial criteria were observed at ESL-13 through ESL-15 than at other sample locations. Impacts from the incident at former Tank 60 likely do not extend

below an approximate depth of four feet bls, where the clay layer is encountered based upon the decrease in concentrations and the type of product released.

- Metals are not constituents of concern for the type of product released from former Tank 60, however arsenic, cadmium and lead are present above the restricted commercial criteria and arsenic is present above the restricted industrial criteria due to background influences (i.e., residential uses, previous property owner usage, regional industrial influences, nearby highways, and urban fill).
- Arsenic is present above the proposed restricted commercial and the restricted industrial criteria at one location on Parcel No. 4 in the shallow interval. Based upon the 1993 GTI composite borings, arsenic was present above both criteria at three of the four 1993 composite sample locations (one on Parcel No. 4 and two on Parcel No. 5) in the one to two foot bls depth interval. However, based upon the historic and recent sampling of individual locations in the one to two foot depth interval, arsenic was not present above either criteria in Parcel No. 4 and was present above both criteria at only one location in the middle third of OU-1 (OU-1 SS-4) and one location in the bottom third of OU-1 (OU-1 SS-2), in Parcel No. 5.
- The only location where cadmium is present above the restricted commercial criteria is at ESL-11 in the shallow interval in Parcel No. 5. The concentration of cadmium at this location is 9.7 ppm compared to the restricted commercial criteria of 9.3 ppm (only 1.04 times the criteria).
- Lead is present above the proposed restricted commercial criteria at two locations within OU-1 (one on each parcel) in the shallow interval. Based upon the 1993 GTI composite borings, lead was present above the proposed restricted industrial criteria at two of the four 1993 composite sample locations (one on each parcel). However, based upon historic and recent sampling of individual locations in the one to two foot interval, lead is present above the proposed restricted commercial criteria at only one location in parcel No. 5 (ESL-14).

Based upon the results of the investigations, the remaining impacts attributable to the historic release from former Tank 60 and the impacts due to background influences have been delineated. The impacts due to the historic release are the elevated SVOC concentrations present in the northeast portion of Parcel No. 5 (ESL-12, ESL-13, ESL-14, and ESL-15) and the impacts due to background influences are the concentrations of benzo[a]pyrene, arsenic, cadmium and lead (as compared to the restricted commercial criteria) and of benzo[a]pyrene and arsenic (as compared to the restricted industrial criteria) outside of the northeast portion of Parcel No. 5.

The soil quality data from previous investigations indicates that the response actions taken following the release in 1976 (i.e., vacuuming of product from the surface, removal of impacted

soil, purchase of properties, and demolition of structures) were effective in removing impacted soil that resulted from the release, except in the northeast portion of Parcel No. 5 of OU-1.

It should be noted, that based upon data collected by New York State Department of Health (NYSDOH) that is summarized in the final technical report entitled “Seneca-Babcock Neighborhood Soil Sampling Program” dated July 1998, the neighborhood surrounding OU-1 is known to have concentrations of metals and SVOCs similar to those observed outside the northeast portion of Parcel No. 5 (the only location where impacts from the 1976 release are still evident).

3.4.4 Groundwater Quality

Tables 9 through 13 summarize analytical results for SVOCs, VOCs, metals, PCBs, and pesticides/herbicides, respectively, for the groundwater samples collected during all investigations on OU-1. No significant impacts to groundwater quality in OU-1 have been observed. The following is a summary of the groundwater quality data collected in OU-1:

- Impact to groundwater (as determined by GC FID) was observed at only one out of four locations sampled during the 1993 GTI investigation (TPH = 5.7 µg/L at TWP-03); and
- No VOCs or SVOCs were detected in the groundwater sample collected from ESL-8/ESL-W1 during the SFI, which was located in the vicinity of the temporary well TWP-03.
- No SVOCs, PCBs, pesticides or herbicides were detected in the groundwater samples collected in August 2006.
- Acetone was the only VOC detected in the groundwater samples collected in August 2006 (at MW-OU1-2 and MW-OU1-3). The concentrations did not exceed the NYSDEC AWQSGV.
- Several metals were detected at low levels in the samples collected in August 2006, including barium, beryllium, cyanide, lead, manganese and zinc. However, none of the concentrations exceeded the NYSDEC AWQSGVs. In general, the concentrations of metals in the filtered samples were lower than in the unfiltered samples.

Based upon the groundwater data presented in this section, groundwater has not been impacted by the historic release from former Tank 60 or from background influences. Therefore, groundwater does not require remediation and will not be addressed further in this AAR/RAWP.

3.4.5 Separate-Phase Product

No separate phase product was detected in any of the wells or temporary well points installed in OU-1.

4.0 REMEDIAL GOALS, SCGS AND REMEDIAL ACTION OBJECTIVES

Based upon the results of the previous site investigations and the current and potential future use of the property, the remedial goals and remedial action objectives (RAOs) have been developed for OU-1. Also provided is a description of Standards, Criteria and Guidance (SCGs) applicable to the remedial action. In accordance with the Draft BCP Guide and Part 375, cleanup for OU-1 will follow the Track 4 cleanup approach. The remedial goals for OU-1 have been developed considering that the reasonably anticipated future use of OU-1 will be vacant land surrounded by a perimeter fence, which is consistent with the zoning of OU-1 as M1 (light industrial district).

4.1 Remedial Goals

As described in Section 4.1 of the Draft BCP Guide, “the goal of the remedy selection process in the BCP is to select a remedy for a site that is fully protective of public health and the environment, taking into account the current, intended, and reasonably anticipated future land use of the site”.

The remedial goal for OU-1 is to meet the proposed restricted commercial or restricted industrial criteria for the top one foot of soil present, as described in the Draft BCP Guide. Consistent with the Draft BCP Guide, the proposed remedy for OU-1 will be fully protective of public health and the environment, taking into account the current, intended, and potential future land use.

4.2 Standards, Criteria and Guidance

SCGs are promulgated requirements (“standards” and “criteria”) and non-promulgated guidance (“guidance”) that govern activities that may affect the environment and are used by the DER at various stages in the investigation and remediation of a site. SCGs incorporate both the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986’s (CERCLA) concept of “applicable or relevant and appropriate requirements” (ARARs) and the United States Environmental Protection Agency’s (USEPA) “to be considered” (TBCs) category of non-enforceable criteria or guidance. SCGs applicable to OU-1 are as follows:

SCGs for Soil

The SCGs for soil were developed to remediate impacts that are the result of the historic release of product from former Tank 60 in 1976 and impacts due to background influences based on a restricted commercial use scenario (which is an upgrade to the current zoning) or restricted industrial use scenario (consistent with the zoning of OU-1) and the reasonably anticipated future use of OU-1 as vacant land surrounded by a fence. Therefore, the SCGs for soil are the proposed restricted commercial or restricted industrial cleanup criteria shown on Table 8, which are consistent with the criteria contained in Part 375. The selection of the appropriate SCG for soil will be determined based upon the results of the alternatives analysis presented in Section 5.

In addition, the unrestricted use criteria presented in Part 375 are used in this AAR/RAWP to evaluate an unrestricted use remedial alternative, as required for the AAR portion of this document. Unrestricted use of OU-1 is not planned. Based upon the current zoning, uses other than those allowed in the M-1 zoning category would require the approval of the City of Buffalo. These unrestricted use criteria are also shown on Table 8.

4.3 Remedial Action Objective

The RAO for the portion OU-1 is established for the protection of public health and the environment and is developed based on the SCGs, described above.

As specified in Draft DER-10, Section 4.1(c), RAOs are to be established by the following:

1. Identifying contaminants exceeding applicable SCGs and the environmental media impacted by the contaminants;
2. Identifying applicable SCGs, taking into consideration the current and, where applicable, future land use for the Site; and
3. Identifying all actual or potential public health and/or environmental exposures resulting from contaminants in environmental media at, or impacted by, the Site.

Based upon the identification of the contaminants and impacted media, as described in previous investigation reports and summarized in Section 3.0, identification of the applicable SCGs, taking into consideration current and potential future land use and identification of the actual or potential public health and/or environmental exposures, the only appropriate RAO for the proposed remedial action is to prevent ingestion/direct contact with impacted soil.

5.0 REMEDY SELECTION PROCESS

The following is a detailed description of the alternatives analysis and remedy selection process for OU-1.

In accordance with Section 4.8 of the Draft BCP Guide, this section of the AAR/RAWP for OU-1 was prepared in accordance with Section 4.3[c] of DER-10. As required, a minimum of two remedial alternatives (one being an unrestricted use scenario) are evaluated for OU-1, as follows:

- One alternative that will achieve a Track 1 cleanup, which is an upgrade to the current zoning and reasonably anticipated future use (i.e., soil impacts at any depth remediated to unrestricted use criteria without relying on the use of institutional or engineering controls);
- One alternative that will achieve a Track 2 restricted commercial use cleanup, which is an upgrade to the current zoning and reasonably anticipated future use (i.e., soil impacts at any depth remediated to restricted commercial criteria without relying on the use of long term institutional or engineering controls).
- One alternative that will achieve a Track 4 restricted commercial cleanup, which is an upgrade to the current zoning and reasonably anticipated future use of OU-1 (i.e., soil impacts in the top one foot remediated to restricted commercial use criteria and reliance on long-term institutional and engineering controls); and
- One alternative that will achieve a Track 4 restricted industrial cleanup that is compatible with the current and reasonably anticipated zoning of OU-1 (i.e., soil impacts in the top one foot remediated to restricted industrial use criteria and reliance on long-term institutional and engineering controls).

The following remedial alternatives for the media of concern were developed based upon the remedial goals and RAOs identified in Section 4:

Remedial Alternative 1: Track 1 Unrestricted Use Scenario - Excavation and offsite disposal of soil exceeding the unrestricted use criteria presented in Part 375 at any depth above the clay; and backfill of excavated areas.

Remedial Alternative 2: Track 2 Restricted Commercial Use Scenario - Excavation and offsite disposal of soil at any elevation above the clay exceeding the proposed restricted commercial use criteria and backfill of excavated areas.

Remedial Alternative 3: Track 4 Restricted Commercial Use Scenario - Excavation and offsite disposal of soil in the zero to one foot depth interval

exceeding the proposed restricted commercial use criteria; backfill of excavated areas; and institutional and engineering controls.

Remedial Alternative 4: Track 4 Restricted Industrial Use Scenario - Excavation and offsite disposal of soil in the zero to one foot depth interval exceeding the proposed restricted industrial use criteria; backfill of excavated areas; and institutional and engineering controls.

5.1 Evaluation Criteria

Each alternative was evaluated based on the following eight evaluation criteria presented in Section 4.1 of the Draft DER-10 Technical Guidance and/or the Draft BCP Guide:

- Overall protection of public health and the environment;
- Compliance with SCGs;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume with treatment;
- Short-term effectiveness;
- Implementability;
- Cost; and
- Compatibility with land use.

Each of the criteria is described below. In addition, DER-10 and the Draft BCP Guide require that the remedy be evaluated on the basis of Community Acceptance. In accordance with NYSDEC guidance, the proposed remedy will be evaluated for community acceptance once the public notice is issued and the public comment period is completed.

5.1.1 Overall Protection of Human Health and the Environment

Description of Criteria

From DER-10: “This criterion is an evaluation of the remedy’s ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls. The remedy’s ability to achieve each of the RAOs is evaluated.”

5.1.2 Compliance with Remedial Goals, SCGs and RAOs

Description of Criteria

From DER-10: “Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance. All SCGs for the site will be listed along with a discussion of whether or not the remedy will achieve compliance. For those SCGs that will not be met, provide a discussion and evaluation of the impacts of each and whether waivers are necessary.”

5.1.3 Long-term Effectiveness and Permanence

Description of Criteria

From DER-10: “This criteria evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain onsite after the selected remedy has been implemented, the following items are evaluated:

- The magnitude of the remaining risks (i.e., will there be any significant threats, exposure pathways, or risks to the community and environment from the remaining wastes or treated residuals);
- The adequacy of the engineering and institutional controls intended to limit the risk;
- The reliability of these controls; and
- The ability of the remedy to continue to meet RAOs in the future.”

5.1.4 Reduction in Toxicity, Mobility or Volume through Treatment

Description of Criteria

From DER-10: “The remedy’s ability to reduce the toxicity, mobility or volume of site contamination is evaluated. Preference should be given to remedies that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the Site.”

5.1.5 Short-term Effectiveness

Description of Criteria

From DER-10: “The potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during the construction and/or implementation are evaluated. A discussion of how the identified adverse impacts and health risks to the community or workers at the site will be controlled and the effectiveness of the controls should be presented.

Provide a discussion of engineering controls that will be used to mitigate short-term impacts (i.e., dust control measures). The length of time needed to achieve the remedial objectives is also estimated.”

5.1.6 Implementability

Description of Criteria

From DER-10: “The technical and administrative feasibility of implementing the remedy is evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.”

5.1.7 Cost

Description of Criteria

From DER-10: “Capital, operation, maintenance and monitoring costs are estimated for the remedy and presented on a present worth basis.”

5.1.8 Compatibility with Land Use

Description of Criteria

From the Draft BCP Guide: “Preliminary information regarding the land use factor was submitted as part of the application. The Department accepted this initial determination of use by approval of the application. This preliminary determination is confirmed and updated as necessary during the remedy selection process. Current, intended, or reasonably anticipated future land uses of the site and its surroundings must be considered in the selection of the remedy.”

5.2 Remedial Alternative 1: Track 1 Unrestricted Use Scenario - Excavation and Offsite Disposal of Soil Exceeding the Unrestricted Use Criteria Presented in Part 375 at Any Depth Above the Clay; and Backfill of Excavated Areas.

The following sections provide a description of Remedial Alternative 1, which would achieve a Track 1 cleanup of OU-1. As defined in the BCP Guide and Part 375, a Track 1 cleanup would achieve a cleanup level that will allow the site to be used for any purpose without any restrictions on the use of the site and that does not rely on the implementation of long-term institutional and

engineering controls. The soil cleanup must achieve the unrestricted use criteria at any depth above bedrock (additional conditions apply to soil below 15 feet) and the backfill used must meet the unrestricted use criteria. As described in Section 3 and as we have discussed in previous meetings and reports, there is a layer of natural clay that begins between two and four feet below land surface beneath OU-1. Due to the nature of the previous site use and the nature of contaminants of concern from the release that occurred in 1976 and from background influences, the remedial action to achieve a Track 1 cleanup of OU-1 will be limited to the fill material that exists above the clay. An evaluation based on the specific evaluation criteria is also presented below.

5.2.1 Description

Figure 6 shows the areas to be addressed under Remedial Alternative 1. Remedial Alternative 1 includes the following remedial elements:

- Mobilization and Site Preparation;
- Storm Water Management and Erosion Control;
- Dust Control;
- Excavation and offsite disposal of soil exceeding the unrestricted use criteria presented in Part 375 at any depth above the clay;
- Temporary Staging and Stockpiling;
- Waste Characterization Sampling;
- Traffic Control;
- Offsite Disposal and Equipment Decontamination;
- Post-Excavation Sampling;
- Backfill of the excavated areas with imported soil meeting the unrestricted use criteria presented in Part 375 (Table 14);
- Site Restoration;
- Health and Safety and Community Air Monitoring; and
- Perimeter fencing (not required but maintained as a precaution against trespassing and dumping).

Each of these elements is discussed in greater detail below.

5.2.1.1 Mobilization and Site Preparation

Upon mobilization to the Site, the Contractor will set up all temporary utilities and temporary facilities, if required. The Contractor will clear vegetation, as necessary, for access to the excavation area. A pre-construction survey will also be prepared by a land surveyor licensed by the State of New York.

5.2.1.2 Storm Water Management and Erosion Control

All necessary measures to temporarily control erosion will be employed. Soil erosion and sediment control measures will be installed prior to the implementation of the remediation and will be maintained throughout the duration of all remedial construction activities, as appropriate. Hay bales and/or silt fences will be placed by the Contractor to control sediment around the disturbed area/excavations or other work areas. Erosion and sediment control measures (i.e., hay bales, silt fences, etc.) will be used to protect any storm water drain in proximity to the construction activities.

In addition, the entrance and adjacent street areas will be swept and/or cleaned, as necessary, throughout the work day, and at the end of the workday, to keep the streets free of soil or other debris generated from the work site during the duration of all excavation activities.

5.2.1.3 Dust Control

Dust (particulate matter) will be controlled at the Site in accordance with the site specific Community Air Monitoring Plan (CAMP), the NYSDEC Technical and Administrative Guidance Memorandum #4031 – Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (TAGM 4031), and all federal, state and local requirements. The Contractor will be required to maintain all excavations, stockpiles, and all other work areas to minimize dust that would cause a hazard or nuisance to others. As a dust control measure, plastic sheeting will be installed on the fence to the north of the proposed excavation area adjacent to the existing residence and to the east of the proposed excavation area adjacent to Bradford Street for the length of the excavation since there are occupied structures on the east side of Bradford Street.

Dust will be monitored in accordance with the requirements of the Contractor's HASP, the CAMP, and the NYSDEC TAGM 4031. Based on the results of the monitoring, the Contractor will implement necessary measures to control dust to acceptable levels, including but not limited to, one or more of the following measures:

1. Misting equipment and excavation fences;
2. Spraying water (using atomizer) on buckets during excavation and dumping;
3. Hauling materials in tarped or lined containers;
4. Reducing speed of vehicles moving through the construction area;
5. Covering excavated material stockpiles and/or portions of the stockpile, as necessary, throughout the day and after excavation activities cease each day; and
6. Stopping work.

5.2.1.4 Excavation

Based on a comparison of the available data to the proposed unrestricted use criteria presented in Part 375, at least one compound exceeded the proposed Part 375 unrestricted use criteria in the zero to one foot bls depth interval and the one to two feet bls depth interval at all sampling locations within the boundaries of OU-1. Several compounds also exceeded the unrestricted criteria at depths greater than two feet bls on Parcel No. 5, but none exceeded the criteria on Parcel No. 4 at greater than two feet. The average depth where the clay layer was encountered beneath the fill layer, which is assumed to be the vertical limit of impacts from the historic release at former Tank 60 or from background influences, ranged from 0.5 to approximately 4 feet bls and averaged approximately 3 feet bls. Therefore, the remedial alternative to achieve unrestricted use of the site assumes that the entire areal extent of Parcel No. 4 would be excavated to two feet below existing grade and the entire areal extent of Parcel No. 5 would be excavated to an average of 3 feet bls. Therefore, the estimated volume of soil to be removed to achieve unrestricted use of OU-1 would be 8,100 cubic yards.

Based upon the investigation results, excavation dewatering is not anticipated to be required.

The final horizontal and vertical limits of the excavation will be surveyed. This alternative is estimated to require two months to complete.

5.2.1.5 Temporary Staging and Stockpiling

All impacted materials are to be stored in stockpiles lined and covered with a single layer of minimum 6-mil plastic sheeting. Stockpiles will be routinely inspected and broken sheeting covers will be promptly replaced. Soil stockpiles will be continuously encircled with silt fence or hay bales.

5.2.1.6 Waste Characterization Sampling

One sample per 500 cubic yards of soil to be excavated will be collected for waste characterization using a hand auger prior to excavation, based upon the requirements of the ExxonMobil-approved disposal facility. The samples will be analyzed for the following:

- Target compound list (TCL) VOCs and SVOCs according to USEPA Methods SW-846 8260 and 8270, respectively;
- TPH for gasoline and diesel range organics (by Method SW-846 8015B);
- Reduced TAL metals by Method SW-846 6010 (includes cadmium, chromium, lead, nickel, selenium, thallium, and vanadium) and Method SW-846 7471 for mercury;
- The full list of toxicity characteristics leaching procedure (TCLP) analyses (metals, VOCs, SVOCs, pesticides, and herbicides);
- Corrosivity;
- Reactivity; and
- Ignitability.

Waste characterization laboratory data are to be reported in NYSDEC ASP Category A deliverables.

5.2.1.7 Traffic Control

Detailed traffic control procedures will be developed when preparing the Contractor's HASP. A truck route map showing primary and secondary routes from the project site to the New York State Thruway is provided as Figure 7.

5.2.1.8 Offsite Disposal and Equipment Decontamination

All impacted soil excavated from the Site and other remediation-derived waste will be transported and disposed of in accordance with all applicable federal, state, and local regulations

at a facility selected by ExxonMobil. The remediation-derived waste that will be generated during the construction activities include:

- Impacted soil from OU-1;
- Personal Protective Equipment (PPE); and
- Decontamination water, if any is generated.

Haul vehicles for bulk soil will be secured with appropriate covers prior to exiting the construction area to prevent a release of waste. PPE generated during the implementation of the remedy will be consolidated and stored in appropriate bulk containers and temporarily staged at the Site waste storage area within the Site limits. Any full or partially filled containers will be appropriately labeled. ExxonMobil will coordinate waste characterization and disposal.

If any is generated, decontamination water will be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street. The water (if any) will be treated through the onsite system or will be disposed of offsite at an ExxonMobil-approved disposal facility.

5.2.1.9 Post-Excavation Sampling

Post excavation bottom sampling (at a frequency of one sample per 2,000 square feet of bottom area) would be conducted for constituents that exceeded the proposed unrestricted use criteria in previous sampling events to confirm that the unrestricted criteria were met. The frequency of bottom sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 Sections 3.5 and 5.4 for excavations 20 to 300 feet in perimeter since the excavations much larger than the referenced excavation and the guidance allows for different sampling frequencies to be negotiated for larger excavations, since there are numerous existing samples throughout the two parcels to demonstrate soil quality and since the excavation areas area primarily impacted by background influences, except in the northeast portion of Parcel No. 5. Constituents or groups of constituents that did not exceed the criteria in previous investigations would not be sampled for. Samples will generally be collected from the top of the excavation since previous data indicates concentrations decrease with depth. However, areas that appear more heavily impacted, if any, will be given sampling preference. If the post-

excavation bottom sample results indicate that concentrations of target constituents are detected below the proposed unrestricted use criteria, the excavation activities will be considered complete. However, if concentrations of target constituents are detected at a level above the unrestricted use criteria, the excavation activities, including additional post-excavation bottom sampling, will continue deeper until these conditions are met. Post excavation sidewall samples (at a frequency of one sample per 100 linear feet) will be collected to identify the concentrations of constituents that will remain at the OU-1 boundary. Again, the proposed sampling frequency is less frequent than the guidance provided in DER-10 due to the reasons stated above. Areas that appear more heavily impacted, if any, will be given sampling preference. However, additional lateral excavation will not be completed outside the OU-1 boundary.

The locations of the post-excavation samples will be surveyed.

Post-excavation samples will be submitted to TestAmerica, a NYSDOH ELAP certified laboratory. Category B laboratory data deliverables, as defined in the analytical services protocol (ASP), will be requested. In addition, a Data Usability Summary Report (DUSR) will be prepared by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10.

5.2.1.10 Backfilling

When excavation and removal of the impacted soil is complete, the excavation will be backfilled and compacted using six inches of offsite common fill material and six inches of offsite topsoil meeting the requirements of the proposed unrestricted use criteria presented in Part 375 (Table 14). The backfill material will be free of extraneous debris or solid waste. The source of the fill must be documented by the supplier, including the location where the fill was obtained and a brief history of the site that is the source of the fill. The fill material must be approved in advance by the NYSDEC. If the NYSDEC agrees that the material originated from a virgin source, then a minimum of one composite sample must be collected and analyzed per source. If the source is not virgin, the following sampling frequency shall apply to each source: one composite sample per 250 cubic yards for the first 1,000 yards, one composite sample per 1,000 cubic yards for 1,000 to 5,000 cubic yards and one composite sample per 5,000 cubic yards

thereafter. Samples will be analyzed for all parameters presented on Table 8. Analytical results will be submitted to the NYSDEC prior to use of the backfill.

5.2.1.11 Site Restoration

After backfilling activities are completed, the work area will be graded and seeded with grass. Once site restoration activities have been completed, all temporary work zone barriers, soil erosion, and sedimentation controls and remedial construction equipment will be removed. The Contractor will then decontaminate all equipment in the established onsite decontamination area prior to removal from the Site.

5.2.1.12 Health and Safety and Community Air Monitoring

All remedial construction activities will be performed in a manner consistent with 29CFR 1910 and 1926. Each consultant and contractor onsite will operate under a site-specific HASP for the project. The HASP will be readily available during the work. During all phases of Site work, the Contractor will monitor safety and health conditions and fully enforce the site-specific HASP. The Contractor will be responsible for monitoring general Site conditions and for safety hazards. Specifically, monitoring will be performed to verify that all requirements of the Occupational Safety and Health Administration, as outlined on 29 CFR Part 1910 and 1926, are adhered to. The HASP for the Site will be submitted to the NYSDEC under separate cover.

Ambient air will be monitored at the site perimeter throughout the course of the work for particulate matter in accordance with the CAMP included as Appendix B. Monitoring for VOCs will not be conducted as part of the CAMP since VOCs are not constituents of concern in OU-1. During the course of the work, the Contractor will take abatement measures, as directed or as otherwise necessary, to minimize the levels of particulates at the limits of the work.

5.2.1.13 Perimeter fencing (not required but maintained as a precaution against trespassing and dumping)

Engineering controls currently in place include a chain link fence with locked gate that surrounds OU-1 Parcels No. 4 and No. 5. Though not required for the remedy, as a precaution against trespassers and dumping, ExxonMobil will maintain the chain link fence and gate following completion of the work.

5.2.2 Evaluation

The following sections provide a detailed evaluation of Remedial Alternative 1 based on the seven specific evaluation criteria.

5.2.2.1 Overall Protection of Human Health and the Environment

Alternative 1 will be protective of human health and the environment by eliminating the concentrations in soil of petroleum-related and non-petroleum-related constituents due to the release from former Tank 60 in 1976 and background influences through source removal. The potential for human and environmental exposure to these constituents throughout OU-1 will be eliminated by excavation of the impacted materials, disposing of impacted material offsite and backfilling the area with material meeting the proposed unrestricted use criteria (Table 14).

5.2.2.2 Compliance with Remedial Goals, SCGs and RAOs

SCGs for the proposed remedy are presented in Section 4.0. Alternative 1 will achieve compliance with the proposed unrestricted use criteria throughout OU-1.

The excavation will be backfilled with material meeting the proposed unrestricted use criteria presented in Part 375 (Table 14).

5.2.2.3 Long-term Effectiveness and Permanence

Alternative 1 removes the all soil in OU-1 that was impacted by the release from former Tank 60 in 1976 or that was impacted by background influences. Alternative 1 returns this portion of OU-1 to conditions that are less contaminated than area background. Therefore, incremental risk from impacts from the 1976 release or background influences is eliminated, engineering and institutional controls are not necessary, and the remedy will continue to meet RAOs in the future, thus providing a permanent long-term solution for OU-1.

5.2.2.4 Reduction in Toxicity, Mobility or Volume through Treatment

By removing all soil with concentrations that exceeded the proposed unrestricted use criteria, Alternative 1 will permanently eliminate the toxicity, mobility, and volume of contaminants within OU-1.

5.2.2.5 Short-term Effectiveness

The health and environmental risks associated with implementation of Alternative 1 are minimal. The remedy implementation time (two months) is relatively short and the potential adverse impacts to the community and workers can be mitigated with engineering controls. These potential impacts (exposure to contaminants and traffic during soil excavation and transportation) will be addressed in the site-specific HASP and CAMP, which also detail monitoring during the construction. These risks will be mitigated through the implementation of engineering controls as necessary (i.e., dust suppression and traffic control) and will only be an issue during the excavation and transportation of soils.

5.2.2.6 Implementability

The materials, equipment, and personnel associated with the implementation of Alternative 1 are commercially available and have been proven effective and reliable for remediation of the media of concern at OU-1 under similar circumstances. It is not anticipated that future remedial action following the remedial construction will be required.

5.2.2.7 Cost

The construction and equipment costs associated with Alternative 1 are estimated at approximately \$1,820,000. It is anticipated that long-term Operation, Maintenance and Monitoring (OM&M) are not required due to the nature of the remedy, which is anticipated to achieve the unrestricted use goal.

5.2.2.8 Compatibility with Land Use

The current and reasonably anticipated future zoning of OU-1 is light industrial. The present and reasonably anticipated future use of the parcels is for them to remain vacant and surrounded by a perimeter fence as a precaution against trespassers and dumping. Following implementation of the remedy, the backfilled area will be restored to unrestricted use conditions, thereby providing an upgraded condition to the present zoning and retaining compatibility with future land use. ExxonMobil has no specific plan for OU-1 at this time.

5.3 Remedial Alternative 2: Track 2 Restricted Commercial Use Scenario - Excavation and Offsite Disposal of Soil at Any Elevation Above the Clay Exceeding the Proposed Restricted Commercial Use Criteria and Backfill of Excavated Areas.

The following sections provide a description of Remedial Alternative 2, which would achieve a Track 2 cleanup of OU-1 to the proposed restricted commercial criteria. As defined in the BCP Guide and Part 375, a Track 2 restricted commercial cleanup allows for the use of the generic soil criteria presented in Part 375; must address contaminants of concern in soils at any depth above bedrock (additional conditions apply to soil below 15 feet) to meet contaminant specific restricted commercial use criteria; backfill must meet the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375 6.8(b) of Part 375 (Table 14); and may not rely on the implementation of long term institutional and engineering controls to address all media of concern. As described in Section 3 and as we have discussed in previous meetings and reports, there is a layer of natural clay that begins between two and four feet below land surface beneath OU-1. Due to the nature of the previous site use and the nature of contaminants of concern from the release that occurred in 1976 and from background influences, the remedial action to achieve a Track 2 cleanup of OU-1 will be limited to the fill material that exists above the clay.

An evaluation based on the specific evaluation criteria is also presented below.

5.3.1 Description

Plate 2 shows the areas to be addressed under Remedial Alternative 2. Remedial Alternative 2 includes the following remedial elements:

- Mobilization and Site Preparation;
- Storm Water Management and Erosion Control;
- Dust Control;
- Excavation and offsite disposal of soil exceeding the proposed restricted commercial use criteria at any depth above the clay;
- Temporary Staging and Stockpiling;
- Waste Characterization Sampling;
- Traffic Control;

- Offsite Disposal and Equipment Decontamination;
- Post-Excavation Sampling;
- Backfill of the excavated areas with imported soil the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14);
- Site Restoration;
- Health and Safety and Community Air Monitoring;
- Perimeter fencing (not required but maintained as a precaution against trespassing and dumping); and
- Environmental Easement for Use Restrictions.

Each of these elements is discussed in greater detail below.

5.3.1.1 Mobilization and Site Preparation

Mobilization and site preparation will be the same as described in Section 5.2.1.1

5.3.1.2 Storm Water Management and Erosion Control

Storm water management and erosion control will be the same as described in Section 5.2.1.2.

5.3.1.3 Dust Control

Dust control will be the same as described in Section 5.2.1.3.

5.3.1.4 Excavation

Based on a comparison of the available data to the proposed restricted commercial use criteria at any depth above the clay presented in Section 3.0, the area requiring excavation to meet these criteria is shown on Plate 2 and is approximately 7,150 square feet on Parcel No. 4 and 45,500 square feet on Parcel No. 5. The total area for Parcel No. 4 is entirely within the zero to one foot below grade interval. The total area on Parcel No. 5 is comprised of 26,300 square feet in the zero to one foot below grade interval, 14,500 square feet in the one to two foot below grade depth interval and 4,700 square feet in the two to three foot below grade depth interval. Therefore, the estimated volume of soil to be removed from Parcels No. 4 and 5 in the zero to one foot below grade interval would be 1,250 cubic yards, the volume to be removed from Parcel No. 5 in the one to two foot below grade interval would be 540 cubic yards and the volume to be

removed from Parcel No. 5 in the two to three foot below grade depth interval would be 180 cubic yards for a total of 1,970 cubic yards to achieve the proposed restricted commercial use criteria for OU-1.

Based upon the investigation results, excavation dewatering is not anticipated to be required.

The final horizontal and vertical limits of the excavation will be surveyed. This alternative is estimated to require five weeks to complete.

5.3.1.5 Temporary Staging and Stockpiling

Temporary staging and stockpiling will be the same as described in Section 5.2.1.5.

5.3.1.6 Waste Characterization Sampling

Waste characterization sampling will be the same as described in Section 5.2.1.6.

5.3.1.7 Traffic Control

Traffic control will be the same as described in Section 5.2.1.7.

5.3.1.8 Offsite Disposal and Equipment Decontamination

Offsite disposal and equipment decontamination will be the same as described in Section 5.2.1.8.

5.3.1.9 Post-Excavation Sampling

Post-excavation sampling will be the same as described in Section 5.2.1.9.

5.3.1.10 Backfilling

Backfilling will be the same as presented in Section 5.2.1.10, with the exception that the backfill will meet the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.3.1.11 Site Restoration

Site restoration will be the same as described in Section 5.2.1.11.

5.3.1.12 Health and Safety and Community Air Monitoring

Health and safety and community air monitoring will be the same as described in Section 5.2.1.12.

5.3.1.13 Perimeter fencing (not required but maintained as a precaution against trespassing and dumping)

Engineering controls currently in place include a chain link fence with locked gate that surrounds OU-1 Parcels No. 4 and No. 5. Though not required for the remedy, as a precaution against trespassers and dumping, ExxonMobil will maintain the chain link fence and gate following completion of the work.

5.3.1.14 Environmental Easement for Use Restriction

An environmental easement subjects OU-1 to use restrictions that run with the land in perpetuity. An environmental easement is a form of institutional control that acts as an enforcement mechanism to ensure required institutional controls remain in place (NYSDEC, 2004). The environmental easement will:

- Restrict the use of OU-1 to commercial or industrial uses allowable under the zoning as M-1 light industrial;
- Restrict the use of groundwater as a source of potable water; and
- Require an annual certification that certifies the institutional controls remain in place and that they remain effective for the protection of human health and the environment.

The Environmental Easement will be incorporated in all agreements regarding rights to use the land such as leases and licenses.

5.3.2 Evaluation

The following sections provide a detailed evaluation of Remedial Alternative 2 based on the specific evaluation criteria.

5.3.2.1 Overall Protection of Human Health and the Environment

Alternative 2 will be protective of human health and the environment by removing soil at any depth above the clay that was impacted above the proposed restricted commercial criteria by the release from former Tank 60 in 1976 and background influences. The potential for human and

environmental exposure to these constituents throughout OU-1 will be eliminated by excavation of the impacted materials at any depth above the clay, disposing of impacted material offsite and backfilling the area with material meeting the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.3.2.2 Compliance with Remedial Goals, SCGs and RAOs

SCGs for the proposed remedy are presented in Section 4.0. Alternative 2 will achieve compliance with the proposed restricted commercial criteria at any depth above the clay throughout OU-1.

The excavation will be backfilled with material meeting the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.3.2.3 Long-Term Effectiveness and Permanence

Alternative 2 removes soil at any depth above the clay in OU-1 that was impacted above the proposed restricted commercial criteria by the release from former Tank 60 in 1976 or that was impacted by background influences. Alternative 2 returns OU-1 to conditions that compatible with the zoning and reasonably anticipated future use of OU-1 as vacant land surrounded by a fence. Therefore, the incremental risk from impacts from the 1976 release or background influences are eliminated and the institutional control of the environmental easement to limit site use and the use of groundwater will be enforced, all of which will provide a permanent long-term solution for OU-1.

5.3.2.4 Reduction in Toxicity, Mobility or Volume through Treatment

By removing all soil impacted above the proposed restricted commercial use criteria, Alternative 2 will permanently eliminate the toxicity, mobility, and volume of contaminants within OU-1.

5.3.2.5 Short-term Effectiveness

The health and environmental risks associated with implementation of Alternative 2 are minimal. The remedy implementation time is relatively short (five weeks) and the potential adverse

impacts to the community and workers can be mitigated with engineering controls. These potential impacts (exposure to contaminants and traffic during soil excavation and transportation) will be addressed in the site-specific HASP and CAMP, which also detail monitoring during the construction. These risks will be mitigated through the implementation of engineering controls as necessary (i.e., dust suppression and traffic control) and will only be an issue during the excavation and transportation of soils.

5.3.2.6 Implementability

The materials, equipment, and personnel associated with the implementation of Alternative 2 are commercially available and have been proven effective and reliable for remediation of the media of concern at OU-1 under similar circumstances. It is not anticipated that future remedial action following the remedial construction will be required.

5.3.2.7 Cost

The construction and equipment costs associated with Alternative 2 are estimated at approximately \$495,000. It is anticipated that long-term Operation, Maintenance and Monitoring (OM&M) are not required, aside from certification of the institutional controls, due to the nature of the remedy, which is anticipated to achieve the restricted commercial use goal. Costs include preparation of an annual report certifying that the institutional controls are in place. Groundwater monitoring will not be required as groundwater was determined not to be impacted. Annual operation and maintenance costs are estimated to be \$5,000 per year.

5.3.2.8 Compatibility with Land Use

The current and reasonably anticipated future zoning of OU-1 is M-1 light industrial. The present and reasonably anticipated future use of the parcels is for them to remain vacant and surrounded by a perimeter fence as a precaution against trespassers and dumping. Following implementation of the remedy, OU-1 will be restored to the restricted commercial use criteria, thereby providing an upgraded condition to the current zoning and retaining compatibility with future land use. ExxonMobil has no specific plan for OU-1 at this time. Any future use will require further evaluation of site conditions and compliance with the SMP and environmental easement.

5.4 Remedial Alternative 3: Track 4 Restricted Commercial Use Scenario - Excavation and Offsite Disposal of Soil in the Zero to One Foot Depth Interval Exceeding the Proposed Restricted Commercial Use Criteria; Backfill of Excavated Areas; and Institutional and Engineering Controls.

The following sections provide a description of Remedial Alternative 3, which would achieve a Track 4 cleanup of OU-1 to the proposed restricted commercial criteria. As defined in the BCP Guide and Part 375, a Track 4 restricted commercial cleanup allows for the use of the generic soil criteria presented in Part 375 or establishment of site-specific criteria; must address contaminants of concern in the top one foot of exposed soil to meet the contaminant specific criteria; backfill must meet the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14); and may rely on the implementation of long term institutional and engineering controls to address all media of concern. An evaluation based on the specific evaluation criteria is also presented below.

5.4.1 Description

Figure 8 shows the areas to be addressed under Remedial Alternative 3. Remedial Alternative 3 includes the following remedial elements:

- Mobilization and Site Preparation;
- Storm Water Management and Erosion Control;
- Dust Control;
- Excavation and offsite disposal of soil exceeding the proposed restricted commercial use criteria in the zero to one foot depth interval;
- Temporary Staging and Stockpiling;
- Waste Characterization Sampling;
- Traffic Control;
- Offsite Disposal and Equipment Decontamination;
- Post-Excavation Sampling;
- Backfill of the excavated areas with imported soil meeting the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14);

- Site Restoration;
- Health and Safety and Community Air Monitoring;
- Preparation of a Site Management Plan;
- Perimeter fencing; and
- An Environmental Easement as Institutional Control.

Each of these elements is discussed in greater detail below.

5.4.1.1 Mobilization and Site Preparation

Mobilization and site preparation will be the same as described in Section 5.2.1.1.

5.4.1.2 Storm Water Management and Erosion Control

Storm water management and erosion control will be the same as described in Section 5.2.1.2.

5.4.1.3 Dust Control

Dust control will be the same as described in Section 5.2.1.3.

5.4.1.4 Excavation

Based on a comparison of the available data to the proposed restricted commercial use criteria in the zero to one foot below grade interval presented in Section 3.0, the area requiring excavation to meet these criteria is shown on Figure 8 and is approximately 7,150 square feet on Parcel No. 4 and 26,300 square feet on Parcel No. 5. Therefore, the estimated volume of soil to be removed in the zero to one foot below grade interval to achieve the proposed restricted commercial use criteria for OU-1 would be 1,250 cubic yards.

Based upon the investigation results, excavation dewatering is not anticipated to be required.

The final horizontal and vertical limits of the excavation will be surveyed. This alternative is estimated to require three weeks to complete.

5.4.1.5 Temporary Staging and Stockpiling

Temporary staging and stockpiling will be the same as described in Section 5.2.1.5.

5.4.1.6 Waste Characterization Sampling

Waste characterization sampling will be the same as described in Section 5.2.1.6.

5.4.1.7 Traffic Control

Traffic control will be the same as described in Section 5.2.1.7.

5.4.1.8 Offsite Disposal and Equipment Decontamination

Offsite disposal and equipment decontamination will be the same as described in Section 5.2.1.8.

5.4.1.9 Post-Excavation Sampling

Post excavation sidewall sampling (at a frequency of one sample per 100 linear feet) will be conducted for constituents that exceeded the proposed restricted commercial use criteria in previous sampling events, SVOCs and metals (arsenic, cadmium and lead), to confirm that the restricted commercial criteria were met. Since all of the SVOCs that exceeded the restricted commercial criteria are listed on the NYSDEC Spill Technology and Remediation Series (STARS) Memo # 1 dated August 1992, the post excavation samples will be analyzed for STARS list SVOCs only by USEPA method 8270. Metals will be analyzed by USEPA method 6010. The frequency of sidewall sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 Sections 3.5 and 5.4 for excavations 20 to 300 feet in perimeter since the excavations much larger than the referenced excavation size and the guidance allows for different sampling frequencies to be negotiated for larger excavations, since there are numerous existing samples throughout the two parcels to demonstrate soil quality and since the excavation areas area primarily impacted by background influences, except in the northeast portion of Parcel No. 5.

Samples will be collected as a composite of the one foot depth of the excavation sidewall. Areas that appear more heavily impacted, if any, will be given sampling preference. If the post-excavation sample results indicate that concentrations of target constituents are detected below the proposed restricted commercial use criteria, the excavation activities will be considered complete. However, if concentrations of target constituents are detected at a level above the restricted commercial use criteria, the excavation activities, including additional post-excavation

sidewall sampling, will continue laterally until these conditions are met or until the OU-1 boundary is reached.

Post excavation bottom samples will not be collected unless there is a visually identified condition that is different than what was observed in previous sampling rounds. No bottom samples are proposed since there is sufficient soil quality data from the one to two foot below grade sample interval from previous investigations to demonstrate what concentrations will remain below the one foot excavation depth following the remediation. In the one to two foot depth interval on the 7,150 square foot proposed excavation area of Parcel No. 4, there is one grab sample and one composite sample from previous investigations. In the one to two foot depth interval on the 26,300 square foot proposed excavation area of Parcel No. 5, there are seven grab samples and three composite samples from previous investigations.

The locations of the post-excavation samples will be surveyed.

Post-excavation samples will be submitted to TestAmerica, a NYSDOH ELAP certified laboratory. Category B laboratory data deliverables, as defined in the ASP, will be requested. In addition, a DUSR will be prepared by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10.

5.3.1.10 Backfilling

Backfilling will be the same as presented in Section 5.2.1.10, with the exception that the backfill will meet the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.4.1.11 Site Restoration

Site restoration will be the same as described in Section 5.2.1.11.

5.4.1.12 Health and Safety and Community Air Monitoring

Health and safety and community air monitoring will be the same as described in Section 5.2.1.12.

5.4.1.13 Perimeter fencing (not required but maintained as a precaution against trespassing and dumping)

Engineering controls currently in place include a chain link fence with locked gate that surrounds OU-1 Parcels No. 4 and No. 5. Though not required for the remedy, as a precaution against trespassers and dumping, ExxonMobil will maintain the chain link fence and gate following completion of the work.

5.4.1.14 Site Management Plan

Following the completion of remedial Alternative 3, constituents would remain onsite at concentrations in excess of the restricted commercial criteria at depths greater than one foot below land surface. For this reason, a Site Management Plan (SMP) will be developed. Potential future Site owners/operators will be required to retain a copy of the SMP for reference. The primary components of the SMP will include:

- A Soil Management Plan;
- Use Restrictions; and
- Operation, Maintenance and Monitoring (OM&M) Plan.

The SMP will be referred to in the Environmental Easement.

Soil Management Plan

The Soil Management Plan would be prepared and implemented to minimize the potential exposure of workers and the community to constituents in soil after the remediation is completed. Further, the Soil Management Plan would establish applicable management practices for the future disturbance/reuse of OU-1 soils exceeding the restricted commercial criteria at depths greater than one foot below grade.

Specifically, the Soil Management Plan will include:

- A description of the proper procedures for the management of excavated soil in a manner that would protect workers and the surrounding community from exposure (including health and safety procedures, dust control and CAMP);
- Use restrictions regarding Site development or groundwater as identified in the Environmental Easement; and

- A requirement that the property owner provide an Institutional Control/Engineering Control certification on a periodic basis.

The Soil Management Plan will provide requirements for the analytical testing of soil in remediated areas (i.e., areas with one foot soil cap) requiring excavation work as part of future Site activities. In the event that analytical testing of the soil is not performed prior to intrusive Site disturbance activities, the soil will be stockpiled and sampled for analytical testing. Analytical results will be evaluated for the determination of soil reuse at the Site. The Soil Management Plan will also provide guidelines for workers in the event soil requires offsite disposal. Soil requiring offsite disposal will be sampled for waste characterization analyses as determined by the waste disposal facility.

Use Restrictions

Any future development in OU-1 would need to be performed in accordance with NYSDEC regulations. Any future modifications to OU-1 would require submittal of a work plan and approval by the NYSDEC.

OM&M Plan

An OM&M plan would be required for the one foot soil cap. The OM&M Plan would provide the detailed procedures necessary to maintain the engineering controls (e.g., cap). This would include any inspection and maintenance of the cap and perimeter fencing. Groundwater monitoring will not be required as previous sampling has shown that groundwater is not impacted above SCGs and since groundwater is not used as a source of drinking water.

5.4.1.15 Environmental Easement

An environmental easement subjects OU-1 to use restrictions or engineering controls that run with the land in perpetuity. An environmental easement is a form of institutional control that acts as an enforcement mechanism to ensure required institutional and engineering controls remain in place (NYSDEC, 2004). The environmental easement will:

- Require compliance with the Site Management Plan;
- Restrict the use of OU-1 to commercial or industrial uses allowable under the zoning as M-1 light industrial;

- Identify areas of residual contamination remaining on Site that would be managed in place (e.g., potential soil with concentrations in excess of restricted commercial criteria at depths greater than one foot below grade);
- Restrict the use of groundwater as a source of potable water; and
- Require an annual certification that certifies the institutional and engineering controls remain in place and that they remain effective for the protection of human health and the environment.

The Environmental Easement will be incorporated in all agreements regarding rights to use the land such as leases and licenses.

5.4.2 Evaluation

The following sections provide a detailed evaluation of Remedial Alternative 3 based on the specific evaluation criteria.

5.4.2.1 Overall Protection of Human Health and the Environment

Alternative 3 will be protective of human health and the environment by removing the top one foot of soil that was impacted above the proposed restricted commercial criteria by the release from former Tank 60 in 1976 and background influences. The potential for human and environmental exposure to these constituents throughout OU-1 will be reduced by excavation of the impacted materials to a depth of one foot bls, disposing of impacted material offsite and backfilling the area with material meeting the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14) to provide a one foot soil cap.

5.4.2.2 Compliance with Remedial Goals, SCGs and RAOs

SCGs for the proposed remedy are presented in Section 4.0. Alternative 3 will achieve compliance with the proposed restricted commercial criteria in the top one foot of soil throughout OU-1, as required in Section 4.6 of the Draft BCP Guide.

The excavation will be backfilled with material meeting the lower of the restricted industrial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.4.2.3 Long-Term Effectiveness and Permanence

Alternative 3 removes the top one foot of soil in OU-1 that was impacted above the proposed restricted commercial criteria by the release from former Tank 60 in 1976 or that was impacted by background influences. Alternative 3 returns OU-1 to conditions that compatible with the zoning and reasonably anticipated future use of OU-1 as vacant land surrounded by a fence. Therefore, the incremental risk from impacts from the 1976 release or background influences are reduced, engineering controls (including the one foot soil cap and the perimeter fencing) will be in place and monitored and the institutional control of the environmental easement will be enforced, all of which will provide a permanent long-term solution for OU-1.

5.4.2.4 Reduction in Toxicity, Mobility or Volume through Treatment

By removing all soil between zero and one foot bls impacted above the proposed restricted commercial use criteria, Alternative 3 will permanently reduce the toxicity, mobility, and volume of contaminants within OU-1.

5.4.2.5 Short-term Effectiveness

The health and environmental risks associated with implementation of Alternative 3 are minimal. The remedy implementation time is relatively short (three weeks) and the potential adverse impacts to the community and workers can be mitigated with engineering controls. These potential impacts (exposure to contaminants and traffic during soil excavation and transportation) will be addressed in the site-specific HASP and CAMP, which also detail monitoring during the construction. These risks will be mitigated through the implementation of engineering controls as necessary (i.e., dust suppression and traffic control) and will only be an issue during the excavation and transportation of soils.

5.4.2.6 Implementability

The materials, equipment, and personnel associated with the implementation of Alternative 3 are commercially available and have been proven effective and reliable for remediation of the media of concern at OU-1 under similar circumstances. It is not anticipated that future remedial action following the remedial construction will be required.

5.4.2.7 Cost

The construction and equipment costs associated with Alternative 3 are estimated at approximately \$320,000. Long-term operation and maintenance activities associated with Alternative 3 are minimal and include inspection and maintenance of the one foot soil cap, maintenance of the perimeter fence and preparation of an annual report certifying that the engineering and institutional controls are in place and operating properly. Groundwater monitoring will not be required as groundwater was determined not to be impacted. Annual operation and maintenance costs are estimated to be \$5,000 per year.

5.4.2.8 Compatibility with Land Use

The current and reasonably anticipated future zoning of OU-1 is M-1 light industrial. The present and reasonably anticipated future use of the parcels is for them to remain vacant and surrounded by a perimeter fence as a precaution against trespassers and dumping. Following implementation of the remedial Alternative 3, OU-1 will be restored to the restricted commercial use criteria, thereby providing an upgraded condition to the current zoning and retaining compatibility with future land use. ExxonMobil has no specific plan for OU-1 at this time. Any future use will require further evaluation of site conditions and compliance with the SMP and environmental easement.

5.5 Remedial Alternative 4: “Track 4” Restricted Industrial Use Scenario - Excavation and Offsite Disposal of Soil in the Zero to One Foot Depth Interval Exceeding the Proposed Restricted Industrial Use Criteria; Backfill of Excavated Areas; and Institutional and Engineering Controls.

The following sections provide a description of Remedial Alternative 4, which would achieve a Track 4 cleanup of OU-1 to the proposed restricted industrial criteria. As defined in the BCP Guide and Part 375, a Track 4 restricted industrial cleanup allows for the use of the generic soil criteria presented in Part 375 (Table 8) or establishment of site-specific criteria; must address contaminants of concern in the top one foot of exposed soil to meet the contaminant specific criteria; backfill must meet the lower of the restricted industrial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375; and may rely on the implementation of long term institutional and engineering controls to address all media of concern. An evaluation based on the specific evaluation criteria is also presented below. An evaluation based on the specific evaluation criteria is also presented below.

5.5.1 Description

Figure 9 shows the areas to be addressed under Remedial Alternative 4. Remedial Alternative 4 includes the following remedial elements:

- Mobilization and Site Preparation;
- Storm Water Management and Erosion Control;
- Dust Control;
- Excavation and offsite disposal of soil exceeding the proposed restricted industrial use criteria in the zero to one foot depth interval;
- Temporary Staging and Stockpiling;
- Waste Characterization Sampling;
- Traffic Control;
- Offsite Disposal and Equipment Decontamination;
- Post-Excavation Sampling;
- Backfill of the excavated areas with imported soil meeting the lower of the restricted industrial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14);
- Site Restoration;
- Health and Safety and Community Air Monitoring;
- Preparation of a Site Management Plan;
- Perimeter fencing; and
- An Environmental Easement as Institutional Control.

Each of these elements is discussed in greater detail below.

5.5.3.1 Mobilization and Site Preparation

Mobilization and site preparation will be the same as described in Section 5.2.1.1.

5.5.1.2 Storm Water Management and Erosion Control

Storm water management and erosion control will be the same as described in Section 5.2.1.2.

5.5.1.3 Dust Control

Dust control will be the same as described in Section 5.2.1.3.

5.5.1.4 Excavation

Based on a comparison of the available data to the proposed restricted industrial use criteria presented in Section 3.0, the area requiring excavation to meet these criteria is shown on Figure 8. and is approximately 7,150 square feet on Parcel No. 4 and 25,300 square feet on Parcel No. 5. Therefore, the estimated volume of soil to be removed to achieve the proposed restricted industrial use criteria for OU-1 would be 1,200 cubic yards.

Based upon the investigation results, excavation dewatering is not anticipated to be required.

The final horizontal and vertical limits of the excavation will be surveyed. This alternative is estimated to require three weeks to complete.

5.5.1.5 Temporary Staging and Stockpiling

Temporary staging and stockpiling will be the same as described in Section 5.2.1.5.

5.5.1.6 Waste Characterization Sampling

Waste characterization sampling will be the same as described in Section 5.2.1.6.

5.5.1.7 Traffic Control

Traffic control will be the same as described in Section 5.2.1.7.

5.5.1.8 Offsite Disposal and Equipment Decontamination

Offsite disposal and equipment decontamination will be the same as described in Section 5.2.1.8.

5.5.1.9 Post-Excavation Sampling

Post excavation sidewall sampling (at a frequency of one sample per 100 linear feet) will be conducted for constituents that exceeded the proposed restricted industrial use criteria in previous sampling events, SVOCs and metals (arsenic), to confirm that the restricted industrial criteria were met. Since all of the SVOCs that exceeded the restricted industrial criteria are listed on the NYSDEC Spill Technology and Remediation Series (STARS) Memo # 1 dated

August 1992, the post excavation samples will be analyzed for STARS list SVOCs only by USEPA method 8270. Metals will be analyzed by USEPA method 6010. The frequency of sidewall sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 Sections 3.5 and 5.4 for excavations 20 to 300 feet in perimeter since the excavations much larger than the referenced excavation size and the guidance allows for different sampling frequencies to be negotiated for larger excavations, since there are numerous existing samples throughout the two parcels to demonstrate soil quality and since the excavation areas are primarily impacted by background influences, except in the northeast portion of Parcel No. 5.

Samples will be collected as a composite of the one foot depth of the excavation sidewall. Areas that appear more heavily impacted, if any, will be given sampling preference. If the post-excavation sample results indicate that concentrations of target constituents are detected below the proposed restricted industrial use criteria, the excavation activities will be considered complete. However, if concentrations of target constituents are detected at a level above the restricted industrial use criteria, the excavation activities, including additional post-excavation sidewall sampling, will continue laterally until these conditions are met or until the OU-1 boundary is reached.

Post excavation bottom samples will not be collected unless there is a visually identified condition that is different than observed in previous sampling rounds. No bottom samples are proposed since there is sufficient soil quality data from the one to two foot below grade sample interval from previous investigations to demonstrate what concentrations will remain below the one foot excavation depth following the remediation. In the one to two foot depth interval on the 7,150 square foot proposed excavation area of Parcel No. 4, there is one grab sample and one composite sample from previous investigations. In the one to two foot depth interval on the 25,300 square foot proposed excavation area of Parcel No. 5, there are seven grab samples and three composite samples from previous investigations.

5.5.1.10 Backfilling

Backfilling will be the same as presented in Section 5.2.1.10, with the exception that the backfill will meet the lower of the restricted industrial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.5.1.11 Site Restoration

Site restoration will be the same as described in Section 5.2.1.11.

5.5.1.12 Health and Safety and Community Air Monitoring

Health and safety and community air monitoring will be the same as described in Section 5.2.1.12.

5.4.1.13 Perimeter fencing (not required but maintained as a precaution against trespassing and dumping)

Engineering controls currently in place include a chain link fence with locked gate that surrounds OU-1 Parcels No. 4 and No. 5. Though not required for the remedy, as a precaution against trespassers and dumping, ExxonMobil will maintain the chain link fence and gate following completion of the work.

5.5.1.14 Site Management Plan

Following the completion of remedial Alternative 4, constituents would remain onsite at concentrations in excess of the restricted industrial criteria at depths greater than one foot below land surface. For this reason, a Site Management Plan (SMP) will be developed. Potential future Site owners/operators will be required to retain a copy of the SMP for reference. The primary components of the SMP will include:

- A Soil Management Plan;
- Use Restrictions; and
- Operation, Maintenance and Monitoring (OM&M) Plan.

The SMP will be referred to in the Environmental Easement.

Soil Management Plan

The Soil Management Plan would be prepared and implemented to minimize the potential exposure of workers and the community to constituents in soil after the remediation is completed. Further, the Soil Management Plan would establish applicable management practices for the future disturbance/reuse of OU-1 soils, exceeding the restricted industrial criteria at depths greater than one foot below grade.

Specifically, the Soil Management Plan will include:

- A description of the proper procedures for the management of excavated soil in a manner that would protect workers and the surrounding community from exposure (including health and safety procedures, dust control and CAMP);
- Use restrictions regarding Site development or groundwater as identified in the Environmental Easement; and
- A requirement that the property owner provide an Institutional Control/Engineering Control certification on a periodic basis.

The Soil Management Plan will provide requirements for the analytical testing of soil in remediated areas (i.e., areas with one foot soil cap) requiring excavation work as part of future Site activities. In the event that analytical testing of the soil is not performed prior to intrusive Site disturbance activities, the soil will be stockpiled and sampled for analytical testing. Analytical results will be evaluated for the determination of soil reuse at the Site. The Soil Management Plan will also provide guidelines for workers in the event soil requires offsite disposal. Soil requiring offsite disposal will be sampled for waste characterization analyses as determined by the waste disposal facility.

Use Restrictions

Any future development in OU-1 would need to be performed in accordance with NYSDEC regulations. Any future modifications to OU-1 would require submittal of a work plan and approval by the NYSDEC.

OM&M Plan

An OM&M plan would be required for the one foot soil cap. The OM&M Plan would provide the detailed procedures necessary to maintain the engineering controls (e.g., cap). This would

include any inspection and maintenance of the cap and perimeter fencing. Groundwater monitoring will not be required as previous sampling has shown that groundwater is not impacted above SCGs and since groundwater is not used as a source of drinking water.

5.5.1.15 Environmental Easement

An environmental easement subjects OU-1 to use restrictions or engineering controls that run with the land in perpetuity. An environmental easement is a form of institutional control that acts as an enforcement mechanism to ensure required institutional and engineering controls remain in place (NYSDEC, 2004). The environmental easement will:

- Require compliance with the Site Management Plan;
- Restrict the use of OU-1 to commercial or industrial uses allowable under the zoning as M-1 light industrial;
- Identify areas of residual contamination remaining on Site that would be managed in place (e.g., potential soil with concentrations in excess of restricted industrial criteria at depths greater than one foot below grade);
- Restrict the use of groundwater as a source of potable water; and
- Require an annual certification that certifies the institutional and engineering controls remain in place and that they remain effective for the protection of human health and the environment.

The Environmental Easement will be incorporated in all agreements regarding rights to use the land such as leases and licenses.

5.5.2 Evaluation

The following sections provide a detailed evaluation of Remedial Alternative 4 based on the specific evaluation criteria.

5.5.2.1 Overall Protection of Human Health and the Environment

Alternative 4 will be protective of human health and the environment by removing the top one foot of soil that was impacted above the proposed restricted industrial criteria by the release from former Tank 60 in 1976 and background influences. The potential for human and environmental exposure to these constituents throughout OU-1 will be reduced by excavation of the impacted materials above the proposed restricted industrial criteria to a depth of one foot bls, disposing of

impacted material offsite and backfilling the area with material meeting the lower of the restricted industrial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14) to provide a one foot soil cap.

5.5.2.2 Compliance with Remedial Goals, SCGs and RAOs

SCGs for the proposed remedy are presented in Section 4.0. Alternative 4 will achieve compliance with the proposed restricted industrial criteria in the top one foot of soil throughout OU-1, as required in Section 4.6 of BCP Guide.

The excavation will be backfilled with material meeting the lower of the restricted industrial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375 (Table 14).

5.5.2.3 Long-Term Effectiveness and Permanence

Alternative 4 removes the top one foot of soil in OU-1 that was impacted above the proposed restricted industrial criteria by the release from former Tank 60 in 1976 or that was impacted by background influences. Alternative 4 returns OU-1 to conditions that are compatible with the zoning and reasonably anticipated future use of OU-1 as vacant land surrounded by a fence. Therefore, the incremental risk from impacts from the 1976 release or background influences are reduced, engineering controls (including the one foot soil cap and the perimeter fencing) will be in place and monitored and the institutional control of the environmental easement will be enforced, all of which will provide a permanent long-term solution for OU-1.

5.5.2.4 Reduction in Toxicity, Mobility or Volume through Treatment

By removing all soil between zero and one foot bls impacted above the proposed restricted industrial use criteria, Alternative 4 will permanently reduce the toxicity, mobility, and volume of contaminants within OU-1.

5.5.2.5 Short-Term Effectiveness

The health and environmental risks associated with implementation of Alternative 4 are minimal. The remedy implementation time is relatively short (three weeks) and the potential adverse impacts to the community and workers can be mitigated with engineering controls. These

potential impacts (exposure to contaminants and traffic during soil excavation and transportation) will be addressed in the site-specific HASP and CAMP, which also detail monitoring during the construction. These risks will be mitigated through the implementation of engineering controls as necessary (i.e., dust suppression and traffic control) and will only be an issue during the excavation and transportation of soils.

5.5.2.6 Implementability

The materials, equipment, and personnel associated with the implementation of Alternative 4 are commercially available and have been proven effective and reliable for remediation of the media of concern at OU-1 under similar circumstances. It is not anticipated that future remedial action following the remedial construction will be required.

5.5.2.7 Cost

The construction and equipment costs associated with Alternative 4 are estimated at approximately \$310,000. Long-term operation and maintenance activities associated with Alternative 4 are minimal and include inspection and maintenance of the one foot soil cap, maintenance of the perimeter fence and preparation of an annual report certifying that the engineering and institutional controls are in place and operating properly. Groundwater monitoring will not be required as groundwater was determined not to be impacted. Annual operation and maintenance costs are estimated to be \$5,000 per year.

5.5.2.8 Compatibility with Land Use

The current and reasonably anticipated future zoning of OU-1 is light industrial. The present and reasonably anticipated future use of the parcels is for them to remain vacant and surrounded by a perimeter fence as a precaution against trespassers and dumping. Following implementation of the remedy, OU-1 will be restored to light industrial use conditions, thereby retaining compatibility with future land use. ExxonMobil has no specific plan for OU-1 at this time. Any future use will require further evaluation of site conditions and compliance with the SMP and environmental easement.

5.6 Selected Remedial Alternative

Remedial Alternative 3 was selected for implementation in OU-1 since it adequately meets each of the evaluation criteria, but costs significantly less than Alternatives 1 and 2 and is only slightly more costly than Alternative 4. In summary, Alternative 3:

- Is protective of public health and the environment;
- Complies with the appropriate restricted commercial criteria for soil;
- Provides long-term effectiveness and permanence through both source removal and the implementation and maintenance of engineering and institutional controls;
- Reduces the toxicity, mobility, or volume of impacted material through source removal;
- Provides short-term effectiveness, including minimal impacts to workers or the surrounding neighborhood through the implementation of engineering controls during construction;
- Is readily implemented;
- Can be implemented at significantly lower cost than Alternative 1; and
- Is compatible with land use.

Alternative 3 is consistent with the approach for a restricted commercial use scenario described in the Draft BCP Guide and Part 375.

6.0 REMEDIAL CONSTRUCTION

This section provides a general description of the construction activities to be performed as part of the proposed remedy. Detailed specifications for the construction of the remedy are provided in Appendix C and cover the following items.

- Definitions (Section 01005)
- Fencing (Section 01080)
- Signs (Section 01090)
- Site Preparation and Site Restoration (Section 01510)
- Temporary Staging and Storage Requirements (Section 01520)
- Temporary Controls (01560)
- Equipment Decontamination Requirements (Section 01565)
- Excavation (Section 02200)
- Waste Transportation and Disposal (Section 02220)
- Backfill and Compaction (Section 02250)

6.1 Summary of Work

The remedial construction will be limited to the excavation of one foot of material, appropriate offsite disposal of the fill material impacted above the proposed restricted commercial criteria; and site restoration in the portion OU-1 shown on Figure 8.

The work to be performed by the Contractor will include but not be limited to:

1. Obtain all necessary permits and licenses required to complete all work and pay all necessary fees for the permits obtained.
2. Verification of utility locations.
3. Mobilization to the Site and the provision of any temporary utilities, if needed.
4. Provision of health and safety services for Contractor's employees.
5. Set-up and maintenance of decontamination areas (Section 01565), staging areas, if necessary (Section 01520), erosion control devices, and dust control measures (Section 01560). Erosion and sediment control measures (i.e., hay bales, silt fences, etc.)

will be used to protect any storm drain in proximity to any construction activities and any adjacent property boundaries.

6. Preparation, submittal, and obtaining approval of the specified surveys, drawings, and other submittals, as necessary.
7. Maintenance (during construction) of perimeter fencing (Section 01080) and signs (Section 01090).
8. Protection of excavations and other work areas. These areas will be protected using temporary fencing and other security measures to prevent unauthorized access.
9. Performance of site preparation work.
10. Excavation of one foot of soil exceeding the proposed restricted commercial criteria in the proposed excavation area as shown on the Figure 8 (Section 02200).
11. Backfill and compaction of the excavation with common fill material meeting the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375, as shown on Table 14 (Section 02250).
12. Offsite disposal of excavated fill material in accordance with all applicable federal, state, and local regulations (Section 02220). Includes transportation in accordance with the New York State Department of Transportation (NYSDOT) regulations. Disposal will only be permitted at an ExxonMobil-approved disposal facility.
13. Collection and onsite treatment of any wastewater generated during construction activities through ExxonMobil's existing water treatment system located in the main portion of the Site south of Elk Street or removed from the Site to an ExxonMobil-approved disposal facility.
14. Final Site restoration and demobilization from the Site.

Additional details regarding critical work elements are described below.

6.1.1 Mobilization and Site Preparation

Prior to mobilizing to the Site, the Contractor will obtain all necessary permits and licenses required to complete all work and pay all necessary fees for the permits obtained and verify all utility locations. Upon mobilization to the Site, the Contractor will set up all temporary utilities and temporary facilities in accordance with Section 01510, if required. The Contractor will clear vegetation, as necessary, for access to the excavation area. A pre-construction survey will also be prepared by a land surveyor licensed by the State of New York.

6.1.2 Storm Water Management and Erosion Control

All necessary measures to temporarily control erosion will be employed. Erosion control will be implemented in accordance with the report titled "NYS Guidelines for Urban and Sediment Control" dated April 1997. Soil erosion and sediment control measures for control of storm water will be installed prior to the implementation of the remediation in accordance with Section 01560 and will be maintained throughout the duration of all remedial construction activities, as appropriate. Hay bales and/or silt fences will be placed by the Contractor to control sediment around the disturbed area/excavations or other work areas. The Contractor will install these silt fences and/or hay bales prior to initiating intrusive activities. Erosion and sediment control measures (i.e., hay bales, silt fences, etc.) will be used to protect any storm water drain in proximity to the construction activities. In addition to silt fence and hay bales, if necessary, temporary diversion swales and berms shall also be created as necessary to control storm runoff and surface water from entering or exiting excavations.

In addition, the entrance and adjacent street areas will be swept and/or cleaned, as necessary, throughout the work day, and at the end of the workday, to keep the streets free of soil or other debris generated from the work site during the duration of all excavation activities. Specifications for these storm water management measures and erosion and sediment controls are attached in Appendix C.

6.1.3 Dust Control

Dust (particulate matter) will be controlled at the Site in accordance with the site specific CAMP, the NYSDEC Technical and Administrative Guidance Memorandum #4031 – Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (TAGM 4031), and all federal, state and local requirements. The Contractor will be required to maintain all excavations, stockpiles, and all other work areas to minimize dust that would cause a hazard or nuisance to others. As a dust control measure, plastic sheeting will be installed on the fence to the north of the proposed excavation area adjacent to the existing residence and to the east of the proposed excavation area adjacent to Bradford Street for the length of the excavation since there are occupied structures on the east side of Bradford Street.

Dust will be monitored in accordance with the requirements of the Contractor's HASP, the CAMP, and the NYSDEC TAGM 4031. Based on the results of the monitoring, the Contractor will implement necessary measures to control dust to acceptable levels, including but not limited to, one or more of the following measures:

1. Misting equipment and excavation fences;
2. Spraying water (using atomizer) on buckets during excavation and dumping;
3. Hauling materials in tarped or lined containers;
4. Reducing speed of vehicles moving through the construction area;
5. Covering excavated material stockpiles and/or portions of the stockpile, as necessary, throughout the day and after excavation activities cease each day; and
6. Stopping work.

6.1.4 Excavation

Based on a comparison of the available data to the proposed restricted commercial use criteria presented in Section 3.0, the area requiring excavation to meet these criteria is shown on Figure 8 and is approximately 7,150 square feet on Parcel No. 4 and 26,300 square feet on Parcel No. 5. Therefore, the estimated volume of soil to be removed to achieve the proposed restricted commercial use criteria for OU-1 would be 1,250 cubic yards.

Based upon the investigation results, excavation dewatering is not anticipated to be required.

The final horizontal and vertical limits of the excavation will be surveyed. This alternative is estimated to require three weeks to complete.

6.1.5 Temporary Staging and Stockpiling

All impacted materials are to be stockpiled in accordance with Section 01520. Stockpiles will be lined and covered with a single layer of minimum 6-mil plastic sheeting. Stockpiles will be routinely inspected and broken sheeting covers will be promptly replaced. Soil stockpiles will be continuously encircled with silt fence or hay bales. A combination stockpile area/decontamination area will be used for the project as detailed in Appendix C.

6.1.6 Waste Characterization Sampling

One sample per 500 cubic yards of material to be excavated will be collected from the soil to be excavated for waste characterization using a hand auger prior to excavation. In accordance with the ExxonMobil-approved disposal facility, the samples will be analyzed for the following:

- Target compound list (TCL) VOCs and SVOCs according to USEPA Methods SW-846 8260 and 8270, respectively;
- TPH for gasoline and diesel range organics (by Method SW-846 8015B);
- Reduced TAL metals by Method SW-846 6010 (includes cadmium, chromium, lead, nickel, selenium, thallium, and vanadium) and Method SW-846 7471 for mercury;
- The full list of toxicity characteristics leaching procedure (TCLP) analyses (metals, VOCs, SVOCs, pesticides, and herbicides);
- Corrosivity;
- Reactivity; and
- Ignitability.

Waste characterization laboratory data are to be reported in NYSDEC ASP Category A deliverables.

6.1.7 Traffic Control

Detailed traffic control procedures will be developed when preparing the contractor's HASP. A truck route map showing primary and secondary routes from the project site to the New York State Thruway is provided as Figure 7.

6.1.8 Offsite Disposal and Equipment Decontamination

All impacted soil excavated from the Site and other remediation-derived waste will be transported and disposed of in accordance with all applicable federal, state, and local regulations (Section 02220) at a facility selected by ExxonMobil. The remediation-derived waste that will be generated during the construction activities include:

- Impacted soil OU-1;
- Personal Protective Equipment (PPE); and
- Decontamination water, if any is generated.

Haul vehicles for bulk soil will be secured with appropriate covers prior to exiting the construction area to prevent a release of waste. PPE generated during the implementation of the remedy will be consolidated and stored in appropriate bulk containers and temporarily staged at the Site waste storage area within the Site limits. Any full or partially filled containers will be appropriately labeled. ExxonMobil will coordinate waste characterization and disposal.

If any is generated, decontamination water will be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street. The water (if any) will be treated through the onsite system or will be disposed of offsite at an ExxonMobil-approved disposal facility.

6.1.9 Post-Excavation Sampling

Post excavation sidewall sampling (at a frequency of one sample per 100 linear feet) will be conducted for constituents that exceeded the proposed restricted commercial use criteria in previous sampling events, SVOCs and metals (arsenic, cadmium and lead), to confirm that the restricted commercial criteria were met. Since all of the SVOCs that exceeded the restricted commercial criteria are listed on the NYSDEC STARS Memo # 1 dated August 1992, the post excavation samples will be analyzed for STARS list SVOCs only by USEPA method 8270. Metals will be analyzed by USEPA method 6010. The frequency of sidewall sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 Sections 3.5 and 5.4 for excavations 20 to 300 feet in perimeter since the excavations much larger than the referenced excavation size and the guidance allows for different sampling frequencies to be negotiated for larger excavations, since there are numerous existing samples throughout the two parcels to demonstrate soil quality and since the excavation areas area primarily impacted by background influences, except in the northeast portion of Parcel No. 5.

Samples will be collected as a composite of the one foot depth of the excavation sidewall. Areas that appear more heavily impacted, if any, will be given sampling preference. If the post-excavation sample results indicate that concentrations of target constituents are detected below the proposed restricted commercial use criteria, the excavation activities will be considered complete. However, if concentrations of target constituents are detected at a level above the restricted commercial use criteria, the excavation activities, including additional post-excavation

sidewall sampling, will continue laterally until these conditions are met or until the OU-1 boundary is reached.

Post excavation bottom samples will not be collected unless there is a visually identified condition that is different than observed in previous sampling rounds. No bottom samples are proposed since there is sufficient soil quality data from the one to two foot below grade sample interval from previous investigations to demonstrate what concentrations will remain below the one foot excavation depth following the remediation. In the one to two foot depth interval on the 7,150 square foot proposed excavation area of Parcel No. 4, there is one grab sample and one composite sample from previous investigations. In the one to two foot depth interval on the 26,300 square foot proposed excavation area of Parcel No. 5, there are seven grab samples and three composite samples from previous investigations.

The locations of the post-excavation samples will be surveyed. Post-excavation samples will be submitted to TestAmerica, a NYSDOH ELAP certified laboratory. Category B laboratory data deliverables, as defined in the analytical services protocol (ASP), will be requested. In addition, a Data Usability Summary Report (DUSR) will be prepared by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10.

6.1.10 Backfilling

When excavation and removal of the impacted soil is complete, the excavation will be backfilled and compacted using six inches of offsite common fill material and six inches of topsoil meeting the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Part 375, as shown on Table 14. The backfill material will be free of extraneous debris or solid waste. The source of the fill must be documented by the supplier, including the location where the fill was obtained and a brief history of the site that is the source of the fill. The fill material must be approved in advance by the NYSDEC. If the NYSDEC agrees that the material originated from a virgin source, then a minimum of one composite sample will be collected and analyzed per source. If the source is not virgin, the following sampling frequency will apply to each source: one composite sample per 250 cubic yards for the first 1,000 yards and one composite sample per 1,000 cubic yards for

1,000 to 5,000 cubic yards Samples will be analyzed for all parameters presented on Table 8. Analytical results will be submitted to the NYSDEC prior to use of the backfill.

6.1.11 Site Restoration

After backfilling activities are completed, the work area will be graded and seeded with grass. Erosion control measures (i.e., hay bales and/or silt fence) will be maintained around the disturbed areas until vegetation is established. Once site restoration activities have been completed, all temporary work zone barriers, soil erosion, and sedimentation controls and remedial construction equipment will be removed. The Contractor will then decontaminate all equipment in the established onsite decontamination area prior to removal from the Site.

6.2 Health and Safety and Community Air Monitoring

All remedial construction activities will be performed in a manner consistent with 29CFR 1910 and 1926. Each consultant and contractor onsite will operate under a site-specific HASP for the project. The site-specific HASP will be readily available during the work. During all phases of Site work, the Contractor will monitor safety and health conditions and fully enforce the site-specific HASP. The Contractor will be responsible for monitoring general Site conditions and for safety hazards. Specifically, monitoring will be performed to verify that all requirements of the Occupational Safety and Health Administration, as outlined on 29 CFR Part 1910 and 1926, are adhered to. The HASP will be submitted to the NYSDEC under separate cover.

Ambient air will be monitored at the site perimeter throughout the course of the work for particulate matter in accordance with the CAMP included as Appendix B. Monitoring for VOCs will not be conducted as part of the CAMP since VOCs are not constituents of concern for OU-1. During the course of the work, the Contractor will take abatement measures, as directed or as otherwise necessary, to minimize the levels of particulates at the limits of the work.

6.3 Quality Assurance/Quality Control

Quality assurance and quality control for all laboratory sampling conducted as part of this remediation will be completed in accordance to the site-specific Quality Assurance Project Plan (QAPP) for the OU-1 AAR/RAWP provided in Appendix D. This QAPP was prepared in accordance with the DER-10 Section 2.2.

As discussed in Section 6.1.8, a DUSR will be prepared for the post-excavation samples only by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10.

7.0 REMEDIAL ACTION REPORT AND SITE MANAGEMENT PLAN

The Remedial Action Report (RAR) will be prepared following completion of the remedial activities in accordance with Section 5.7 of the Draft BCP Guide and Section 5.8 of the Draft DER-10. The Remedial Action Report will describe the work performed as part of the remediation and will include:

- Disposal documentation for all material removed from the Site, including excavated impacted soil, solid waste, and fluids (if any).
- Survey drawings and site maps.
- A certification by a New York professional engineer that all construction activities completed during the remediation were performed in accordance with the specifications provided in this AAR/RAWP, as approved by the NYSDEC, and that the activities were personally witnessed by a person under the direct supervision of the professional engineer.
- Any changes or modifications to the work, as well as any problems encountered during construction and their resolution, will be documented.
- A list of all remediation standards applied and results of the post-excavation sampling compared to the restricted commercial criteria. A certification that the post-excavation sampling data was usable and met the remedial requirements.
- A description of all backfill material used for site restoration, including source and quality.
- A description of engineering and institutional controls.

The SMP, as described in Section 5.3.1.14, will be submitted concurrently with the RAR.

8.0 OPERATION, MAINTENANCE AND MONITORING

The RAOs for OU-1 will be met upon completion of the proposed remedy. However, since the selected remedy relies on institutional controls (environmental easement) and engineering controls (one foot soil cap and perimeter fencing), there are minimal OM&M activities required upon completion of the work as described in this AAR/RAWP. A formal OM&M Plan will be submitted with the Remedial Action Report to describe the minimal OM&M activities required.

9.0 INSTITUTIONAL AND ENGINEERING CONTROLS

There are currently no institutional controls in place for any of the parcels of OU-1. Institutional controls, in the form of the SMP and associated environmental easement, are proposed as part of this AAR/RAWP. Engineering controls currently in place include a chain link fence with locked gate that surrounds OU-1 Parcels No. 4 and No. 5. Though not required for the remedy, as a precaution against trespassers and dumping, ExxonMobil will maintain the chain link fence and gate following completion of the work.

10.0 CITIZEN PARTICIPATION PLAN

A Citizen Participation Plan (CPP) for the Former Buffalo Terminal has been prepared in accordance with Section 2.10 and Section 8 of the Draft BCP Guide (NYSDEC 2004). The CPP was submitted under separate cover.

The citizen participation activities relevant to approval and implementation of this AAR/RAWP, which are outlined in the CPP, include:

- Transmittal of a public notice and fact sheet regarding the NYSDEC approved AAR/RAWP to the Brownfield Site Contact List presented in the CPP.
- Placement of the AAR/RAWP in the Site's document repository.
- Forty-five day comment period on the AAR/RAWP.
- Transmittal of a public notice and fact sheet announcing the proposed start of remedial construction to the Brownfield Site Contact List presented in the CPP at least 10 days prior to the start of construction.
- Placement of any additional design related documents in the Site's document repository.
- Transmittal of a public notice and fact sheet regarding the Remedial Action Report to the Brownfield Site Contact List presented in the CPP.
- Placement of the Remedial Action Report in the Site's document repository.

11.0 SCHEDULE

It is anticipated that the remedial construction will commence as soon as practicable following completion of the public comment period. Completion of the work will take approximately three weeks. The Remedial Action Report will be submitted within 90 days of completion of the work. A schedule for the work is provided as Figure 10.

Respectfully submitted,

ROUX ASSOCIATES, INC.



Wendy Shen
Project Engineer

REMEDIAL ENGINEERING, P.C.



Noelle M. Clarke, P.E.
Principal Engineer

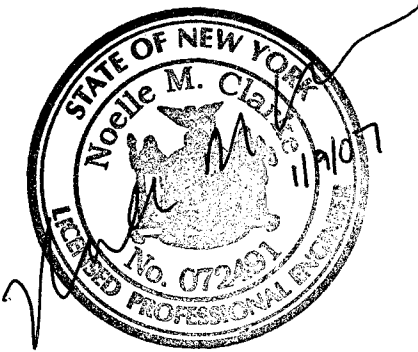


Table 1. Summary of Spills/Releases at Operable Unit 1 of the Buffalo Terminal, ExxonMobil Oil Corporation, Buffalo, New York

Date of Incident	Quantity	Product	Cause/Source of Spill	Geographic Area	Media Affected	Agency Notified	Action Taken/Comments	Source	Date Spill Closed by NYSDEC
3/12/1976	Unknown	Cracking Stock	The top of Tank 60 was damaged when hot product from the crude unit contacted ice on the bottom of the tank causing it to expand. Cracking stock for the TCC unit was released to Elk Street and several properties north of Elk Street.	ESPA/NTYA	Soil	Unknown	Mobil cleaned up the cracking stock by vacuuming off excess product and then mixing the remaining material with sand, excavating the material and disposing it off-site. Residences that were impacted were purchased by Mobil and demolished.	Current and/or Former Mobil Employees	NA
2/1/1994	Unknown	Cracking Stock	NYSDEC documentation refers to the "old spill at Elk Street". The incident referred to was the rupture of Tank 60 (cracking stock) in 1976.	ESPA/NTYA	Soil	NYSDEC - #9314016	NYSDEC Spill Report Form noted that additional investigation and possible remediation would be requested and that this spill would be incorporated into spill #8808982. Spill closed by NYSDEC on 1/3/96 as site addressed under consent order.	NYSDEC Spills	1/3/1996

Table 2. Summary of Gauging Results
ExxonMobil Oil Corporation, Buffalo, New York

Well Designation	Date	Measuring Point Elevation (ft msl)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Specific Gravity	Corrected Elevation (ft msl)
B-1MW	08/14/06	590.31	NA	6.21	NA	NA	584.10
MW-34	08/14/06	591.64	NA	5.99	NA	NA	585.65
MW-35	08/14/06	590.65	NA	5.21	NA	NA	585.44
MW-OU1-1	08/14/06	587.21	NA	7.86	NA	NA	579.35
MW-OU1-2	08/14/06	587.42	NA	11.54	NA	NA	575.88
MW-OU1-3	08/14/06	588.14	NA	10.73	NA	NA	577.41
B-1MW	08/31/06	590.31	NA	6.11	NA	NA	584.20
MW-34	08/31/06	591.64	NA	5.81	NA	NA	585.83
MW-35	08/31/06	590.65	NA	4.69	NA	NA	585.96
MW-OU1-1	08/31/06	587.21	NA	8.1	NA	NA	579.11
MW-OU1-2	08/31/06	587.42	NA	10	NA	NA	577.42
MW-OU1-3	08/31/06	588.14	NA	10.62	NA	NA	577.52

Notes:

NA - Not Applicable

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	ESL-1 06/17/98 OU-1 0-0.5	ESL-2 06/17/98 OU-1 0-0.5	ESL-3 06/17/98 OU-1 0-0.5	ESL-4 DUP 06/17/98 OU-1 0-0.5	ESL-5 06/17/98 OU-1 0-0.5	ESL-6 06/17/98 OU-1 0-0.5	ESL-7 06/17/98 OU-1 0-0.5	ESL-8/ESL-W1 06/17/98 OU-1 0-0.5
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene		42 J	36 U	34 U	64 J	36 J	37 U	130 J	38 U
Acenaphthylene		58 J	51 J	68 J	120 J	190	160 J	250	38 U
Anthracene		120 J	96 J	110 J	320	230	180 J	470	38 U
Benzo[a]anthracene		770	380	480	1300	780	410	1700	93 J
Benzo[a]pyrene		860	410	440	1200	800	400	1700	90 J
Benzo[b]fluoranthene		1200	530	640	1600	980	570	2100	140 J
Benzo[g,h,i]perylene		720	350	330	800	550	280	970	77 J
Benzo[k]fluoranthene		420	210	230	570	370	180 J	760	45 J
Chrysene		850	430	450	1300	840	470	1800	110 J
Dibenzo[a,h]anthracene		170 J	120 J	99 J	280	170 J	82 J	300	38 U
Dibenzofuran		NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene		1700	740	790	2500	1300	680	3500	120 J
Fluorene		38 J	36 U	34 U	100 J	59 J	45 J	150 J	38 U
Hexachlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene		780	340	400	900	610	300	1100	77 J
Naphthalene		38 U	36 U	34 U	100 J	35 U	110 J	84 J	160 J
Pentachlorophenol		NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene		970	400	240	1400	530	430	2000	140 J
Phenol		NA	NA	NA	NA	NA	NA	NA	NA
Pyrene		1400	610	650	1900	1200	610	2800	130 J
Total SVOCs:		10098	4667	4927	14454	8645	4907	19814	1182
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		NA	NA	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: ESL-8/ESL-W1	ESL-9	ESL-10	ESL-11	ESL-12	ESL-13	ESL-13	ESL-13	ESL-14
	Sample Date: 06/22/98	06/17/98	06/17/98	06/17/98	06/17/98	09/02/99	09/02/99	09/02/99	09/02/99
	Operable Unit: OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls): 8-10	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	1-2	2-3	0-0.5
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	42 U	40 U	62 J	64 J	5300	1700	2100	350	760
Acenaphthylene	42 U	74 J	78 J	110 J	2500	940	1100	220	400 U
Anthracene	42 U	110 J	270	220	21000	5500	5500	1100	2200
Benzo[a]anthracene	42 U	430 J	930	760	69000	16000	16000	2500	6800
Benzo[a]pyrene	42 U	450 J	870	710	57000	13000	14000	2300	7000
Benzo[b]fluoranthene	42 U	590 J	1000	940	63000	15000	17000	2900	7600
Benzo[g,h,i]perylene	42 U	390 J	550	520	30000	6500	5200	1000	4500
Benzo[k]fluoranthene	42 U	200 J	410	310	26000	6300	5700	1200	3500
Chrysene	42 U	550 J	850	800	59000	16000	16000	2600	6900
Dibenzo[a,h]anthracene	42 U	120 J	170 J	150 J	9200 J	2400	1700	340	1400
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	42 U	760 J	1700	1600	140000	29000	35000	4700	12000
Fluorene	42 U	40 U	70 J	79 J	5600	2100	3100	540	830
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	42 U	360 J	610	520	35000	8200	10000	1300	5100
Naphthalene	42 U	40 U	74 J	76 J	1200	720	2300	330	400 U
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	42 U	410 J	890	1000	69000	18000	26000	3800	7300
Phenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	42 U	670 J	1400	1300	120000	28000	29000	4500	12000
Total SVOCs:	0	5114	9934	9159	712800	169360	189700	29680	77890
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation:	ESL-14	ESL-14	ESL-15	ESL-15	ESL-15	ESL-16	ESL-16	ESL-16	ESL-17
	Sample Date:	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	1-2	2-3	0-0.5	1-2	2-3	0-0.5	1-2	2-3	0-0.5
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene		1600	61	3400	950	170	49	36 U	37 U	110
Acenaphthylene		480	42 U	410	500	110	110	53	37 U	160
Anthracene		5100	140	7400	2600	580	190	110	37 U	340
Benzo[a]anthracene		7700	510	18000	6700	2200	710	310	37 U	1100
Benzo[a]pyrene		6900	570	13000	5500	1800	750	320	53	1100
Benzo[b]fluoranthene		8900	740	14000	7200	2200	1000	400	64	1400
Benzo[g,h,i]perylene		2400	440	4200	3200	910	600	290	49	810
Benzo[k]fluoranthene		3800	260	13000	3700	940	330	140	37 U	610
Chrysene		7800	560	20000	7200	2300	910	390	45	1300
Dibenzo[a,h]anthracene		990	130	2500	1000	330	180	96	37 U	250
Dibenzofuran		NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene		16000	940	30000	15000	3900	1400	670	65	2200
Fluorene		3300	120	3400	1400	180	74	52	37 U	110
Hexachlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene		3300	470	5200	3600	1100	630	290	43	940
Naphthalene		1200	47	1700	600	90	100	58	37 U	52
Pentachlorophenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene		18000	530	25000	11000	1600	790	510	43	1400
Phenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene		13000	820	33000	13000	3500	1300	610	60	1900
Total SVOCs:		100470	6338	194210	83150	21910	9123	4299	422	13782
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	ESL-17 09/02/99 OU-1 1-2	ESL-17 09/02/99 OU-1 2-3	ESL-18 09/02/99 OU-1 0-0.5	ESL-18 09/02/99 OU-1 1-2	ESL-18 09/02/99 OU-1 2-3	ESL-19 09/02/99 OU-1 0-0.5	ESL-19 09/02/99 OU-1 1-2	ESL-19 09/02/99 OU-1 2-3	ESL-20 09/02/99 OU-1 0-0.5
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene		150	37 U	36 U	38 U	38 U	55	39 U	39 U	41 U
Acenaphthylene		300	37 U	36 U	38 U	38 U	130	39 U	39 U	53
Anthracene		510	66	44	38 U	38 U	300	39 U	39 U	110
Benzo[a]anthracene		2000	150	180	110	38 U	1400	39 U	39 U	490
Benzo[a]pyrene		1800	130	250	130	38 U	1300	39 U	39 U	420
Benzo[b]fluoranthene		2200	130	230	120	38 U	1500	39 U	39 U	560
Benzo[g,h,i]perylene		1100	73	250	96	38 U	1000	39 U	39 U	400
Benzo[k]fluoranthene		970	50	74	55	38 U	1200	39 U	39 U	410
Chrysene		2200	180	200	120	38 U	1800	39 U	39 U	630
Dibenzo[a,h]anthracene		380	37 U	74	38 U	38 U	530	39 U	39 U	190
Dibenzofuran		NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene		3200	260	280	150	38 U	2100	40	39 U	650
Fluorene		170	37 U	36 U	38 U	38 U	100	39 U	39 U	41 U
Hexachlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene		1300	69	160	84	38 U	910	39 U	39 U	350
Naphthalene		78	37 U	36 U	38 U	38 U	42	39 U	39 U	41 U
Pentachlorophenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene		1800	350	160	45	38 U	1400	39 U	39 U	450
Phenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene		2900	340	270	140	38 U	2500	42	39 U	1000
Total SVOCs:		21058	1798	2172	1050	0	16267	82	0	5713
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	ESL-20 09/02/99 OU-1 1-2	ESL-20 09/02/99 OU-1 2-3	ESL-21 12/14/01 OU-1 0-0.5	ESL-21 12/14/01 OU-1 2-3	ESL-22 12/14/01 OU-1 0-0.5	ESL-22 12/14/01 OU-1 2-3	ESL-23 12/14/01 OU-1 0-0.5	ESL-23 12/14/01 OU-1 2-3	ESL-24 12/14/01 OU-1 0-0.5
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene		42 U	40 U	41 U	44 U	230 U	37 U	220 U	40 U	480
Acenaphthylene		42 U	40 U	NA	NA	NA	NA	NA	NA	NA
Anthracene		42 U	40 U	180 J	67 J	550 J	37 U	600 J	40 U	2200
Benzo[a]anthracene		120	40 U	610	220 J	1500 J	37 U	2600	40 U	6800
Benzo[a]pyrene		170	40 U	630	230 J	1600 J	37 U	2900	40 U	7400
Benzo[b]fluoranthene		130	50	900	310 J	2000 J	40 J	3700	40 U	9100
Benzo[g,h,i]perylene		150	40 U	300 J	110 J	820 J	37 U	1600 J	40 U	3100
Benzo[k]fluoranthene		100	40 U	390 J	150 J	800 J	37 U	1600 J	40 U	3700
Chrysene		170	40 U	620	270 J	1500 J	37 U	2900	40 U	8700
Dibenzo[a,h]anthracene		42	40 U	110 J	44 U	290 J	37 U	580 J	40 U	1000
Dibenzofuran		NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene		110	40 U	1200	440 J	3400	48 J	5000	40 U	17000
Fluorene		42 U	40 U	51 J	44 U	230 U	37 U	220 U	40 U	860
Hexachlorobenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene		93	40 U	350 J	140 J	930 J	37 U	1900 J	40 U	3600
Naphthalene		42 U	40 U	41 U	44 U	230 U	37 U	220 U	40 U	700
Pentachlorophenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene		79	40 U	760	290 J	2500	37 U	2100 J	40 U	14000
Phenol		NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene		200	45	1200	380 J	3000	44 J	4900	40 U	16000
Total SVOCs:		1364	95	7301	2607	18890	132	30380	0	94640
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	ESL-24 12/14/01 OU-1 2-3	ESL-25 12/14/01 OU-1 0-0.5	ESL-25 DUP 12/14/01 OU-1 0-0.5	ESL-25 12/14/01 OU-1 2-3	ESL-26 12/14/01 OU-1 0-0.5	ESL-26 12/14/01 OU-1 2-3	MW-OU1-1 08/09/06 OU-1 0-1	MW-OU1-1 08/09/06 OU-1 1-2
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA	0.628 U	0.647 U
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA	0.782 U	0.806 U
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	0.592 U	0.611 U
2-Methylphenol		NA	NA	NA	NA	NA	NA	92.5 U	94.1 U
3&4-Methylphenol		NA	NA	NA	NA	NA	NA	129 U	131 U
Acenaphthene		39 U	40 U	40 U	45 U	38 U	39 U	70.2 J	20.3 U
Acenaphthylene		NA	NA	NA	NA	NA	NA	146 J	19.1 U
Anthracene		39 U	130 J	210 J	45 U	73 J	39 U	251 J	77.1 J
Benzo[a]anthracene		39 U	620	830	92 J	400	39 U	1140	272 J
Benzo[a]pyrene		39 U	740	860	100 J	470	39 U	1160	299 J
Benzo[b]fluoranthene		39 U	1000	1300	140 J	700	39 U	1030	287 J
Benzo[g,h,i]perylene		39 U	400	720	65 J	310 J	39 U	827	238 J
Benzo[k]fluoranthene		39 U	440	630	54 J	260 J	39 U	1120	184 J
Chrysene		39 U	790	1000	130 J	500	39 U	1250	315 J
Dibenzo[a,h]anthracene		39 U	160 J	230 J	45 U	110 J	39 U	279 J	89 J
Dibenzofuran		NA	NA	NA	NA	NA	NA	77.7 J	66.7 U
Fluoranthene		74 J	1000	1600	180 J	740	39 U	2230	516
Fluorene		39 U	40 U	51 J	45 U	38 U	39 U	96.8 J	46.5 U
Hexachlorobenzene		NA	NA	NA	NA	NA	NA	63.2 U	64.3 U
Indeno[1,2,3-cd]pyrene		39 U	450	710	63 J	350 J	39 U	677	156 J
Naphthalene		39 U	56 J	69 J	45 U	54 J	39 U	108 J	29.8 U
Pentachlorophenol		NA	NA	NA	NA	NA	NA	176 U	179 U
Phenanthrene		54 J	520	770	130 J	430	39 U	1220	354 J
Phenol		NA	NA	NA	NA	NA	NA	80.8 U	82.2 U
Pyrene		73 J	1100	1400	190 J	720	39 U	1990	482
Total SVOCs:		201	7406	10380	1144	5117	0	13672.7	3269.1
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		NA	NA	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: MW-OU1-1 DUP	MW-OU1-2	MW-OU1-2	MW-OU1-3	MW-OU1-3	SB-OU1-1
Sample Date:	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06
Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
Sample Depth (ft bls):	1-2	0-1	1-2	0-1	1-2	0-1
1,2-Dichlorobenzene	0.649 U	0.624 U	0.6 U	0.662 U	0.616 U	0.616 U
1,3-Dichlorobenzene	0.808 U	0.776 U	0.747 U	0.825 U	0.767 U	0.767 U
1,4-Dichlorobenzene	0.612 U	0.588 U	0.566 U	0.625 U	0.581 U	0.581 U
2-Methylphenol	96.3 U	91.2 U	87.4 U	98.5 U	90.5 U	90 U
3&4-Methylphenol	134 U	127 U	122 U	137 U	126 U	125 U
Acenaphthene	20.7 U	19.6 U	18.8 U	21.2 U	19.5 U	19.4 U
Acenaphthylene	19.5 U	18.5 U	17.7 U	20 U	18.3 U	46 J
Anthracene	45.9 J	15 U	14.4 U	16.2 U	14.9 U	93.1 J
Benzo[a]anthracene	97.2 J	93.5 J	16.6 U	193 J	17.2 U	386
Benzo[a]pyrene	92.7 J	103 J	12.2 U	233 J	12.6 U	421
Benzo[b]fluoranthene	102 J	88.1 J	19.9 U	179 J	20.6 U	441
Benzo[g,h,i]perylene	63.4 J	88.5 J	18.8 U	176 J	19.5 U	305 J
Benzo[k]fluoranthene	75.6 J	120 J	25.4 U	154 J	26.3 U	314 J
Chrysene	105 J	128 J	25.4 U	239 J	26.3 U	467
Dibenzo[a,h]anthracene	18.3 U	17.3 U	16.6 U	18.7 U	17.2 U	111 J
Dibenzofuran	68.3 U	64.6 U	61.9 U	69.8 U	64.1 U	63.8 U
Fluoranthene	191 J	167 J	16.6 U	325 J	17.2 U	780
Fluorene	47.6 U	45 U	43.1 U	48.6 U	44.7 U	44.4 U
Hexachlorobenzene	65.9 U	62.3 U	59.7 U	67.3 U	61.8 U	61.5 U
Indeno[1,2,3-cd]pyrene	47.2 J	63.1 J	16.6 U	98.9 J	17.2 U	239 J
Naphthalene	30.5 U	28.9 U	27.6 U	31.2 U	28.6 U	51.3 J
Pentachlorophenol	183 U	173 U	166 U	187 U	172 U	171 U
Phenanthrene	173 J	75.4 J	13.3 U	179 J	13.7 U	481
Phenol	84.1 U	79.6 U	76.3 U	86 U	79 U	78.6 U
Pyrene	159 J	166 J	15.5 U	350 J	16 U	696
Total SVOCs:	1152	1092.6	0	2126.9	0	4831.4
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)	NA	NA	NA	NA	NA	NA

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	SB-OU1-1 08/09/06 OU-1 1-2	SB-OU1-2 08/09/06 OU-1 0-1	SB-OU1-2 08/09/06 OU-1 1-2	SB-OU1-2 08/09/06 OU-1 3	SB-OU1-3 08/09/06 OU-1 0-1	SB-OU1-3 08/09/06 OU-1 1-2	SB-OU1-3 08/09/06 OU-1 4	SS#1 10/07/93 OU-1 1-2
1,2-Dichlorobenzene		0.615 U	0.69 U	0.616 U	0.64 U	0.624 U	0.616 U	0.616 U	NA
1,3-Dichlorobenzene		0.766 U	0.859 U	0.767 U	0.797 U	0.777 U	0.767 U	0.767 U	NA
1,4-Dichlorobenzene		0.58 U	0.651 U	0.581 U	0.604 U	0.589 U	0.581 U	0.581 U	NA
2-Methylphenol		90.8 U	103 U	90.5 U	94.7 U	90.7 U	91.1 U	90.9 U	NA
3&4-Methylphenol		126 U	143 U	126 U	132 U	126 U	127 U	127 U	NA
Acenaphthene		19.5 U	22.1 U	19.5 U	20.4 U	1280	19.6 U	19.6 U	NA
Acenaphthylene		18.4 U	20.8 U	18.3 U	19.2 U	405	18.5 U	18.4 U	NA
Anthracene		14.9 U	16.9 U	14.9 U	15.6 U	3020	15 U	15 U	NA
Benzo[a]anthracene		17.2 U	19.5 U	17.2 U	18 U	5340	80.3 J	17.3 U	NA
Benzo[a]pyrene		12.6 U	55.4 J	12.6 U	13.2 U	4790	73.8 J	12.7 U	NA
Benzo[b]fluoranthene		20.7 U	23.4 U	20.6 U	21.6 U	3530	50 J	20.7 U	NA
Benzo[g,h,i]perylene		19.5 U	77 J	19.5 U	20.4 U	2280	43.8 J	19.6 U	NA
Benzo[k]fluoranthene		26.4 U	29.9 U	26.4 U	27.6 U	3990	79.6 J	26.5 U	NA
Chrysene		26.4 U	48.9 J	26.4 U	27.6 U	5370	81.9 J	26.5 U	NA
Dibenzo[a,h]anthracene		17.2 U	19.5 U	17.2 U	18 U	1070	17.3 U	17.3 U	NA
Dibenzofuran		64.4 U	72.7 U	64.2 U	67.1 U	1200	64.6 U	64.4 U	NA
Fluoranthene		17.2 U	62.7 J	17.2 U	18 U	12500	171 J	17.3 U	NA
Fluorene		44.8 U	50.6 U	44.7 U	46.7 U	1600	45 U	44.9 U	NA
Hexachlorobenzene		62.1 U	70.1 U	61.9 U	64.7 U	62 U	62.3 U	62.1 U	NA
Indeno[1,2,3-cd]pyrene		17.2 U	19.5 U	17.2 U	18 U	2180	17.3 U	17.3 U	NA
Naphthalene		28.7 U	32.5 U	28.6 U	30 U	643	28.8 U	28.8 U	NA
Pentachlorophenol		172 U	195 U	172 U	180 U	172 U	173 U	173 U	NA
Phenanthrene		13.8 U	47.6 J	13.7 U	14.4 U	11200	133 J	13.8 U	NA
Phenol		79.3 U	89.6 U	79.1 U	82.7 U	79.2 U	79.6 U	79.4 U	NA
Pyrene		16.1 U	64.5 J	16 U	16.8 U	10300	154 J	16.1 U	NA
Total SVOCs:		0	356.1	0	0	70698	867.4	0	NA
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		NA	NA	NA	NA	NA	NA	NA	300

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 3. Summary of Semivolatile Organic Compounds and TPH in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg) (except where noted for TPH)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	SS#2 10/08/93 OU-1 1-2	SS#3 10/08/93 OU-1 1-2	SS#4 10/08/93 OU-1 1-2
1,2-Dichlorobenzene		NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA
2-Methylphenol		NA	NA	NA
3&4-Methylphenol		NA	NA	NA
Acenaphthene		NA	NA	NA
Acenaphthylene		NA	NA	NA
Anthracene		NA	NA	NA
Benzo[a]anthracene		NA	NA	NA
Benzo[a]pyrene		NA	NA	NA
Benzo[b]fluoranthene		NA	NA	NA
Benzo[g,h,i]perylene		NA	NA	NA
Benzo[k]fluoranthene		NA	NA	NA
Chrysene		NA	NA	NA
Dibenzo[a,h]anthracene		NA	NA	NA
Dibenzofuran		NA	NA	NA
Fluoranthene		NA	NA	NA
Fluorene		NA	NA	NA
Hexachlorobenzene		NA	NA	NA
Indeno[1,2,3-cd]pyrene		NA	NA	NA
Naphthalene		NA	NA	NA
Pentachlorophenol		NA	NA	NA
Phenanthrene		NA	NA	NA
Phenol		NA	NA	NA
Pyrene		NA	NA	NA
Total SVOCs:		NA	NA	NA
Total Petroleum Hydrocarbons (Lubricating Oil; concentrations in mg/kg)		180	7200	2600

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

SVOCs - Semivolatile Organic Compounds

Table 4. Revised Summary of Metals and Chloride in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/kg)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	ESL-1 06/17/98 OU-1 0-0.5	ESL-2 06/17/98 OU-1 0-0.5	ESL-3 06/17/98 OU-1 0-0.5	ESL-4 06/17/98 OU-1 0-0.5	ESL-4 DUP 06/17/98 OU-1 0-0.5	ESL-5 06/17/98 OU-1 0-0.5	ESL-6 06/17/98 OU-1 0-0.5	ESL-7 06/17/98 OU-1 0-0.5	ESL-8/ESL-W1 06/17/98 OU-1 0-0.5	ESL-8/ESL-W1 06/22/98 OU-1 8-10	ESL-9 06/17/98 OU-1 0-0.5	ESL-10 06/17/98 OU-1 0-0.5	ESL-11 06/17/98 OU-1 0-0.5
Arsenic		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		1.81	1.04	0.36	0.96	0.84	0.92	1.31	2.7	1.76	3.8 J	1.36	1.49	9.7
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		838	15.9	73.7	15.3	16.1	35.5	24.8	32.6	26.6	19.4 J	14.9	22.6	32.7
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		85.6	129	25.7	333	NA	130	232	723	324	11.9 EJ	169	214	625
Manganese		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury		0.0755	0.33	0.0381	0.38	0.49	0.18	0.0257	1.38	0.0658	0.0202	0.31	0.57	2.04
Nickel		12	20.1	7.8	13.1	14.9	16.9	12.4	27	15.7	35.6	16.6	22.8	31.8
Selenium		1.4	0.41	0.37 U	1.2	0.8	0.39 U	1.02	1.8	1.7	0.46 UJ	1.2	0.47	2.1
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetra Ethyl Lead		NA	NA	NA	NA	NA	NA	NA	33 U	NA	NA	NA	NA	33 U
Thallium		12.9	1.39	1.94	1.1	2.06	1.43	1.97	1.77	1.54	2.01	0.92	2.6	2.3
Trivalent Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium		300	15.3	27.7	15.5	15.6	22.7	18.9	28.4	27.6	21.7	18.2	37.8	26.4
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

J - Estimated value

U - Analyte was not detected at or above the reporting limit

mg/kg - milligrams per kilogram

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

V- Qualifier added based on Data Usability Summary Report

Table 4. Revised Summary of Metals and Chloride in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/kg)	Sample Designation:	ESL-12	ESL-13	ESL-13	ESL-13	ESL-14	ESL-14	ESL-14	ESL-15	ESL-15	ESL-15	ESL-16	ESL-16	ESL-16	ESL-17	ESL-17	ESL-17	ESL-18
	Sample Date:	06/17/98	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99	09/02/99
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	0-0.5	0-0.5	1-2	2-3	0-0.5	1-2	2-3	0-0.5	1-2	2-3	0-0.5	1-2	2-3	0-0.5	1-2	2-3	0-0.5
Arsenic		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		2.6	0.056 U	0.06 U	0.057 U	0.061 U	0.065 U	0.52	2.64	0.06 U	0.058 U	4.94	0.056 U	0.054 U	0.28 U	0.058 U	0.055 U	2.3
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		21.1	31.2	22.8	30.1	28.1	24.4	14.7	27.1	24.7	14.9	26.7	16.1	18.2	87.3	32.8	14.7	14.5
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		164	1410	533	44.2	652	1620	491	704	514	324	449	261	30.3	552	294	16.5	112
Manganese		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury		0.6	2.54	0.41	0.0998	1.56	0.83	0.0983	1.59	1.09	0.13	0.71	0.92	0.0676	0.82	0.45	0.025	0.12
Nickel		29.6	23.6	18.2	35	24.3	23.3	13	18	20.5	16.5	30.4	16.3	27.8	41	31.5	23.4	17.2
Selenium		0.6	5.2	2.8	0.46 U	1.4	3.6	0.5 U	0.47	2.9	0.47 U	1.5	1.2	0.44 U	10.2	4.4	0.44 U	0.5
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetra Ethyl Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium		4.2	0.75 U	2.4	2.3	0.81 U	3.6	0.83 U	0.75 U	1.96	1.37	0.74 U	1.08	1.6	36	4.8	1.02	0.73 U
Trivalent Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium		18.3	32	29.4	34	58.6	35.5	17.9	41.6	29.3	25.5	32.9	20.3	24.5	88	30.6	18.7	19.1
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

J - Estimated value

U - Analyte was not detected at or above the reporting limit

mg/kg - milligrams per kilogram

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

V- Qualifier added based on Data Usability Summary Report

Table 4. Revised Summary of Metals and Chloride in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/kg)	Sample Designation: ESL-18 ESL-18 ESL-19 ESL-19 ESL-19 ESL-20 ESL-20 ESL-20 ESL-21 ESL-21 ESL-22 ESL-22 ESL-23 ESL-23 ESL-24 ESL-24 ESL-25																	
	Sample Date: 09/02/99 09/02/99 09/02/99 09/02/99 09/02/99 09/02/99 09/02/99 09/02/99 12/14/01 12/14/01 12/14/01 12/14/01 12/14/01 12/14/01 12/14/01 12/14/01 12/14/01																	
	Operable Unit: OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1 OU-1																	
	Sample Depth (ft bls): 1-2 2-3 0-0.5 1-2 2-3 0-0.5 1-2 2-3 0-0.5 2-3 0-0.5 2-3 0-0.5 2-3 0-0.5 2-3 0-0.5																	
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.058 U	0.057 U	6.89	0.058 U	0.059 U	0.62 U	0.64	0.062 U	1.3 J	0.55 J	1.4 J	0.062 U	0.58 J	0.066 U	3.8	0.065 U	2.6	
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	19.4	20.1	119	24.6	25.4	985	197	57.2	21.3	20.7	28.9	9.1	2040	25.8	161	13.7	37.1	
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.5	31.1	1610	27.1	34	676	134	48.1	495	321	1000	33.8	298	20.4	1970	16.2	118	
Manganese	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.0589	0.0339	1.41	0.0778	0.0391	0.91	0.27	0.0356	0.51	0.51	1.3	0.041 J	0.15	0.019 J	0.45	0.02 J	0.65	
Nickel	22.8	33.6	24.2	27.2	35.1	28.7	21.4	35.8	51.7	16	24.6	11	48.6	36.8	36.8	10.1	21.1	
Selenium	1.12	0.46 U	2	0.47 U	0.47 U	5 U	1.3	0.5 U	0.96 J	1.9	2	0.54 U	3.1 U	0.85 J	6.3	0.57 U	1.1 J	
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetra Ethyl Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	1.51	0.76 U	0.8 U	0.96	1.5	13.5	3	2.04	1 U	1.1 U	1.1 U	0.96 U	5.4 U	1 U	1 U	1 U	1 U	
Trivalent Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.2	24.4	47.1	26.6	27.9	266	72.1	38.7	27.7	29.7	30	18.7	423	34.7	94.8	26.2	24.4	
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

J - Estimated value

U - Analyte was not detected at or above the reporting limit

mg/kg - milligrams per kilogram

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

V- Qualifier added based on Data Usability Summary Report

Table 4. Revised Summary of Metals and Chloride in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/kg)	Sample Designation:	ESL-25 DUP	ESL-25	ESL-26	ESL-26	MW-OUI-1	MW-OUI-1	MW-OUI-1 DUP	MW-OUI-2	MW-OUI-2	MW-OUI-3	MW-OUI-3	SB-OUI-1
	Sample Date:	12/14/01	12/14/01	12/14/01	12/14/01	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	0-0.5	2-3	0-0.5	2-3	0-1	1-2	1-2	0-1	1-2	0-1	1-2	0-1
Arsenic		NA	NA	NA	NA	26.5	14	5.2	13	8.54	13.5	6.25	12.3
Barium		NA	NA	NA	NA	167	115	70.3	92	100	161	86.3	76
Beryllium		NA	NA	NA	NA	0.621 J	0.806 J	0.562 J	0.602 J	0.719 J	0.724 J	0.802 J	0.721 J
Cadmium		3.9	0.21 J	0.37 J	0.063 U	0.669 J	0.0977 U	0.0936 U	0.0926 U	0.0872 U	0.0965 U	0.0916 U	0.093 U
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		56.4	14.6	92.6	17.2	50.5 J V	19.6 J V	13 J V	14.9 J V	13.7 J V	6.44 J V	19.9 J V	18.3 J V
Copper		NA	NA	NA	NA	92.6 J V	49.3 J V	30.2 J V	34.5 J V	27.5 J V	62.1 J V	25.2 J V	29 J V
Cyanide		NA	NA	NA	NA	0.995 U	1.03 U	1.03 U	0.988 U	0.95 U	1.05 U	0.976 U	0.977 U
Hexavalent Chromium		NA	NA	NA	NA	0.711 U	0.733 U	0.734 U	0.706 U	0.679 U	0.75 U	0.697 U	0.698 U
Lead		278	47	156	17.4	774	164 J V	33.9 J V	150	13.5	126	14.2	21.8
Manganese		NA	NA	NA	NA	756	489	155	557	631	134	337	298
Mercury		1.2	0.16	0.099 J	0.037 J	1.27	0.663	0.18	0.113 J	0.0568 U	0.231	0.0585 U	0.0574 U
Nickel		22.1	10.9	17	19.9	27.7	29.5	20.2	26.5	26.5	12.6	27.3	28.6
Selenium		1.2 J	0.8 J	1.8	0.71 J	2.39	1.95 U	1.87 U	1.85 U	1.74 U	2.75 U V	1.83 U	1.86 U
Silver		NA	NA	NA	NA	0.478 U	0.488 U	0.468 U	0.463 U	0.436 U	0.483 U	0.458 U	0.465 U
Tetra Ethyl Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium		1 U	1.1 U	0.98 U	0.98 U	NA	NA	NA	NA	NA	NA	NA	NA
Trivalent Chromium		NA	NA	NA	NA	50.5	19.6	13	14.9	13.7	6.44	19.9	18.3
Vanadium		38.2	23.2	49	36.9	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	487 J V	284 J V	60.7 J V	117 J V	68.2 J V	239	74.6 J V	74.4

Notes:

J - Estimated value

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mg/kg - milligrams per kilogram

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

V- Qualifier added based on Data Usability Summary Report

Table 4. Revised Summary of Metals and Chloride in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/kg)	Sample Designation:	SB-OU1-1	SB-OU1-2	SB-OU1-2	SB-OU1-2	SB-OU1-3	SB-OU1-3	SB-OU1-3	SS#1	SS#2	SS#3	SS#4	OU-1 SS-1	OU-1 SS-2
	Sample Date:	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	10/07/93	10/08/93	10/08/93	10/08/93	11/16/2006	11/16/2006
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	1-2	0-1	1-2	3	0-1	1-2	4	1-2	1-2	1-2	1-2	1-2	1-2
Arsenic		10.6	3.54	2.66	13.4	8.18	5.4	7	17	18	42	12	5.96	26.9
Barium		82.4	104	51.5	121	112	67.9	80.8	260	150	310	190	NA	NA
Beryllium		0.607 J	0.616 J	0.425 J	0.856 J	0.795 J	0.6 J	0.61 J	NA	NA	NA	NA	NA	NA
Cadmium		0.0934 U	0.103 U	0.0895 U	0.0951 U	0.0935 U	0.0923 U	0.0903 U	3.1 U	0.94	2.1	3.1 U	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	1200 U	1200 U	1400 U	1200 U	NA	NA
Chromium		14.8 J V	17.1 J V	8.88 J V	22.9 J V	21.2 J V	14.7 J V	13.9 J V	57	21	29	20	NA	NA
Copper		8.47 J V	15.4 J V	4.95 J V	33 J V	29.4 J V	20.3 J V	21 J V	NA	NA	NA	NA	NA	NA
Cyanide		0.974 U	1.09 U	0.976 U	1.01 U	0.989 U	0.977 U	0.977 U	NA	NA	NA	NA	NA	NA
Hexavalent Chromium		0.696 U	0.781 U	0.697 U	0.87 J	0.707 U	0.698 U	0.698 U	NA	NA	NA	NA	NA	NA
Lead		18.1	76.9	26.4	19.4	34.2	8.86	38.5	1200	530	1300	550	NA	NA
Manganese		269	250	128	657	252	128	174	NA	NA	NA	NA	NA	NA
Mercury		0.0571 U	0.437	0.0582 U	0.0604 U	0.176	0.0581 U	0.0566 U	0.12U	0.88	2	1.7	NA	NA
Nickel		12.1	10.9	8.15	35.2	29.2	14.1	16.8	NA	NA	NA	NA	NA	NA
Selenium		1.87 U	2.05 U	1.86 U V	1.9 U	1.87 U	2.24 U V	1.81 U	0.62 U	1	1.1	0.86	NA	NA
Silver		0.467 U	0.514 U	0.448 U	0.475 U	0.467 U	0.461 U	0.452 U	6.2 U	1.2 U	1.8	6.2 U	NA	NA
Tetra Ethyl Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trivalent Chromium		14.8	17.1	8.88	22 J V	21.2	14.7	13.9	NA	NA	NA	NA	NA	NA
Vanadium		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		57.7 J V	91 J V	61.7 J V	77.7 J V	116 J V	44.8 J V	72.5 J V	NA	NA	NA	NA	NA	NA

Notes:

J - Estimated value

U - Analyte was not detected at or above the reporting limit

mg/kg - milligrams per kilogram

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

V- Qualifier added based on Data Usability Summary Report

Table 4. Revised Summary of Metals and Chloride in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/kg)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	OU-1 SS-3 11/16/2006 OU-1 1-2	OU-1 SS-4 11/16/2006 OU-1 1-2	OU-1 SS-4 DUP 11/16/2006 OU-1 1-2	OU-1 SS-5 11/16/2006 OU-1 1-2	OU-1 SS-6 11/16/2006 OU-1 1-2
Arsenic		3.65	19.9	21.4	7.88	7.84
Barium		NA	NA	NA	NA	NA
Beryllium		NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	NA
Hexavalent Chromium		NA	NA	NA	NA	NA
Lead		123	743	973	237	145
Manganese		NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Tetra Ethyl Lead		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Trivalent Chromium		NA	NA	NA	NA	NA
Vanadium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA

Notes:

J - Estimated value

U - Analyte was not detected at or above the reporting limit

mg/kg - milligrams per kilogram

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

V- Qualifier added based on Data Usability Summary Report

Table 5. Revised Summary of Volatile Organic Compounds in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg)	Sample Designation:	ESL-4	ESL-4 DUP	ESL-8/ESL-W1	ESL-8/ESL-W1	ESL-12	MW-OU1-1	MW-OU1-1	MW-OU1-1 DUP	MW-OU1-2
	Sample Date:	06/22/98	06/22/98	06/22/98	06/22/98	06/22/98	08/09/06	08/09/06	08/09/06	08/09/06
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	1.5-2	1.5-2	1.5-2	8-10	1.5-2	0-1	1-2	1-2	0-1
1,1,1-Trichloroethane		NA	NA	NA	NA	NA	0.521 U	0.537 U	0.539 U	0.518 U
1,1-Dichloroethane		NA	NA	NA	NA	NA	0.735 U	0.757 U	0.759 U	0.729 U
1,1-Dichloroethene		NA	NA	NA	NA	NA	1.1 U	1.14 U	1.14 U	1.09 U
1,2,4-Trimethylbenzene		29 J	5.5 UJ	27	5 U	5.2 U	1.16 J	0.574 U	2.89	0.553 U
1,2-Dichloroethane		NA	NA	NA	NA	NA	0.794 U	0.818 U	0.82 U	0.788 U
1,3,5-Trimethylbenzene		7.9 J	5.5 UJ	6.3 J	5 U	5.2 U	0.545 U	0.562 U	0.563 U	0.541 U
1,4-Dioxane		NA	NA	NA	NA	NA	129 U J V	133 U J V	133 U J V	128 U J V
2-Butanone		NA	NA	NA	NA	NA	10 J V	8.06 U J V	8.08 U J V	7.76 U J V
Acetone		NA	NA	NA	NA	NA	159 J V	36.1 J V	33.5 J V	23.5 U J V
Benzene		5.5 U	5.5 U	5 U	5 U	5.2 U	2.22 J N V	1.93 J	2.62	2.82
Carbon Tetrachloride		NA	NA	NA	NA	NA	0.664 U	0.684 U	0.685 U	0.659 U
Chlorobenzene		NA	NA	NA	NA	NA	0.592 U	0.611 U	0.612 U	0.588 U
Chloroform		NA	NA	NA	NA	NA	0.912 U	0.94 U	0.942 U	0.906 U
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	0.711 U	0.733 U	0.734 U	0.706 U
Ethylbenzene		7.2 J	5.5 UJ	8.5 J	5 U	5.2 U	0.592 U	0.611 U	3.24	0.588 U
Isopropylbenzene		7.5 J	5.5 UJ	5 U	5 U	5.2 U	0.592 U	0.611 U	0.612 U	0.588 U
Methylene Chloride		NA	NA	NA	NA	NA	2.89 U	2.98 U	2.99 U	2.87 U
MTBE		5.5 U	5.5 U	5 U	5 U	5.2 U	1.04 U	1.07 U	1.08 U	1.04 U
n-Butylbenzene		8.2 J	5.5 UJ	12 J	5 U	5.2 U	0.592 U	0.611 U	0.612 U	0.588 U
n-Propylbenzene		8 J	5.5 UJ	7.1 J	5 U	5.2 U	0.592 U	0.611 U	0.612 U	0.588 U
Naphthalene		51 UJ	14 J	42	5 U	12 U	0.877 U	0.904 U	0.906 U	0.871 U
p-Isopropyltoluene		5.5 U	5.5 U	6.9 J	5 U	5.2 U	NA	NA	NA	NA
sec-Butylbenzene		5.6 J	5.5 UJ	5 U	5 U	5.2 U	0.711 U	0.733 U	0.734 U	0.706 U
tert-Butylbenzene		5.5 U	5.5 U	5 U	5 U	5.2 U	0.628 U	0.647 U	0.649 U	0.624 U
Tetrachloroethene		NA	NA	NA	NA	NA	0.889 U	0.916 U	0.918 U	0.882 U
Toluene		18 J	5.5 UJ	9.1 J	5 U	5.2 U	1.72 J	3.03	26.4	4.81
trans-1,2-Dichloroethene		NA	NA	NA	NA	NA	0.9 U	0.928 U	0.93 U	0.894 U
Trichloroethene		NA	NA	NA	NA	NA	0.96 U	0.989 U	0.991 U	0.953 U
Vinyl chloride		NA	NA	NA	NA	NA	0.889 U	0.916 U	0.918 U	0.882 U
Xylenes (total)		35 J	11 UJ	24	10 U	10 U	1.75 U	1.81 U	18.8	2.72 J
Total VOCs:		126.4	14	142.9	0	0	174.1	41.06	87.45	10.35

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

VOCs - Volatile Organic Compounds

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

V- Qualifier added based on Data Usability Summary Report

Table 5. Revised Summary of Volatile Organic Compounds in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg)	Sample Designation:	MW-OU1-2	MW-OU1-3	MW-OU1-3	SB-OU1-1	SB-OU1-1	SB-OU1-2	SB-OU1-2	SB-OU1-2	SB-OU1-3	SB-OU1-3	SB-OU1-3
	Sample Date:	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	1-2	0-1	1-2	0-1	1-2	3	0-1	1-2	0-1	1-2	4
1,1,1-Trichloroethane		0.498 U	0.55 U	0.511 U	0.512 U	0.51 U	0.531 U	0.573 U	0.511 U	0.518 U	0.512 U	0.512 U
1,1-Dichloroethane		0.701 U	0.775 U	0.72 U	0.721 U	0.719 U	0.749 U	0.807 U	0.72 U	0.73 U	0.721 U	0.721 U
1,1-Dichloroethene		1.05 U	1.16 U	1.08 U	1.08 U	1.08 U	1.12 U	1.21 U	1.08 U	1.1 U	1.08 U	1.08 U
1,2,4-Trimethylbenzene		0.532 U	0.588 U	0.546 U	0.547 U	0.545 U	0.568 U	0.612 U	0.546 U	1.33 J V	0.547 U	0.547 U
1,2-Dichloroethane		0.758 U	0.838 U	0.778 U	0.779 U	0.777 U	0.809 U	0.872 U	0.778 U	0.789 U	0.779 U	0.779 U
1,3,5-Trimethylbenzene		0.52 U	0.575 U	0.534 U	0.535 U	0.534 U	0.556 U	0.599 U	0.534 U	0.542 U	0.535 U	0.535 U
1,4-Dioxane		123 U J V	136 U J V	127 U J V	127 U J V	126 U J V	132 U J V	142 U J V	127 U J V	128 U J V	127 U J V	127 U J V
2-Butanone		7.47 U J V	12.8 J V	7.67 U J V	7.67 U J V	7.66 U J V	7.97 U J V	8.59 U J V	7.67 U J V	7.77 U J V	17.6 J V	9.05 J V
Acetone		55.5 J V	146 J V	23.2 U J V	26.6 J V	69 J V	24.2 U J V	121 J V	60.6 J V	93.4 J V	144 J V	106 J V
Benzene		0.566 U	1.85 J	2.07 J	0.581 U	0.58 U	2.52	0.651 U	0.581 U	2.82 J V	0.581 U	0.581 U
Carbon Tetrachloride		0.633 U	0.7 U	0.65 U	0.651 U	0.65 U	0.676 U	0.729 U	0.65 U	0.66 U	0.651 U	0.651 U
Chlorobenzene		0.566 U	0.625 U	0.581 U	0.581 U	0.58 U	0.604 U	0.651 U	0.581 U	0.589 U	0.581 U	0.581 U
Chloroform		0.871 U	0.962 U	0.894 U	0.895 U	0.893 U	0.93 U	1 U	0.894 U	0.907 U	0.895 U	0.895 U
cis-1,2-Dichloroethene		0.679 U	0.75 U	0.697 U	0.698 U	0.696 U	0.725 U	0.781 U	0.697 U	0.707 U	0.698 U	0.698 U
Ethylbenzene		0.566 U	0.625 U	0.581 U	0.581 U	0.58 U	0.604 U	0.651 U	0.581 U	0.589 U	0.581 U	0.581 U
Isopropylbenzene		0.566 U	0.625 U	0.581 U	0.581 U	0.58 U	0.604 U	0.651 U	0.581 U	0.589 U	0.581 U	0.581 U
Methylene Chloride		2.76 U	3.05 U	2.83 U	3.1 J	2.83 U	2.95 U	3.18 U	2.83 U	2.87 U	2.84 U	2.84 U
MTBE		0.995 U	1.1 U	1.02 U	1.02 U	1.02 U	1.06 U	1.15 U	1.02 U	1.04 U	1.02 U	1.02 U
n-Butylbenzene		0.566 U	0.625 U	0.581 U	0.581 U	0.58 U	0.604 U	0.651 U	0.581 U	0.589 U	0.581 U	0.581 U
n-Propylbenzene		0.566 U	0.625 U	0.581 U	0.581 U	0.58 U	0.604 U	0.651 U	0.581 U	0.589 U	0.581 U	0.581 U
Naphthalene		0.837 U	0.925 U	0.859 U	0.86 U	0.858 U	0.894 U	0.964 U	0.859 U	4.3 J V	0.86 U	0.86 U
p-Isopropyltoluene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene		0.679 U	0.75 U	0.697 U	0.698 U	0.696 U	0.725 U	0.781 U	0.697 U	0.707 U	0.698 U	0.698 U
tert-Butylbenzene		0.6 U	0.662 U	0.616 U	0.616 U	0.615 U	0.64 U	0.69 U	0.616 U	0.624 U	0.616 U	0.616 U
Tetrachloroethene		0.848 U	0.938 U	0.871 U	0.872 U	0.87 U	0.906 U	0.977 U	0.871 U	0.883 U	0.872 U	0.872 U
Toluene		1.1 U	3.36	2.98	1.13 U	1.13 U	4.82	1.26 U	1.13 U	3.39 J V	1.13 U	1.13 U
trans-1,2-Dichloroethene		0.86 U	0.95 U	0.883 U	0.884 U	0.882 U	0.918 U	0.99 U	0.883 U	0.895 U	0.884 U	0.884 U
Trichloroethene		0.916 U	1.01 U	0.941 U	0.942 U	0.94 U	0.978 U	1.05 U	0.941 U	0.954 U	0.942 U	0.942 U
Vinyl chloride		0.848 U	0.938 U	0.871 U	0.872 U	0.87 U	0.906 U	0.977 U	0.871 U	0.883 U	0.872 U	0.872 U
Xylenes (total)		1.67 U	1.85 U	1.72 U	1.72 U	1.72 U	2.39 J	1.93 U	1.72 U	3.33 J V	1.72 U	1.72 U
Total VOCs:		55.5	164.01	5.05	29.7	69	9.73	121	60.6	108.57	161.6	115.05

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

NA - Not analyzed

VOCs - Volatile Organic Compounds

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

V- Qualifier added based on Data Usability Summary Report

Table 6. Revised Summary of Polychlorinated Biphenyls in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg)	Sample Designation:	MW-OU1-1	MW-OU1-1	MW-OU1-1 DUP	MW-OU1-2	MW-OU1-2	MW-OU1-3	MW-OU1-3	SB-OU1-1
	Sample Date:	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	0-1	1-2	1-2	0-1	1-2	0-1	1-2	0-1
Aroclor-1016		18.8 U	19 U	19.2 U	18.6 U	17.7 U	19.7 U	18.2 U	18.3 U
Aroclor-1221		5.76 U	5.82 U	5.89 U	5.71 U	5.43 U	6.03 U	5.57 U	5.61 U
Aroclor-1232		12.9 U	13.1 U	13.2 U	12.8 U	12.2 U	13.5 U	12.5 U	12.6 U
Aroclor-1242		16.5 U	16.6 U	16.8 U	16.3 U	15.5 U	17.2 U	15.9 U	16 U
Aroclor-1248		6.82 U	6.89 U	6.98 U	6.75 U	6.43 U	7.14 U	6.6 U	6.64 U
Aroclor-1254		16.5 U	16.6 U	16.8 U	16.3 U	15.5 U	17.2 U	15.9 U	16 U
Aroclor-1260		6.48 U	6.54 U	6.63 U	6.42 U	6.11 U	6.79 U	6.27 U	6.31 U
Total PCBs:		0	0	0	0	0	0	0	0

Notes:

J - Estimated value

M - Manually integrated compound

U - Analyte was not detected at or above the reporting limit

µg/kg - micrograms per kilogram

ft bls - Feet below land surface

PCBs - Polychlorinated Biphenyls

DUP - Duplicate sample

V- Qualifier added based on Data Usability Summary Report

Table 6. Revised Summary of Polychlorinated Biphenyls in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg)	Sample Designation:	SB-OU1-1	SB-OU1-2	SB-OU1-2	SB-OU1-2	SB-OU1-3	SB-OU1-3	SB-OU1-3
	Sample Date:	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	1-2	0-1	1-2	3	0-1	1-2	4
Aroclor-1016		18.5 U	20.2 U	18.1 U J V	19.2 U J V	18.8 U	18.4 U	18.2 U J V
Aroclor-1221		5.67 U	6.19 U	5.53 U J V	5.89 U J V	5.75 U	5.65 U	5.57 U J V
Aroclor-1232		12.7 U	13.9 U	12.4 U J V	13.2 U J V	12.9 U	12.7 U	12.5 U J V
Aroclor-1242		16.2 U	17.7 U	15.8 U J V	16.8 U J V	16.4 U	16.1 U	15.9 U J V
Aroclor-1248		6.71 U	7.33 U	6.55 U J V	6.97 U J V	6.81 U	6.68 U	6.59 U J V
Aroclor-1254		16.2 U	17.7 U	15.8 U J V	16.8 U J V	16.4 U	16.1 U	15.9 U J V
Aroclor-1260		6.37 U	6.96 U	6.22 U J V	6.62 U J V	6.47 U	6.35 U	6.26 U J V
Total PCBs:		0	0	0	0	0	0	0

Notes:

J - Estimated value

M - Manually integrated compound

U - Analyte was not detected at or above the reporting limit

µg/kg - micrograms per kilogram

ft bls - Feet below land surface

PCBs - Polychlorinated Biphenyls

DUP - Duplicate sample

V- Qualifier added based on Data Usability Summary Report

Table 7. Revised Summary of Pesticides and Herbicides in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg)	Sample Designation: MW-OU1-1	MW-OU1-1	MW-OU1-1 DUP	MW-OU1-2	MW-OU1-2	MW-OU1-3	MW-OU1-3	SB-OU1-1
	Sample Date:	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06	08/09/06
	Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
	Sample Depth (ft bls):	0-1	1-2	1-2	0-1	1-2	0-1	1-2
2,4,5-TP		10.8 U	11.1 U	11.1 U	10.7 J V	10.3 U	11.4 U	10.6 U
4,4'-DDD		6.77 U V	1.43 U J V	2.4 U	1.16 U	1.1 U	1.21 U	1.12 U
4,4'-DDE		2.03 U	0.714 U J V	1.2 U	0.581 U	0.552 U	0.603 U	0.561 U
4,4'-DDT		8.12 J V	1.86 U J V	3.12 U	1.51 U	1.44 U	1.57 U	1.46 U
Aldrin		3.66 U	1.28 U J V	2.16 U	1.05 U	0.994 U	1.08 U	1.01 U
alpha-BHC		2.84 U	0.999 U J V	1.68 U	0.813 U	0.773 U	0.844 U	0.786 U
alpha-Chlordane		2.84 U	0.999 U J V	1.68 U	0.813 U	0.773 U	0.844 U	0.786 U
beta-BHC		3.25 U	1.14 U J V	1.92 U	0.93 U	0.883 U	0.964 U	0.898 U
delta-BHC		3.25 U	1.14 U J V	1.92 U	0.93 U	0.883 U	0.964 U	0.898 U
Dieldrin		2.44 U	0.857 U J V	1.44 U	0.697 U	0.663 U	0.723 U	0.674 U
Endosulfan I		2.84 U	0.999 U J V	1.68 U	0.813 U	0.773 U	0.844 U	0.786 U
Endosulfan II		3.66 U	1.28 U J V	2.16 U	1.05 U	0.994 U	1.08 U	1.01 U
Endosulfan sulfate		3.25 U	1.14 U J V	1.92 U	0.93 U	0.883 U	0.964 U	0.898 U
Endrin		2.84 U	0.999 U J V	1.68 U	0.813 U	0.773 U	0.844 U	0.786 U
gamma-BHC(Lindane)		2.44 U	0.857 U J V	1.44 U	0.697 U	0.663 U	0.723 U	0.674 U
Heptachlor		3.66 U	1.28 U J V	2.16 U	1.05 U	0.994 U	1.08 U	1.01 U

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

V- Qualifier added based on Data Usability Summary Report

Table 7. Revised Summary of Pesticides and Herbicides in Soil Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/kg)	Sample Designation: Sample Date: Operable Unit: Sample Depth (ft bls):	SB-OU1-1 08/09/06 OU-1 1-2	SB-OU1-2 08/09/06 OU-1 0-1	SB-OU1-2 08/09/06 OU-1 1-2	SB-OU1-2 08/09/06 OU-1 3	SB-OU1-3 08/09/06 OU-1 0-1	SB-OU1-3 08/09/06 OU-1 1-2	SB-OU1-3 08/09/06 OU-1 4
2,4,5-TP		10.6 U	11.8 U	10.6 U	11 U	214 U	10.6 U	10.6 U
4,4'-DDD		1.16 U	1.28 U	1.16 U	1.2 U	70.7 U	5.8 U	1.11 U
4,4'-DDE		0.58 U	0.641 U	0.579 U	0.602 U	35.3 U	2.9 U	0.556 U
4,4'-DDT		1.51 U	1.67 U	1.5 U	1.56 U	91.9 U	7.55 U	1.44 U
Aldrin		1.04 U	1.15 U	1.04 U	1.08 U	63.6 U	5.22 U	1 U
alpha-BHC		0.812 U	0.898 U	0.81 U	0.842 U	49.5 U	4.06 U	0.778 U
alpha-Chlordane		0.812 U	0.898 U	0.81 U	0.842 U	49.5 U	4.06 U	0.778 U
beta-BHC		0.928 U	1.03 U	0.926 U	0.963 U	212 U V	4.64 U	0.889 U
delta-BHC		0.928 U	1.03 U	0.926 U	0.963 U	56.5 U	4.64 U	0.889 U
Dieldrin		0.696 U	0.77 U	0.694 U	0.722 U	42.4 U	3.48 U	0.667 U
Endosulfan I		0.812 U	0.898 U	0.81 U	0.842 U	49.5 U	4.06 U	0.778 U
Endosulfan II		1.04 U	1.15 U	1.04 U	1.08 U	63.6 U	5.22 U	1 U
Endosulfan sulfate		0.928 U	1.03 U	0.926 U	0.963 U	56.5 U	4.64 U	0.889 U
Endrin		0.812 U	0.898 U	0.81 U	0.842 U	49.5 U	4.06 U	0.778 U
gamma-BHC(Lindane)		0.696 U	0.77 U	0.694 U	0.722 U	42.4 U	3.48 U	0.667 U
Heptachlor		1.04 U	1.15 U	1.04 U	1.08 U	63.6 U	5.22 U	1 U

Notes:

µg/kg -Micrograms per kilogram

J - Estimated value

U - Compound was analyzed for but not detected

ft bls - Feet below land surface

DUP - Duplicate

V- Qualifier added based on Data Usability Summary Report

Table 8. Standards, Criteria and Guidance Values, ExxonMobil Oil Corporation, Buffalo, New York

Analyte	Proposed Unrestricted Use Criteria	Proposed Restricted Commercial Criteria	Proposed Restricted Industrial Criteria
Semivolatile Organic Compounds (Concentrations in ug/kg)			
1,2-Dichlorobenzene	1,100	500,000	1,000,000
1,3-Dichlorobenzene	2,400	280,000	560,000
1,4-Dichlorobenzene	1,800	130,000	250,000
2-Methylphenol	330	500,000	1,000,000
3&4-Methylphenol	330	500,000	1,000,000
Acenaphthene	20,000	500,000	1,000,000
Acenaphthylene	100,000	500,000	1,000,000
Anthracene	100,000	500,000	1,000,000
Benzo[a]anthracene	1,000	5,600	11,000
Benzo[a]pyrene	1,000	1,000	1,100
Benzo[b]fluoranthene	1,000	5,600	11,000
Benzo[g,h,i]perylene	100,000	500,000	1,000,000
Benzo[k]fluoranthene	800	56,000	110,000
Chrysene	1,000	56,000	110,000
Dibenzo[a,h]anthracene	330	560	1,100
Dibenzofuran	7,000	350,000	1,000,000
Fluoranthene	100,000	500,000	1,000,000
Fluorene	30,000	500,000	1,000,000
Hexachlorobenzene	330	6,000	12,000
Indeno[1,2,3-cd]pyrene	500	5,600	11,000
Naphthalene	12,000	500,000	1,000,000
Pentachlorophenol	800	6,700	55,000
Phenanthrene	100,000	500,000	1,000,000
Phenol	330	500,000	1,000,000
Pyrene	100,000	500,000	1,000,000
Metals (Concentrations in mg/kg)			
Arsenic	13	16	16
Barium	350	400	10,000
Beryllium	7.2	590	2,700
Cadmium	2.5	9.3	60
Copper	50	270	10,000
Cyanide	27	27	10,000
Hexavalent Chromium	1	400	800
Lead	63	1,000	3,900
Manganese	1,600	10,000	10,000
Mercury	0.18	2.8	5.7
Nickel	30	310	10,000
Selenium	3.9	1,500	6,800
Silver	2	1,500	6,800
Trivalent Chromium	30	1,500	6,800
Zinc	109	10,000	10,000

Table 8. Standards, Criteria and Guidance Values, ExxonMobil Oil Corporation, Buffalo, New York

Analyte	Proposed Unrestricted Use Criteria	Proposed Restricted Commercial Criteria	Proposed Restricted Industrial Criteria
Volatile Organic Compounds (concentrations in ug/kg)			
1,1,1-Trichloroethane	680	500,000	1,000,000
1,1-Dichloroethane	270	240,000	480,000
1,1-Dichloroethene	330	500,000	1,000,000
1,2,4-Trimethylbenzene	3,600	190,000	380,000
1,2-Dichloroethane	20	30,000	60,000
1,3,5-Trimethylbenzene	8,400	190,000	380,000
1,4-Dioxane	100	130,000	250,000
2-Butanone	120	500,000	1,000,000
Acetone	50	500,000	1,000,000
Benzene	60	44,000	89,000
Carbon Tetrachloride	760	22,000	44,000
Chlorobenzene	1,100	500,000	1,000,000
Chloroform	370	350,000	700,000
cis-1,2-Dichloroethene	250	500,000	1,000,000
Ethylbenzene	1,000	390,000	780,000
Isopropylbenzene			
Methylene Chloride	50	500,000	1,000,000
MTBE	930	500,000	1,000,000
Naphthalene	12,000	500,000	1,000,000
n-Butylbenzene	12,000	500,000	1,000,000
n-Propylbenzene	3,900	500,000	1,000,000
sec-Butylbenzene	11,000	500,000	1,000,000
tert-Butylbenzene	5,900	500,000	1,000,000
Tetrachloroethene	1,300	150,000	300,000
Toluene	700	500,000	1,000,000
trans-1,2-Dichloroethene	190	500,000	1,000,000
Trichloroethene	470	200,000	400,000
Vinyl chloride	20	13,000	27,000
Xylenes (total)	260	500,000	1,000,000
Polychlorinated Biphenyls (Concentrations in ug/kg)			
Total PCBs	100	1,000	25,000
Pesticides and Herbicides (Concentrations in ug/kg)			
2,4,5-TP	3,800	500,000	1,000,000
4,4'-DDD	3.3	92,000	180,000
4,4'-DDE	3.3	62,000	120,000
4,4'-DDT	3.3	47,000	94,000
Aldrin	5	680	1,400
alpha-BHC	20	3,400	6,800
alpha-Chlordane	94	24,000	47,000
beta-BHC	36	3,000	14,000
delta-BHC	40	500,000	1,000,000
Dieldrin	5	1,400	2,800
Endosulfan I	2,400	200,000	920,000
Endosulfan II	2,400	200,000	920,000
Endosulfan sulfate	2,400	200,000	920,000
Endrin	14	89,000	410,000
gamma-BHC(Lindane)	100	9,200	23,000
Heptachlor	42	15,000	29,000

Table 9. Summary of Semivolatile Organic Compounds and TPH in Groundwater Samples
Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter	NYSDEC AWQSGVs	Sample Designation:	ESL-8/ESL-W1	MW-OU1-1	MW-OU1-1 DUP	MW-OU1-1 F	MW-OU1-1 DUP F	MW-OU1-2
(Concentrations in µg/L)	(µg/L)	Sample Date:	07/08/98	08/15/06	08/15/06	08/15/06	08/15/06	08/15/06
		Operable Unit:	OU-1	OU-1	OU-1	OU-1	OU-1	OU-1
1,2-Dichlorobenzene	3		NA	0.37 U	0.37 U	NA	NA	0.37 U
1,3-Dichlorobenzene	3		NA	0.36 U	0.36 U	NA	NA	0.36 U
1,4-Dichlorobenzene	3		NA	0.46 U	0.46 U	NA	NA	0.46 U
2-Methylphenol	--		NA	2.8 U	2.8 U	2.8 U	2.8 U	3.73 U
3&4-Methylphenol	--		NA	3.1 U	3.1 U	3.1 U	3.1 U	4.13 U
Acenaphthene	20		1 U	1.6 U	1.6 U	1.6 U	1.6 U	2.13 U
Acenaphthylene	--		1 U	1.5 U	1.5 U	1.5 U	1.5 U	2 U
Anthracene	50		1 U	0.9 U	0.9 U	0.9 U	0.9 U	1.2 U
Benzo[a]anthracene	0.002		1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.47 U
Benzo[a]pyrene	ND		1 U	0.9 U	0.9 U	0.9 U	0.9 U	1.2 U
Benzo[b]fluoranthene	0.002		1 U	1.7 U	1.7 U	1.7 U	1.7 U	2.27 U
Benzo[g,h,i]perylene	--		1 U	0.8 U	0.8 U	0.8 U	0.8 U	1.07 U
Benzo[k]fluoranthene	0.002		1 U	1.5 U	1.5 U	1.5 U	1.5 U	2 U
Chrysene	0.002		1 U	1 U	1 U	1 U	1 U	1.33 U
Dibenzo[a,h]anthracene	--		1 U	1 U	1 U	1 U	1 U	1.33 U
Dibenzofuran	--		NA	2.5 U	2.5 U	2.5 U	2.5 U	3.33 U
Fluoranthene	50		1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.6 U
Fluorene	50		1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.6 U
Hexachlorobenzene	0.04		NA	2.4 U	2.4 U	2.4 U	2.4 U	3.2 U
Indeno[1,2,3-cd]pyrene	0.002		1 U	1 U	1 U	1 U	1 U	1.33 U
Naphthalene	10		1 U	1.5 U	1.5 U	1.5 U	1.5 U	2 U
Pentachlorophenol	1		NA	3 U	3 U	3 U	3 U	4 U
Phenanthrene	50		1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.6 U
Phenol	1		NA	1.8 U	1.8 U	1.8 U	1.8 U	2.4 U
Pyrene	50		1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.47 U
Total SVOCs:			0	0	0	0	0	0
Total Petroleum Hydrocarbons (Lubricating Oil)			NA	NA	NA	NA	NA	NA

Notes:

- J - Estimated value
- U - Analyte was not detected at or above the reporting limit
- DUP - Duplicate sample
- NA - Not analyzed
- NYSDEC - New York State Department of Environmental Conservation
- AWQSGVs - Ambient Water Quality Standards and Guidance Values
- µg/L - µg/L -Micrograms per liter
- - No NYSDEC AWQSGV available
- Bold - Concentration exceeds NYSDEC AWQSGVs
- SVOCs - Semivolatile Organic Compounds
- F - Filtered

Table 9. Summary of Semivolatile Organic Compounds and TPH in Groundwater Samples
Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: Sample Date: Operable Unit:	MW-OU1-2 F 08/16/06 OU-1	MW-OU1-3 08/15/06 OU-1	MW-OU1-3 F 08/16/06 OU-1	TWP#2 10/12/93 OU-1	TWP#3 10/12/93 OU-1	TWP#4 10/12/93 OU-1	TWP#5 10/12/93 OU-1
1,2-Dichlorobenzene	3		NA	0.37 U	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	3		NA	0.36 U	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	3		NA	0.46 U	NA	NA	NA	NA	NA
2-Methylphenol	--		2.75 U	3.73 U	2.77 U	NA	NA	NA	NA
3&4-Methylphenol	--		3.04 U	4.13 U	3.07 U	NA	NA	NA	NA
Acenaphthene	20		1.57 U	2.13 U	1.58 U	NA	NA	NA	NA
Acenaphthylene	--		1.47 U	2 U	1.49 U	NA	NA	NA	NA
Anthracene	50		0.882 U	1.2 U	0.891 U	NA	NA	NA	NA
Benzo[a]anthracene	0.002		1.08 U	1.47 U	1.09 U	NA	NA	NA	NA
Benzo[a]pyrene	ND		0.882 U	1.2 U	0.891 U	NA	NA	NA	NA
Benzo[b]fluoranthene	0.002		1.67 U	2.27 U	1.68 U	NA	NA	NA	NA
Benzo[g,h,i]perylene	--		0.784 U	1.07 U	0.792 U	NA	NA	NA	NA
Benzo[k]fluoranthene	0.002		1.47 U	2 U	1.49 U	NA	NA	NA	NA
Chrysene	0.002		0.98 U	1.33 U	0.99 U	NA	NA	NA	NA
Dibenzo[a,h]anthracene	--		0.98 U	1.33 U	0.99 U	NA	NA	NA	NA
Dibenzofuran	--		2.45 U	3.33 U	2.48 U	NA	NA	NA	NA
Fluoranthene	50		1.18 U	1.6 U	1.19 U	NA	NA	NA	NA
Fluorene	50		1.18 U	1.6 U	1.19 U	NA	NA	NA	NA
Hexachlorobenzene	0.04		2.35 U	3.2 U	2.38 U	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	0.002		0.98 U	1.33 U	0.99 U	NA	NA	NA	NA
Naphthalene	10		1.47 U	2 U	1.49 U	NA	NA	NA	NA
Pentachlorophenol	1		2.94 U	4 U	2.97 U	NA	NA	NA	NA
Phenanthrene	50		1.18 U	1.6 U	1.19 U	NA	NA	NA	NA
Phenol	1		1.76 U	2.4 U	1.78 U	NA	NA	NA	NA
Pyrene	50		1.08 U	1.47 U	1.09 U	NA	NA	NA	NA
Total SVOCs:			0	0	0	NA	NA	NA	NA
Total Petroleum Hydrocarbons (Lubricating Oil)			NA	NA	NA	52 U	5700	50 U	62 U

Notes:

- J - Estimated value
- U - Analyte was not detected at or above the reporting limit
- DUP - Duplicate sample
- NA - Not analyzed
- NYSDEC - New York State Department of Environmental Conservation
- AWQSGVs - Ambient Water Quality Standards and Guidance Values
- µg/L - µg/L -Micrograms per liter
- - No NYSDEC AWQSGV available
- Bold - Concentration exceeds NYSDEC AWQSGVs
- SVOCs - Semivolatile Organic Compounds
- F - Filtered

Table 10. Revised Summary of Metals and Chloride in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/L)	NYSDEC AWQSGVs (mg/L)	Sample Designation: Sample Date: Operable Unit:	MW-OU1-1 08/15/06 OU-1	MW-OU1-1 DUP 08/15/06 OU-1	MW-OU1-1 F 08/15/06 OU-1	MW-OU1-1 DUP F 08/15/06 OU-1
Arsenic	0.025		0.0046 U	0.0046 U	0.0046 U	0.0046 U
Barium	1		0.0473 J V	0.0555	0.0542 J V	0.0561
Beryllium	0.003		0.0011 U V	0.0014 U V	0.001 U	0.001 U
Cadmium	0.005		0.0004 U	0.0004 U	0.0004 U	0.0004 U
Chloride	0.25		NA	NA	NA	NA
Chromium	0.05		0.0015 U	0.0015 U	0.0015 U	0.0015 U
Copper	0.2		0.0053 U	0.0053 U	0.0053 U	0.0053 U
Cyanide	0.2		0.002 U	0.002 U	0.002 U	0.002 U
Hexavalent Chromium	0.05		0.005 HU	0.005 HU	0.005 HU	0.005 HU
Lead	0.025		0.0027 U	0.0027 U	0.0027 U	0.0027 U
Manganese	0.3		0.222	0.223 J V	0.172	0.274 J V
Mercury	0.0007		0.0001 U	0.0001 U	0.0001 U	0.0001 U
Nickel	0.1		0.0017 U	0.0017 U	0.0017 U J V	0.0037 J V
Selenium	0.01		0.0082 U	0.0082 U	0.0082 U	0.0082 U
Silver	0.05		0.0019 U	0.0019 U	0.0019 U	0.0019 U
Trivalent Chromium	--		0.0015 U	0.0015 U	0.0015 U	0.0015 U
Zinc	2		0.0075 U V	0.0081 U V	0.0017 U V	0.0017 U V

Notes:

H - Sample analysis performed past method-specified holding time

J - Estimated value

U - Analyte was not detected at or above the reporting limit

DUP - Duplicate sample

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water Quality Standards and Guidance Values

mg/L - Milligrams per liter

-- - No NYSDEC AWQSGV available

Bold - Concentration exceeds NYSDEC AWQSGVs

F - Filtered

V - Qualifier added based on Data Usability Summary Report

On February 16, 2007, table was revised to correct discrepancies in the units.

Table 10. Revised Summary of Metals and Chloride in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/L)	NYSDEC AWQSGVs (mg/L)	Sample Designation: Sample Date: Operable Unit:	MW-OU1-2 08/15/06 OU-1	MW-OU1-2 F 08/16/06 OU-1	MW-OU1-3 08/15/06 OU-1	MW-OU1-3 F 08/16/06 OU-1	TWP#1 10/12/93
Arsenic	0.025		0.0046 U	0.0046 U	0.0046 U J V	0.0054 J V	NA
Barium	1		0.0913	0.0944	0.0574	0.0515	NA
Beryllium	0.003		0.0014 U V	0.001 U	0.0014 U V	0.001 U	NA
Cadmium	0.005		0.0004 U	0.0004 U	0.0004 U	0.0004 U	NA
Chloride	0.25		NA	NA	NA	NA	0.37
Chromium	0.05		0.0015 U	0.0015 U	0.0015 U	0.0015 U	NA
Copper	0.2		0.0053 U	0.0053 U	0.0053 U	0.0053 U	NA
Cyanide	0.2		0.002 U	0.002 U	0.0038 U V	0.0022 U V	NA
Hexavalent Chromium	0.05		0.005 HU	0.005 HU	0.005 HU	0.005 HU	NA
Lead	0.025		0.0027 U	0.0027 U	0.0031 J	0.0027 U	NA
Manganese	0.3		0.0894	0.0781	0.0781	0.0654	NA
Mercury	0.0007		0.0001 U	0.0001 U	0.0001 U	0.0001 U	NA
Nickel	0.1		0.0017 U	0.0017 U	0.0017 U	0.0017 U	NA
Selenium	0.01		0.0082 U	0.0082 U	0.0082 U	0.0082 U	NA
Silver	0.05		0.0019 U	0.0019 U	0.0019 U	0.0019 U	NA
Trivalent Chromium	--		0.0015 U	0.0015 U	0.0015 U	0.0015 U	NA
Zinc	2		0.0079 U V	0.0072 U V	0.0093 U V	0.0073 U V	NA

Notes:

H - Sample analysis performed past method-specified holding time

J - Estimated value

U - Analyte was not detected at or above the reporting limit

DUP - Duplicate sample

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water Quality Standards and Guidance Values

mg/L - Milligrams per liter

-- - No NYSDEC AWQSGV available

Bold - Concentration exceeds NYSDEC AWQSGVs

F - Filtered

V - Qualifier added based on Data Usability Summary Report

On February 16, 2007, table was revised to correct discrepa

Table 10. Revised Summary of Metals and Chloride in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in mg/L)	NYSDEC AWQSGVs (mg/L)	Sample Designation: Sample Date: Operable Unit:	TWP#2 10/12/93	TWP#3 10/12/93	TWP#4 10/12/93	TWP#5 10/12/93
Arsenic	0.025		0.042	0.047	0.03	0.063
Barium	1		0.35	0.36	0.42	1 U
Beryllium	0.003		NA	NA	NA	NA
Cadmium	0.005		0.005U	0.006	0.005 U	0.025 U
Chloride	0.25		0.037	0.020 U	0.020 U	0.13
Chromium	0.05		0.078	0.052	0.06	0.11
Copper	0.2		NA	NA	NA	NA
Cyanide	0.2		NA	NA	NA	NA
Hexavalent Chromium	0.05		NA	NA	NA	NA
Lead	0.025		0.21	2	0.12	0.32
Manganese	0.3		NA	NA	NA	NA
Mercury	0.0007		0.00029U	0.0002 U	0.00029 U	0.00029 U
Nickel	0.1		NA	NA	NA	NA
Selenium	0.01		0.016	0.0074	0.013	0.019
Silver	0.05		.010 U	0.010 U	0.010 U	0.050 U
Trivalent Chromium	--		0.037	0.020 U	0.020 U	0.13
Zinc	2		NA	NA	NA	NA

Notes:

- H - Sample analysis performed past method-specified holding time
 - J - Estimated value
 - U - Analyte was not detected at or above the reporting limit
 - DUP - Duplicate sample
 - NYSDEC - New York State Department of Environmental Conservation
 - AWQSGVs - Ambient Water Quality Standards and Guidance Values
 - mg/L - Milligrams per liter
 - - No NYSDEC AWQSGV available
 - Bold - Concentration exceeds NYSDEC AWQSGVs
 - F - Filtered
 - V - Qualifier added based on Data Usability Summary Report
- On February 16, 2007, table was revised to correct discrepa

Table 11. Revised Summary of Volatile Organic Compounds in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: ESL-8/ESL-W1 Sample Date: 07/08/98 Operable Unit: OU-1	MW-OU1-1 08/15/06 OU-1	MW-OU1-1 DUP 08/15/06 OU-1	MW-OU1-2 08/15/06 OU-1	MW-OU1-3 08/15/06 OU-1
1,1,1-Trichloroethane	5	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,1-Dichloroethane	5	NA	0.32 U	0.32 U	0.32 U	0.32 U
1,1-Dichloroethene	5	NA	0.45 U	0.45 U	0.45 U	0.45 U
1,2,4-Trimethylbenzene	5	0.2 U	0.34 U	0.34 U	0.34 U	0.34 U
1,2-Dichloroethane	0.6	NA	0.28 U	0.28 U	0.28 U	0.28 U
1,3,5-Trimethylbenzene	5	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
1,4-Dioxane	--	NA	79.5 U	79.5 U	79.5 U J V	79.5 U J V
2-Butanone	50	NA	5.09 U	5.09 U	5.09 U J V	5.09 U J V
Acetone	50	NA	5.91 U	5.91 U	15.4 J	6 J
Benzene	1	0.2 U	0.29 U	0.29 U	0.29 U	0.29 U
Carbon Tetrachloride	5	NA	0.48 U	0.48 U	0.48 U	0.48 U
Chlorobenzene	5	NA	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	7	NA	0.38 U	0.38 U	0.38 U	0.38 U
cis-1,2-Dichloroethene	5	NA	0.39 U	0.39 U	0.39 U	0.39 U
Ethylbenzene	5	0.2 U	0.34 U	0.34 U	0.34 U	0.34 U
Isopropylbenzene	5	0.2 U	0.34 U	0.34 U	0.34 U	0.34 U
Methylene Chloride	5	NA	1.26 U	1.26 U	1.26 U	1.26 U
MTBE	10	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
n-Butylbenzene	5	0.2 U	0.46 U	0.46 U	0.46 U	0.46 U
n-Propylbenzene	5	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U
Naphthalene	10	0.2 U	NA	NA	NA	NA
p-Isopropyltoluene	5	0.2 U	NA	NA	NA	NA
sec-Butylbenzene	5	0.2 U	0.38 U	0.38 U	0.38 U	0.38 U
tert-Butylbenzene	5	0.2 U	0.39 U	0.39 U	0.39 U	0.39 U
Tetrachloroethene	5	NA	0.39 U	0.39 U	0.39 U	0.39 U
Toluene	5	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
trans-1,2-Dichloroethene	5	NA	0.34 U	0.34 U	0.34 U	0.34 U
Trichloroethene	5	NA	0.45 U	0.45 U	0.45 U	0.45 U
Vinyl chloride	2	NA	0.43 U	0.43 U	0.43 U	0.43 U
Xylenes (total)	5	0.4 U	0.82 U	0.82 U	0.82 U	0.82 U
Total VOCs:		0	0	0	15.4	6

Notes:

- J - Estimated value
- U - Analyte was not detected at or above the reporting limit
- DUP - Duplicate sample
- NA - Not analyzed
- NYSDEC - New York State Department of Environmental Conservation
- AWQSGVs - Ambient Water Quality Standards and Guidance Values
- µg/L - µg/L -Micrograms per liter
- - No NYSDEC AWQSGV available
- Bold - Concentration exceeds NYSDEC AWQSGVs
- VOCs - Volatile Organic Compounds
- V - Qualifier added based on Data Usability Summary Report

Table 12. Revised Summary of Polychlorinated Biphenyls in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Analyte (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: Sample Date: Operable Unit:	MW-OU1-1 08/15/06 OU-1	MW-OU1-1 DUP 08/15/06 OU-1	MW-OU1-1 F 08/15/06 OU-1	MW-OU1-1 DUP F 08/15/06 OU-1	MW-OU1-2 08/15/06 OU-1	MW-OU1-2 F 08/16/06 OU-1	MW-OU1-3 08/15/06 OU-1	MW-OU1-3 F 08/16/06 OU-1
Aroclor-1016			0.076 U	0.076 U	0.076 U	0.076 U	0.076 U J V	0.076 U	0.076 U	0.076 U
Aroclor-1221			0.108 U	0.108 U	0.108 U	0.108 U	0.108 U J V	0.108 U	0.108 U	0.108 U
Aroclor-1232			0.044 U	0.044 U	0.044 U	0.044 U	0.044 U J V	0.044 U	0.044 U	0.044 U
Aroclor-1242			0.072 U	0.072 U	0.072 U	0.072 U	0.072 U J V	0.072 U	0.072 U	0.072 U
Aroclor-1248			0.036 U	0.036 U	0.036 U	0.036 U	0.036 U J V	0.036 U	0.036 U	0.036 U
Aroclor-1254			0.04 U	0.04 U	0.04 U	0.04 U	0.04 U J V	0.04 U	0.04 U	0.04 U
Aroclor-1260			0.036 U	0.036 U	0.036 U	0.036 U	0.036 U J V	0.036 U	0.036 U	0.036 U
Total PCBs:	0.09		0	0	0	0	0	0	0	0

Notes:

NYSDEC AWQSGV for Total PCBs (sum of the Aroclors) is 0.09 µg/L

* - Batch QC exceeds the upper or lower control limits

U - Compound was analyzed for but not detected

µg/L - Micrograms per liter

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water Quality Standards and Guidance Values

-- - No NYSDEC AWQSGV available

DUP - Duplicate sample

PCBs - Polychlorinated Biphenyls

F - Filtered

V - Qualifier added based on Data Usability Summary Report

Table 13. Revised Summary of Pesticides and Herbicides in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Analyte (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: Sample Date: Operable Unit:	MW-OU1-1 08/15/06 OU-1	MW-OU1-1 DUP\ 08/15/06 OU-1	MW-OU1-1 F 08/15/06 OU-1	MW-OU1-1 DUP F 08/15/06 OU-1	MW-OU1-2 08/15/06 OU-1
2,4,5 TP	--		R V	R V	R V	R V	R V
4,4'-DDD	0.3		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4,4'-DDE	0.2		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
4,4'-DDT	0.2		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Aldrin	ND		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
alpha-BHC	--		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
alpha-Chlordane	--		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
beta-BHC	--		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
delta-BHC	--		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	0.004		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Endosulfan I	--		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan II	--		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Endosulfan sulfate	--		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin	ND		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
gamma-BHC (Lindane)	--		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Heptachlor	0.04		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:

J - Estimated value

U - Compound was analyzed for but not detected

µg/L - Micrograms per liter

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water Quality Standards and Guidance Values

-- - No NYSDEC AWQSGV available

DUP - Duplicate sample

Bold - Concentration exceeds NYSDEC AWQSGVs

F - Filtered

R - Data rejected based on Data Usability Summary Report

V - Qualifier added based on Data Usability Summary Report

Table 13. Revised Summary of Pesticides and Herbicides in Groundwater Samples, Former Buffalo Terminal, ExxonMobil Corporation, Buffalo, New York

Analyte (Concentrations in µg/L)	NYSDEC	Sample Designation: MW-OU1-2 F MW-OU1-3 MW-OU1-3 F			
	AWQSGVs	Sample Date:	08/16/06	08/15/06	08/16/06
	(µg/L)	Operable Unit:	OU-1	OU-1	OU-1
2,4,5 TP	--		0.0192 U	0.02 U	R V
4,4'-DDD	0.3		0.04 U	0.04 U	0.04 U
4,4'-DDE	0.2		0.03 U	0.03 U	0.03 U
4,4'-DDT	0.2		0.03 U	0.03 U	0.03 U
Aldrin	ND		0.01 U	0.01 U	0.01 U
alpha-BHC	--		0.01 U	0.01 U	0.01 U
alpha-Chlordane	--		0.03 U	0.03 U	0.03 U
beta-BHC	--		0.03 U	0.03 U	0.03 U
delta-BHC	--		0.02 U	0.02 U	0.02 U
Dieldrin	0.004		0.01 U	0.01 U	0.01 U
Endosulfan I	--		0.02 U	0.02 U	0.02 U
Endosulfan II	--		0.03 U	0.03 U	0.03 U
Endosulfan sulfate	--		0.02 U	0.02 U	0.02 U
Endrin	ND		0.02 U	0.02 U	0.02 U
gamma-BHC (Lindane)	--		0.01 U	0.01 U	0.01 U
Heptachlor	0.04		0.02 U	0.02 U	0.02 U

Notes:

J - Estimated value

U - Compound was analyzed for but not detected

µg/L - Micrograms per liter

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water Quality Standards and Guidance Values

-- - No NYSDEC AWQSGV available

DUP - Duplicate sample

Bold - Concentration exceeds NYSDEC AWQSGVs

F - Filtered

R - Data rejected based on Data Usability Summary Report

V - Qualifier added based on Data Usability Summary Report

Table 14. Standards, Criteria and Guidance Values, ExxonMobil Oil Corporation, Buffalo, New York

Analyte	Proposed Backfill Criteria for Unrestricted Use ¹	Proposed Backfill Criteria for Restricted Commercial Use ²	Proposed Backfill Criteria for Restricted Industrial Use ³
Semivolatile Organic Compounds (Concentrations in ug/kg)			
1,2-Dichlorobenzene	1,100	1,100	1,100
1,3-Dichlorobenzene	2,400	2,400	2,400
1,4-Dichlorobenzene	1,800	1,800	1,800
2-Methylphenol	330	330	330
3&4-Methylphenol	330	330	330
Acenaphthene	20,000	98,000	98,000
Acenaphthylene	100,000	107,000	107,000
Anthracene	100,000	500,000	1,000,000
Benzo[a]anthracene	1,000	1,000	1,000
Benzo[a]pyrene	1,000	1,000	1,100
Benzo[b]fluoranthene	1,000	1,700	1,700
Benzo[g,h,i]perylene	100,000	500,000	1,000,000
Benzo[k]fluoranthene	800	1,700	1,700
Chrysene	1,000	1,000	1,000
Dibenzo[a,h]anthracene	330	560	1,100
Dibenzofuran	7,000	210,000	210,000
Fluoranthene	100,000	500,000	1,000,000
Fluorene	30,000	386,000	386,000
Hexachlorobenzene	330	3,200	3,200
Indeno[1,2,3-cd]pyrene	500	5,600	8,200
Naphthalene	12,000	12,000	12,000
Pentachlorophenol	800	800	800
Phenanthrene	100,000	500,000	1,000,000
Phenol	330	330	330
Pyrene	100,000	500,000	1,000,000
Metals (Concentrations in mg/kg)			
Arsenic	13	16	16
Barium	350	400	820
Beryllium	7.2	47	47
Cadmium	2.5	7.5	8
Copper	50	270	1,720
Cyanide	27	27	40
Hexavalent Chromium	1	19	19
Lead	63	450	450
Manganese	1,600	2,000	2,000
Mercury	0.18	0.7	0.7
Nickel	30	130	130
Selenium	3.9	4	4
Silver	2	8	8
Trivalent Chromium	30	1,500	6,800
Zinc	109	2,480	2,480

Table 14. Standards, Criteria and Guidance Values, ExxonMobil Oil Corporation, Buffalo, New York

Analyte	Proposed Backfill Criteria for Unrestricted Use ¹	Proposed Backfill Criteria for Restricted Commercial Use ²	Proposed Backfill Criteria for Restricted Industrial Use ³
Volatile Organic Compounds (concentrations in ug/kg)			
1,1,1-Trichloroethane	680	680	680
1,1-Dichloroethane	270	270	270
1,1-Dichloroethene	330	330	330
1,2,4-Trimethylbenzene	3,600	3,600	3,600
1,2-Dichloroethane	20	20	20
1,3,5-Trimethylbenzene	8,400	8,400	8,400
1,4-Dioxane	100	100	100
2-Butanone	120	120	120
Acetone	50	50	50
Benzene	60	60	60
Carbon Tetrachloride	760	760	760
Chlorobenzene	1,100	1,100	1,100
Chloroform	370	370	370
cis-1,2-Dichloroethene	250	250	250
Ethylbenzene	1,000	1,000	1,000
Methylene Chloride	50	50	50
MTBE	930	930	930
Naphthalene	12,000	12,000	12,000
n-Butylbenzene	12,000	12,000	12,000
n-Propylbenzene	3,900	3,900	3,900
sec-Butylbenzene	11,000	11,000	11,000
tert-Butylbenzene	5,900	5,900	5,900
Tetrachloroethene	1,300	1,300	1,300
Toluene	700	700	700
trans-1,2-Dichloroethene	190	190	190
Trichloroethene	470	47	47
Vinyl chloride	20	20	20
Xylenes (total)	260	1,600	1,600
Polychlorinated Biphenyls (Concentrations in ug/kg)			
Total PCBs	100	1,000	3,200
Pesticides and Herbicides (Concentrations in ug/kg)			
2,4,5-TP	3,800	3,800	3,800
4,4'-DDD	3.3	14,000	14,000
4,4'-DDE	3.3	17,000	17,000
4,4'-DDT	3.3	47,000	94,000
Aldrin	5	190	190
alpha-BHC	20	20	20
alpha-Chlordane	94	2,900	2,900
beta-BHC	36	90	90
delta-BHC	40	250	250
Dieldrin	5	100	100
Endosulfan I	2,400	102,000	102,000
Endosulfan II	2,400	102,000	102,000
Endosulfan sulfate	2,400	200,000	920,000

Table 14. Standards, Criteria and Guidance Values, ExxonMobil Oil Corporation, Buffalo, New York

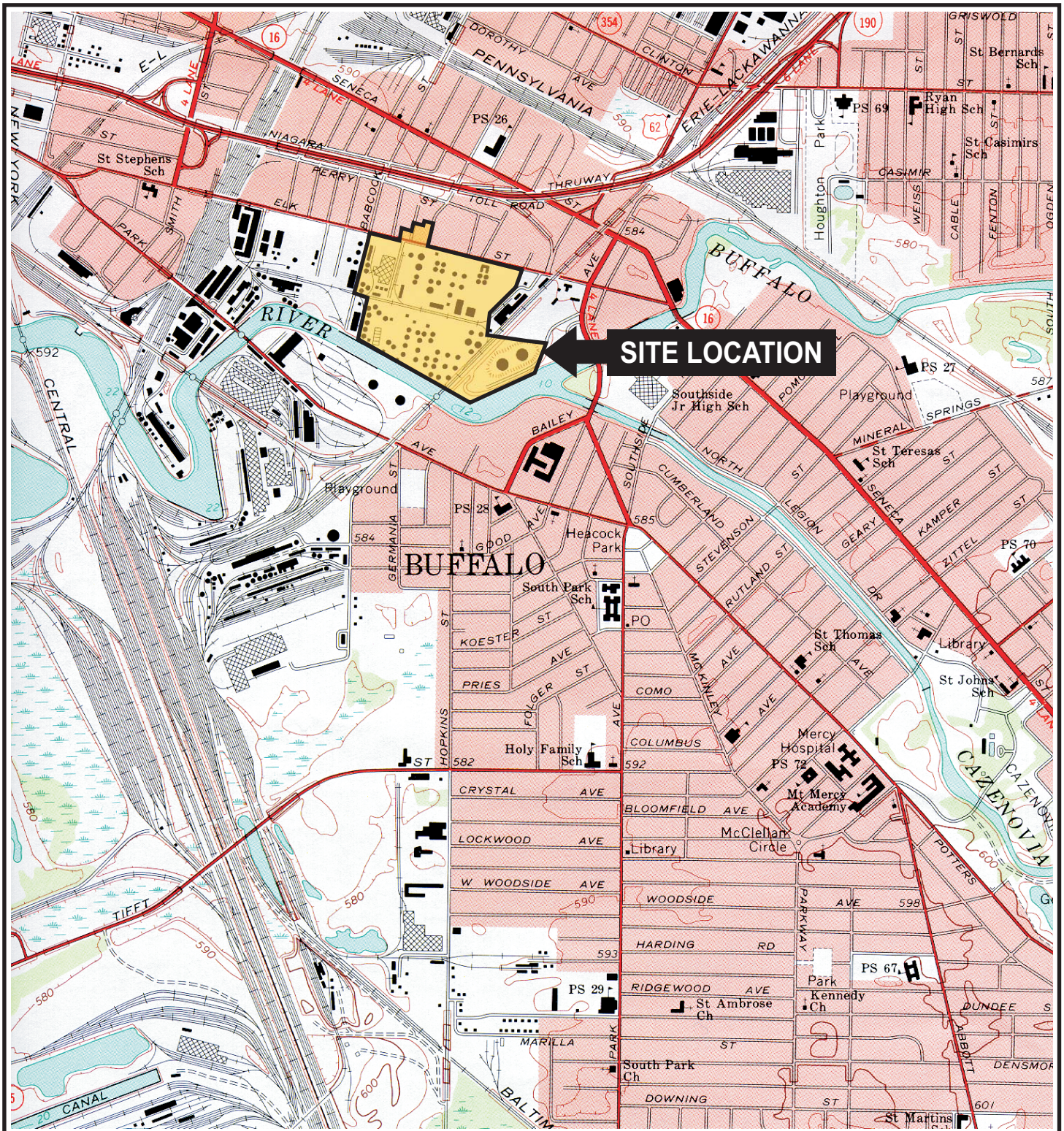
Analyte	Proposed Backfill Criteria for Unrestricted Use ¹	Proposed Backfill Criteria for Restricted Commercial Use ²	Proposed Backfill Criteria for Restricted Industrial Use ³
Endrin	14	60	60
gamma-BHC(Lindane)	100	100	100
Heptachlor	42	380	380

Notes:

¹ Criteria for backfill under the Unrestricted use scenario are the same as those presented in Table 8 for excavation of impacted soil.

² Criteria for backfill under the restricted commercial use scenario is the lower of the restricted commercial use criteria for human health presented in Table 8 for excavation of impacted material or the criteria for protection of groundwater presented in Table 375-6.8(b) of Draft Part 375.

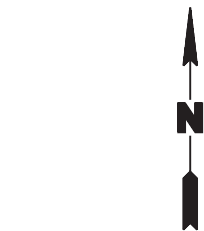
³ Criteria for backfill under the restricted industrial use scenario is the lower of the restricted industrial use criteria for human health presented in Table 8 for excavation of impacted material or the criteria for protection of groundwater presented in Table 375-6.8(b) of Draft Part 375.



QUADRANGLE LOCATION



SOURCE:
USGS; 1965, Buffalo SE, New York
7.5 Minute Topographic Quadrangle



0 2000'

Title:

SITE LOCATION MAP

FORMER BUFFALO TERMINAL

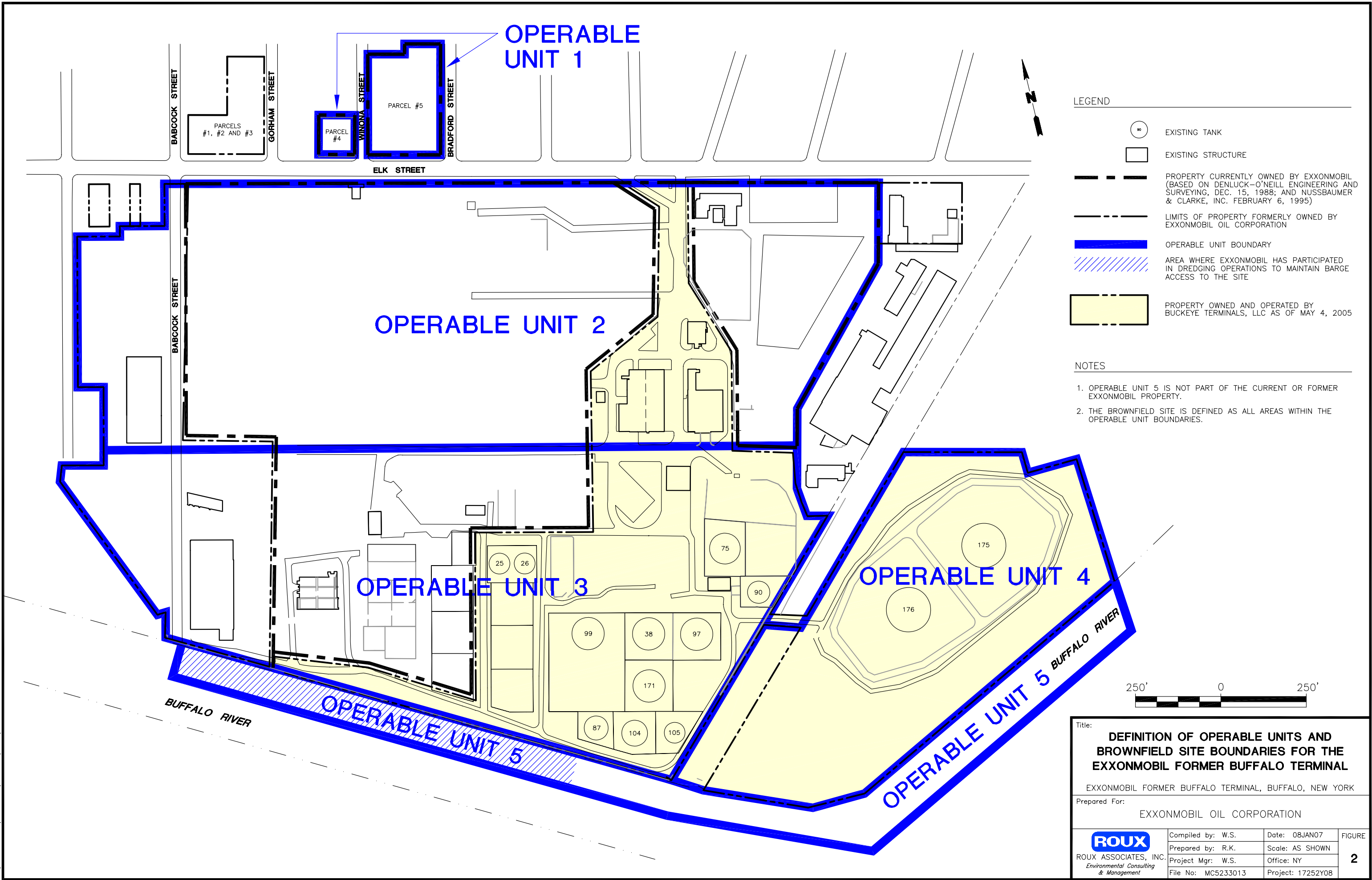
Prepared for:

EXXONMOBIL OIL CORPORATION

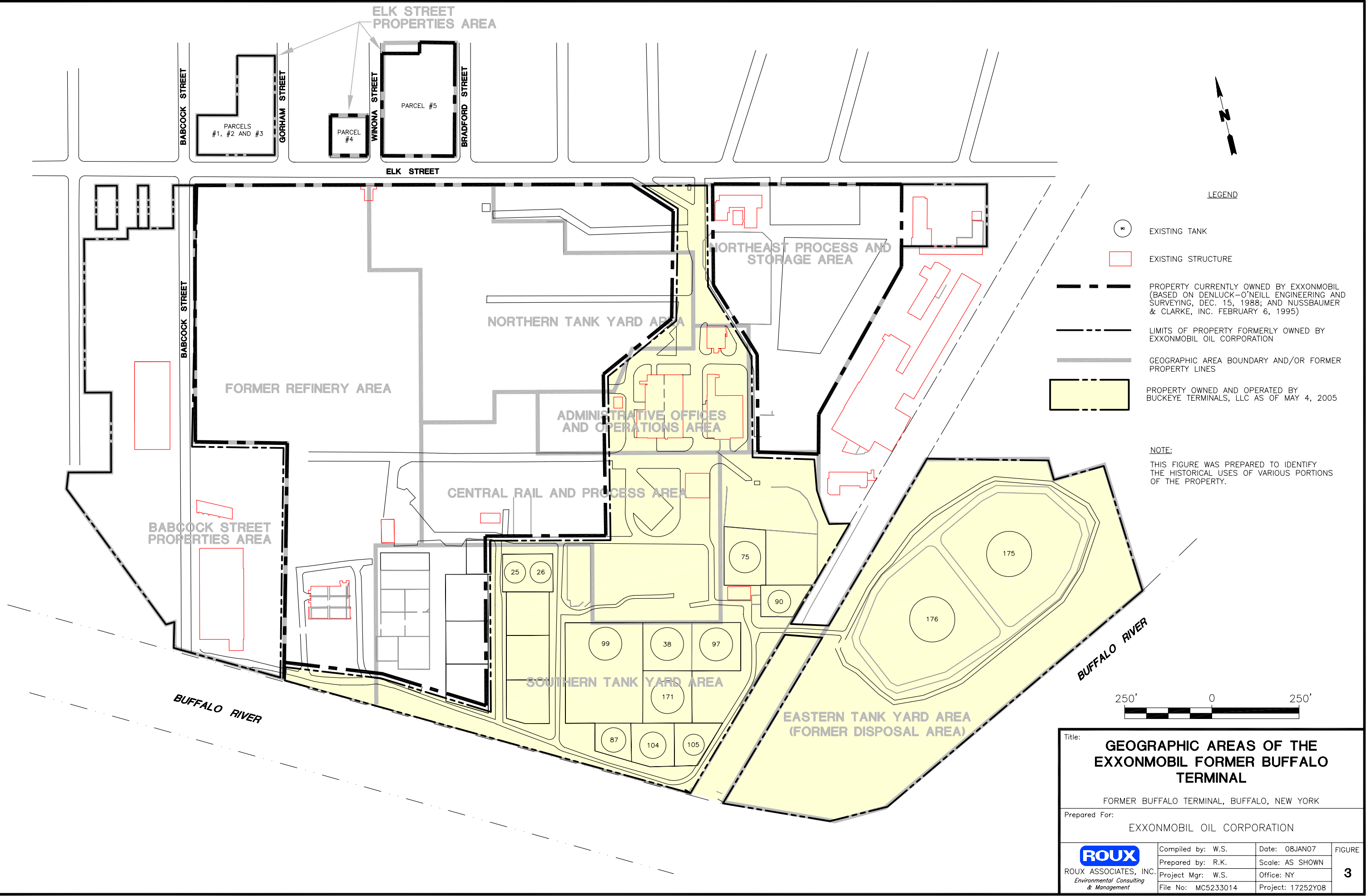
ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

Compiled by: W.S.	Date: 08JAN07	FIGURE 1
Prepared by: R.K.	Scale: AS SHOWN	
Project Mgr.: W.S.	Office: NY	
File No.: MC5233012.CDR	Project No.: 17252Y08	

N:\PROJECTS\MC172\MC52Y\330\MC5233013.DWG



N:\PROJECTS\MC172Y\MC52Y\330\MC5233014.DWG



LEGEND

- ESL-3 ●

LOCATION AND DESIGNATION OF SFI/
SFI COMPLETION SOIL BORING
- SS#1C/TWP-05
○ ○ ○ ○

LOCATION OF 1993 GTI SITE ASSESSMENT INVESTIGATION
COMPOSITE SOIL BORINGS SS#1 THROUGH SS#4
(ONE COMPOSITE SAMPLE FROM EACH
GROUP OF FIVE BORINGS, GROUPS ARE SHOWN
AS FOUR DIFFERENT COLORS; TWP INDICATES
TEMPORARY WELL POINT GROUNDWATER
SAMPLING LOCATION)
- ⊕

ESPA INVESTIGATION COMPLETION
SOIL SAMPLING LOCATION
- MW-OU1-1 ●

LOCATION AND DESIGNATION OF TEMPORARY
MONITORING WELL (SEE NOTE 5)
- SB-OU1-2 ✕

LOCATION AND DESIGNATION OF SHALLOW
SOIL SAMPLE (SEE NOTE 5)
- OU-1SS-1 ■

LOCATION AND DESIGNATION OF ADDITIONAL
1-2 FOOT DEPTH INTERVAL SOIL SAMPLES
COLLECTED IN NOVEMBER 2006
- ⊕ hyd

FIRE HYDRANT
- SFI

SITE FACILITY INVESTIGATION
- FORMER PROPERTY DIVISIONS
- EXXONMOBIL PROPERTY LINE
- x —

EXXONMOBIL FENCE LINE (INSTALLED JULY 2000)
- x —

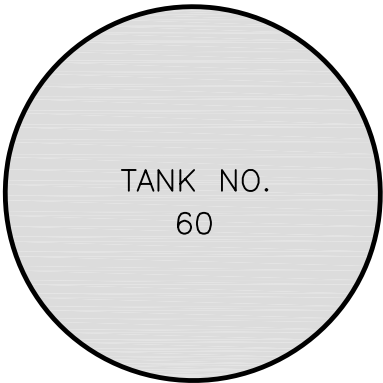
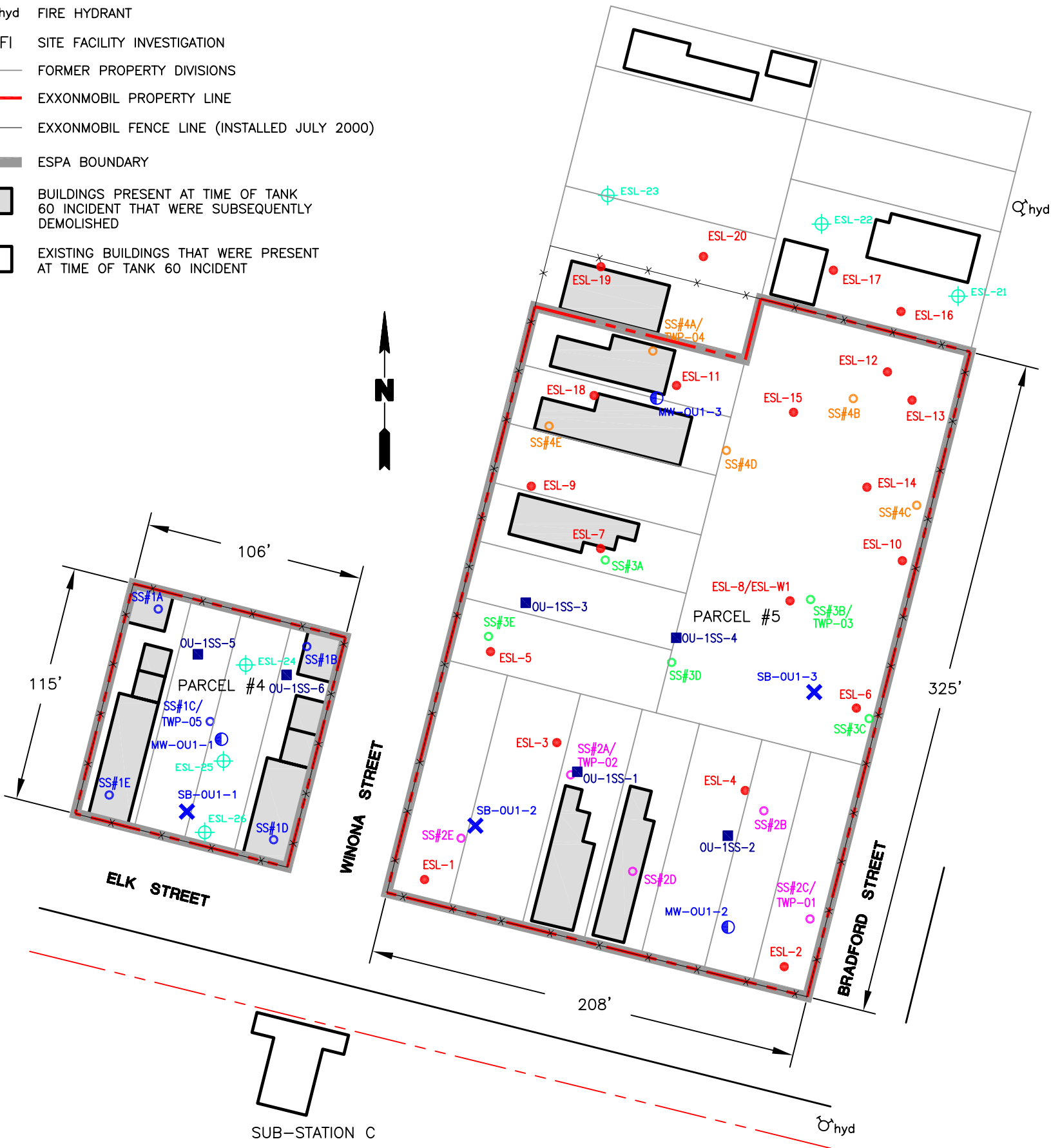
ESPA BOUNDARY
- ▭

BUILDINGS PRESENT AT TIME OF TANK
60 INCIDENT THAT WERE SUBSEQUENTLY
DEMOLISHED
- ▭

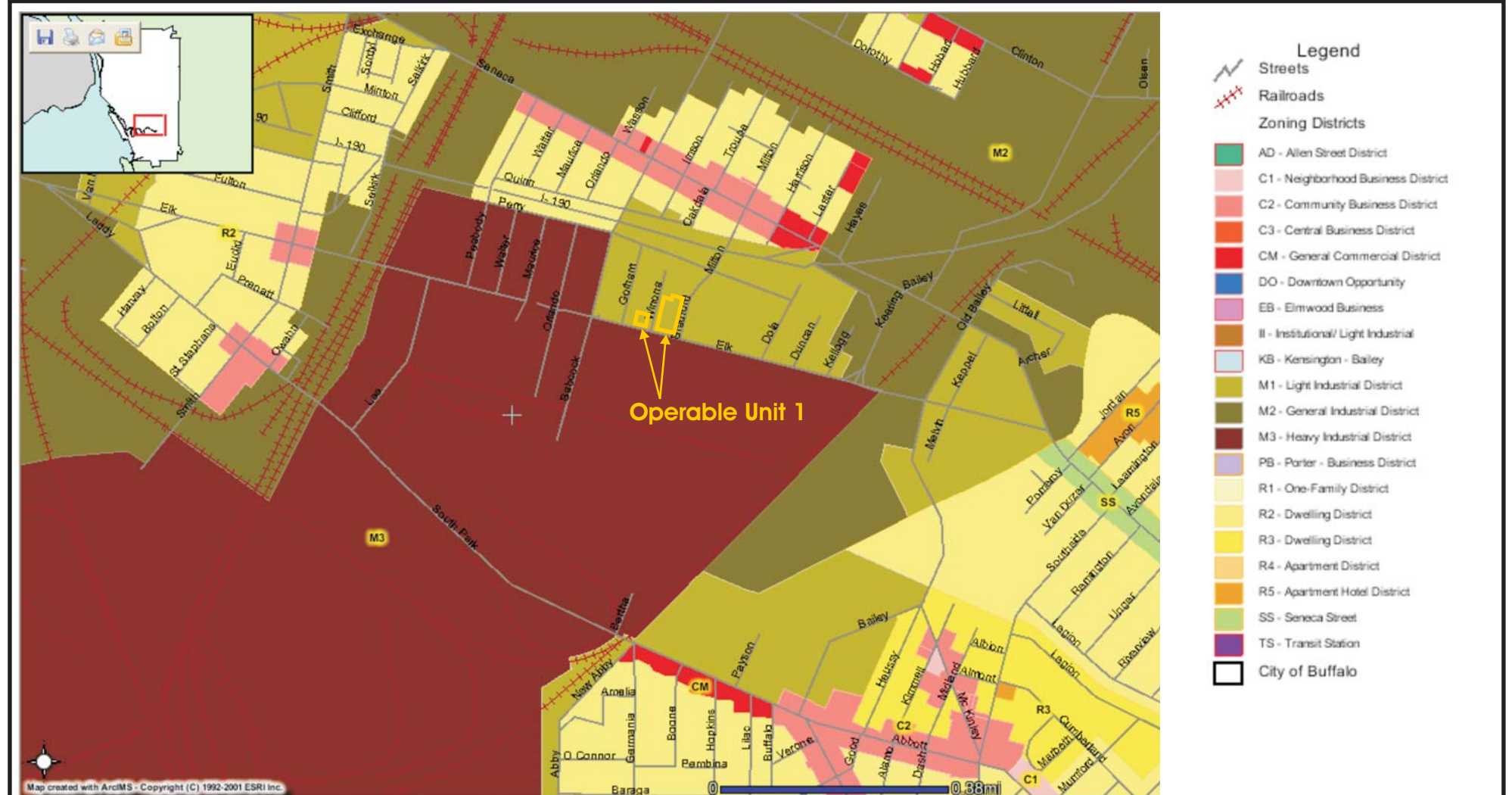
EXISTING BUILDINGS THAT WERE PRESENT
AT TIME OF TANK 60 INCIDENT

NOTES:

1. GROUNDWATER AT TEMPORARY WELL POINT TWP-01 WAS NOT SAMPLED IN DURING THE 1993 INVESTIGATION.
2. ESL-8/ESL-W1 WAS AN SFI SHALLOW SOIL BORING AND TEMPORARY GROUNDWATER SAMPLING LOCATION.
3. ESL-1 THROUGH ESL-12 WERE INSTALLED DURING THE 1998 SFI. ESL-13 THROUGH ESL-20 WERE INSTALLED DURING THE 1999 SFI COMPLETION. ESL-21 THROUGH ESL-26 WERE INSTALLED DURING THE ESPA INVESTIGATION COMPLETION, DECEMBER 14, 2001.
4. LOCATION OF FORMER BUILDINGS AND PROPERTY DIVISIONS ARE BASED ON SANBORN FIRE INSURANCE MAPS AND AERIAL PHOTOGRAPHS PRIOR TO 1976.
5. MW-OU1-1 THROUGH MW-OU1-3 AND SB-OU1-1 THROUGH SB-OU1-3 WERE INSTALLED AND SAMPLED IN AUGUST 2006.



Title: INVESTIGATION SAMPLE LOCATIONS IN OPERABLE UNIT 1			
FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK			
Prepared For: EXXONMOBIL OIL CORPORATION			
 ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: N.C.	Date: 27DEC06	FIGURE 4
	Prepared by: J.A.D.	Scale: AS SHOWN	
	Project Mgr: N.C.	Office: NY	
	File No: MC5233001	Project: 17252Y08	



Source:

<http://erie-gis.co.erie.ny.us/website/buffalony/Viewer.htm>

Title:

ZONING MAP

FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared for:

EXXONMOBIL OIL COMPANY

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

Compiled by: N.C.	Date: 08JAN07	FIGURE 5
Prepared by: R.K.	Scale: AS SHOWN	
Project Mgr.: N.C.	Office: NY	
File No.: MC5233015.CDR	Project No.: 17252Y08	

LEGEND

- ESL-3 ●

LOCATION AND DESIGNATION OF SFI/
SFI COMPLETION SOIL BORING
- SS#1C/TWP-05
○ ○ ○ ○

LOCATION OF 1993 GTI SITE ASSESSMENT INVESTIGATION
COMPOSITE SOIL BORINGS SS#1 THROUGH SS#4
(ONE COMPOSITE SAMPLE FROM EACH
GROUP OF FIVE BORINGS, GROUPS ARE SHOWN
AS FOUR DIFFERENT COLORS; TWP INDICATES
TEMPORARY WELL POINT GROUNDWATER
SAMPLING LOCATION)
- ⊕

ESPA INVESTIGATION COMPLETION
SOIL SAMPLING LOCATION
- MW-OU1-1 ●

LOCATION AND DESIGNATION OF TEMPORARY
MONITORING WELL (SEE NOTE 5)
- SB-OU1-2 ✕

LOCATION AND DESIGNATION OF SHALLOW
SOIL SAMPLE (SEE NOTE 5)
- OU-1SS-1 ■

LOCATION AND DESIGNATION OF ADDITIONAL
1-2 FOOT DEPTH INTERVAL SOIL SAMPLES
COLLECTED IN NOVEMBER 2006
- ⊕ hyd

FIRE HYDRANT
- SFI

SITE FACILITY INVESTIGATION
- FORMER PROPERTY DIVISIONS
- EXXONMOBIL PROPERTY LINE
- x x

EXXONMOBIL FENCE LINE (INSTALLED JULY 2000)
- ▬

ESPA BOUNDARY
- ▬

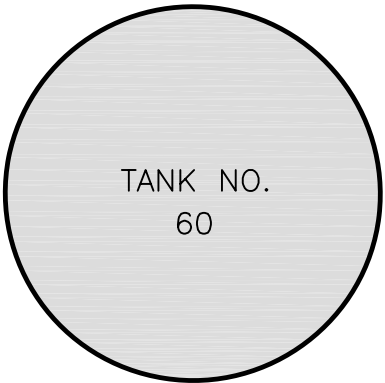
BUILDINGS PRESENT AT TIME OF TANK
60 INCIDENT THAT WERE SUBSEQUENTLY
DEMOLISHED
- ▬

EXISTING BUILDINGS THAT WERE PRESENT
AT TIME OF TANK 60 INCIDENT
- ▨

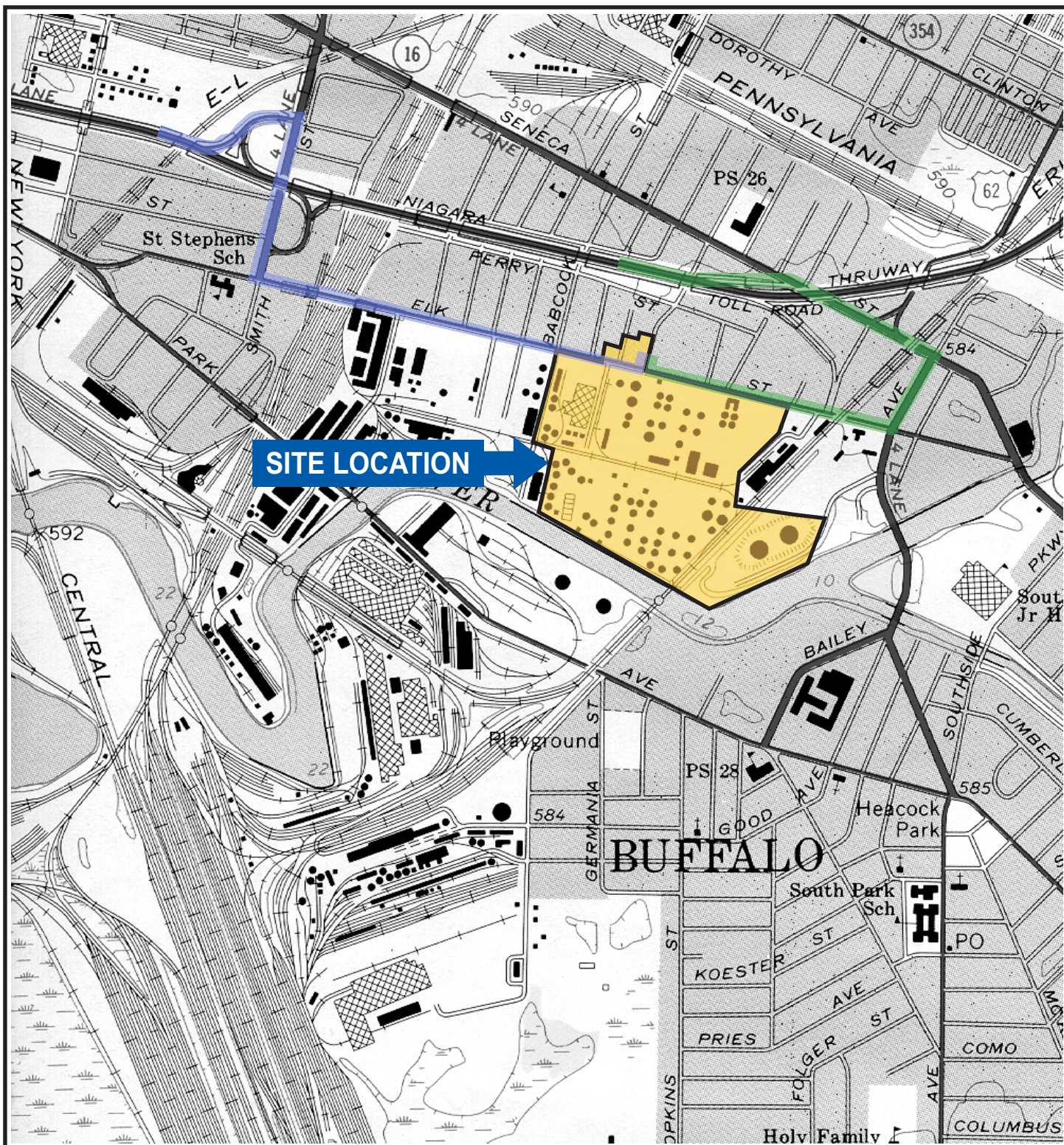
AERIAL EXTENT OF EXCAVATION FOR
REMEDIAL ALTERNATIVE 1 (SEE NOTE 6)

NOTES:

1. GROUNDWATER AT TEMPORARY WELL POINT TWP-01 WAS NOT SAMPLED IN DURING THE 1993 INVESTIGATION.
2. ESL-8/ESL-W1 WAS AN SFI SHALLOW SOIL BORING AND TEMPORARY GROUNDWATER SAMPLING LOCATION.
3. ESL-1 THROUGH ESL-12 WERE INSTALLED DURING THE 1998 SFI. ESL-13 THROUGH ESL-20 WERE INSTALLED DURING THE 1999 SFI COMPLETION. ESL-21 THROUGH ESL-26 WERE INSTALLED DURING THE ESPA INVESTIGATION COMPLETION, DECEMBER 14, 2001.
4. LOCATION OF FORMER BUILDINGS AND PROPERTY DIVISIONS ARE BASED ON SANBORN FIRE INSURANCE MAPS AND AERIAL PHOTOGRAPHS PRIOR TO 1976.
5. MW-OU1-1 THROUGH MW-OU1-3 AND SB-OU1-1 THROUGH SB-OU1-3 WERE INSTALLED AND SAMPLED IN AUGUST 2006.
6. REMEDIAL ALTERNATIVE 1 INCLUDES EXCAVATION OF THE ENTIRE AREAL EXTENT OF PARCEL NO. 4 TO TWO FEET BELOW GRADE AND THE ENTIRE AREAL EXTENT OF PARCEL NO. 5 TO AN AVERAGE OF THREE FEET BELOW GRADE.



Title: REMEDIAL ALTERNATIVE 1 TRACK 1 - UNRESTRICTED USE			
FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK			
Prepared For: EXXONMOBIL OIL CORPORATION			
 ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: N.C.	Date: 27DEC06	FIGURE 6
	Prepared by: J.A.D.	Scale: AS SHOWN	
	Project Mgr: N.C.	Office: NY	
	File No: MC5233003	Project: 17252Y08	



LEGEND

- Primary Route
- Secondary Route



0 2000'

Title:

TRUCK ROUTE MAP

FORMER BUFFALO TERMINAL

Prepared for:

EXXONMOBIL OIL CORPORATION

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

Compiled by: N.C..	Date: 08JAN07	FIGURE
Prepared by: R.K.	Scale: AS SHOWN	7
Project Mgr.: N.C.	Office: NY	
File No.: MC5233016.CDR	Project No.: 17252Y08	

LEGEND

- ESL-3 ●

LOCATION AND DESIGNATION OF SFI/
SFI COMPLETION SOIL BORING
- SS#1C/TWP-05
○ ○ ○ ○

LOCATION OF 1993 GTI SITE ASSESSMENT INVESTIGATION
COMPOSITE SOIL BORINGS SS#1 THROUGH SS#4
(ONE COMPOSITE SAMPLE FROM EACH
GROUP OF FIVE BORINGS, GROUPS ARE SHOWN
AS FOUR DIFFERENT COLORS; TWP INDICATES
TEMPORARY WELL POINT GROUNDWATER
SAMPLING LOCATION)
- ⊕

ESPA INVESTIGATION COMPLETION
SOIL SAMPLING LOCATION
- MW-OU1-1 ●

LOCATION AND DESIGNATION OF TEMPORARY
MONITORING WELL (SEE NOTE 5)
- SB-OU1-2 ✕

LOCATION AND DESIGNATION OF SHALLOW
SOIL SAMPLE (SEE NOTE 5)
- OU-1SS-1 ■

LOCATION AND DESIGNATION OF ADDITIONAL
1-2 FOOT DEPTH INTERVAL SOIL SAMPLES
COLLECTED IN NOVEMBER 2006
- ⊕ hyd

FIRE HYDRANT
- SFI

SITE FACILITY INVESTIGATION
- FORMER PROPERTY DIVISIONS
- EXXONMOBIL PROPERTY LINE
- ✕

EXXONMOBIL FENCE LINE (INSTALLED JULY 2000)
- x

ESPA BOUNDARY
- ▬

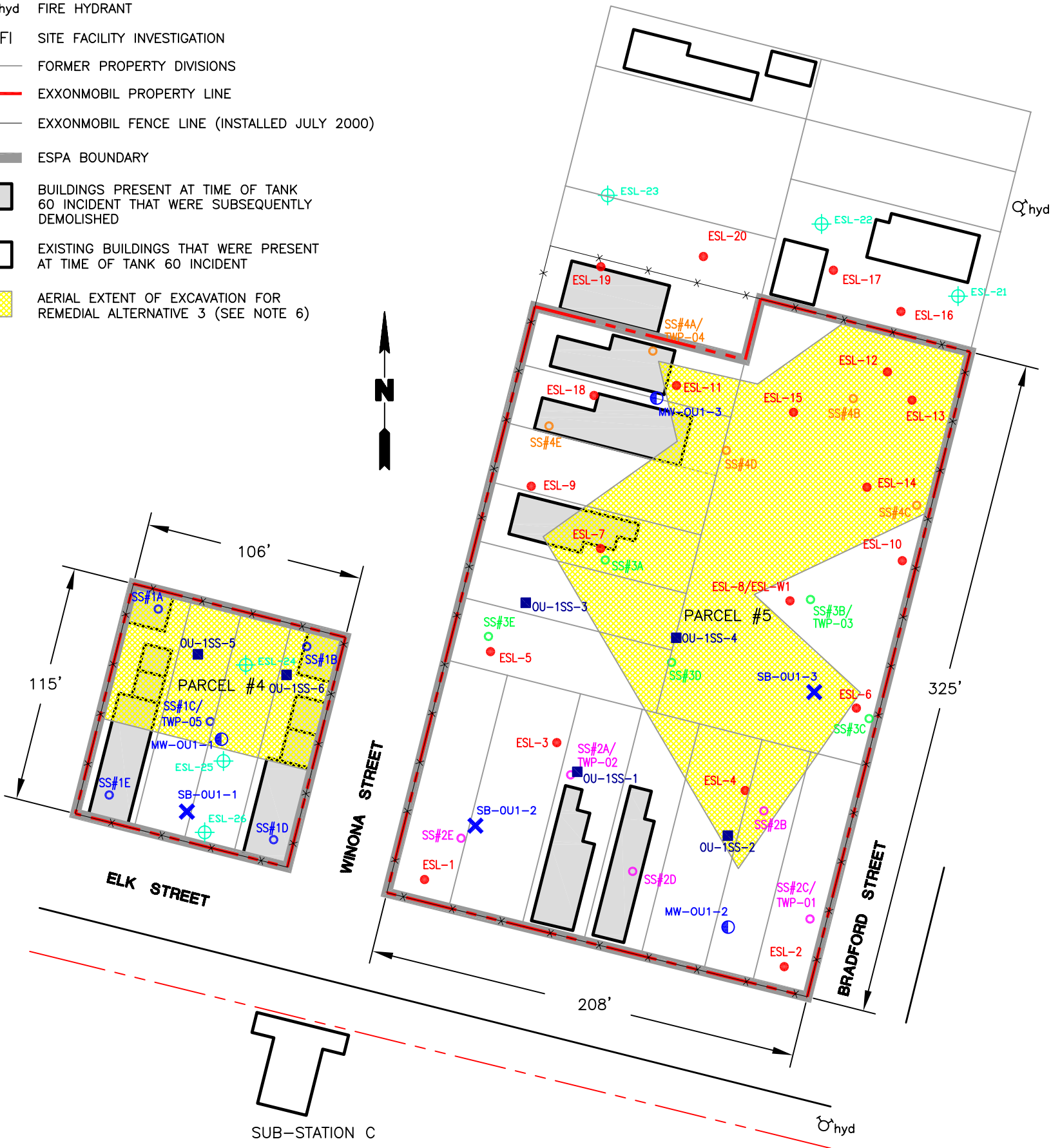
BUILDINGS PRESENT AT TIME OF TANK
60 INCIDENT THAT WERE SUBSEQUENTLY
DEMOLISHED
- ▭

EXISTING BUILDINGS THAT WERE PRESENT
AT TIME OF TANK 60 INCIDENT
- ▨

AERIAL EXTENT OF EXCAVATION FOR
REMEDIAL ALTERNATIVE 3 (SEE NOTE 6)

NOTES:

1. GROUNDWATER AT TEMPORARY WELL POINT TWP-01 WAS NOT SAMPLED IN DURING THE 1993 INVESTIGATION.
2. ESL-8/ESL-W1 WAS AN SFI SHALLOW SOIL BORING AND TEMPORARY GROUNDWATER SAMPLING LOCATION.
3. ESL-1 THROUGH ESL-12 WERE INSTALLED DURING THE 1998 SFI. ESL-13 THROUGH ESL-20 WERE INSTALLED DURING THE 1999 SFI COMPLETION. ESL-21 THROUGH ESL-26 WERE INSTALLED DURING THE ESPA INVESTIGATION COMPLETION, DECEMBER 14, 2001.
4. LOCATION OF FORMER BUILDINGS AND PROPERTY DIVISIONS ARE BASED ON SANBORN FIRE INSURANCE MAPS AND AERIAL PHOTOGRAPHS PRIOR TO 1976.
5. MW-OU1-1 THROUGH MW-OU1-3 AND SB-OU1-1 THROUGH SB-OU1-3 WERE INSTALLED AND SAMPLED IN AUGUST 2006.
6. REMEDIAL ALTERNATIVE 3 INCLUDES EXCAVATION OF THE HIGHLIGHTED AREAS TO A DEPTH OF ONE FOOT BELOW GRADE TO MEET PROPOSED RESTRICTED COMMERCIAL CRITERIA.



Title: REMEDIAL ALTERNATIVE 3 TRACK 4 - RESTRICTED COMMERCIAL USE FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK			
Prepared For: EXXONMOBIL OIL CORPORATION			
 ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i>	Compiled by: N.C.	Date: 27DEC06	FIGURE 8
	Prepared by: J.A.D.	Scale: AS SHOWN	
	Project Mgr: N.C.	Office: NY	
	File No: MC5233010	Project: 17252Y08	

LEGEND

- ESL-3 ●

LOCATION AND DESIGNATION OF SFI/
SFI COMPLETION SOIL BORING
- SS#1C/TWP-05
○ ○ ○ ○

LOCATION OF 1993 GTI SITE ASSESSMENT INVESTIGATION
COMPOSITE SOIL BORINGS SS#1 THROUGH SS#4
(ONE COMPOSITE SAMPLE FROM EACH
GROUP OF FIVE BORINGS, GROUPS ARE SHOWN
AS FOUR DIFFERENT COLORS; TWP INDICATES
TEMPORARY WELL POINT GROUNDWATER
SAMPLING LOCATION)
- ⊕

ESPA INVESTIGATION COMPLETION
SOIL SAMPLING LOCATION
- MW-OU1-1 ●

LOCATION AND DESIGNATION OF TEMPORARY
MONITORING WELL (SEE NOTE 5)
- SB-OU1-2 ✕

LOCATION AND DESIGNATION OF SHALLOW
SOIL SAMPLE (SEE NOTE 5)
- OU-1SS-1 ■

LOCATION AND DESIGNATION OF ADDITIONAL
1-2 FOOT DEPTH INTERVAL SOIL SAMPLES
COLLECTED IN NOVEMBER 2006
- ⊕ hyd

FIRE HYDRANT
- SFI

SITE FACILITY INVESTIGATION
- FORMER PROPERTY DIVISIONS
- EXXONMOBIL PROPERTY LINE
- ✕ ✕

EXXONMOBIL FENCE LINE (INSTALLED JULY 2000)
- ESPA BOUNDARY
- ▭

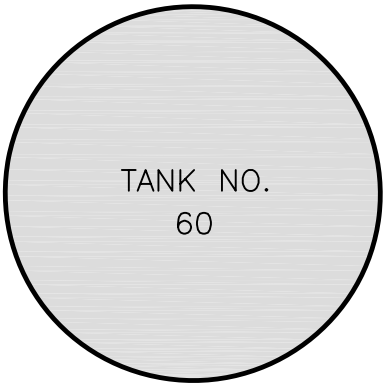
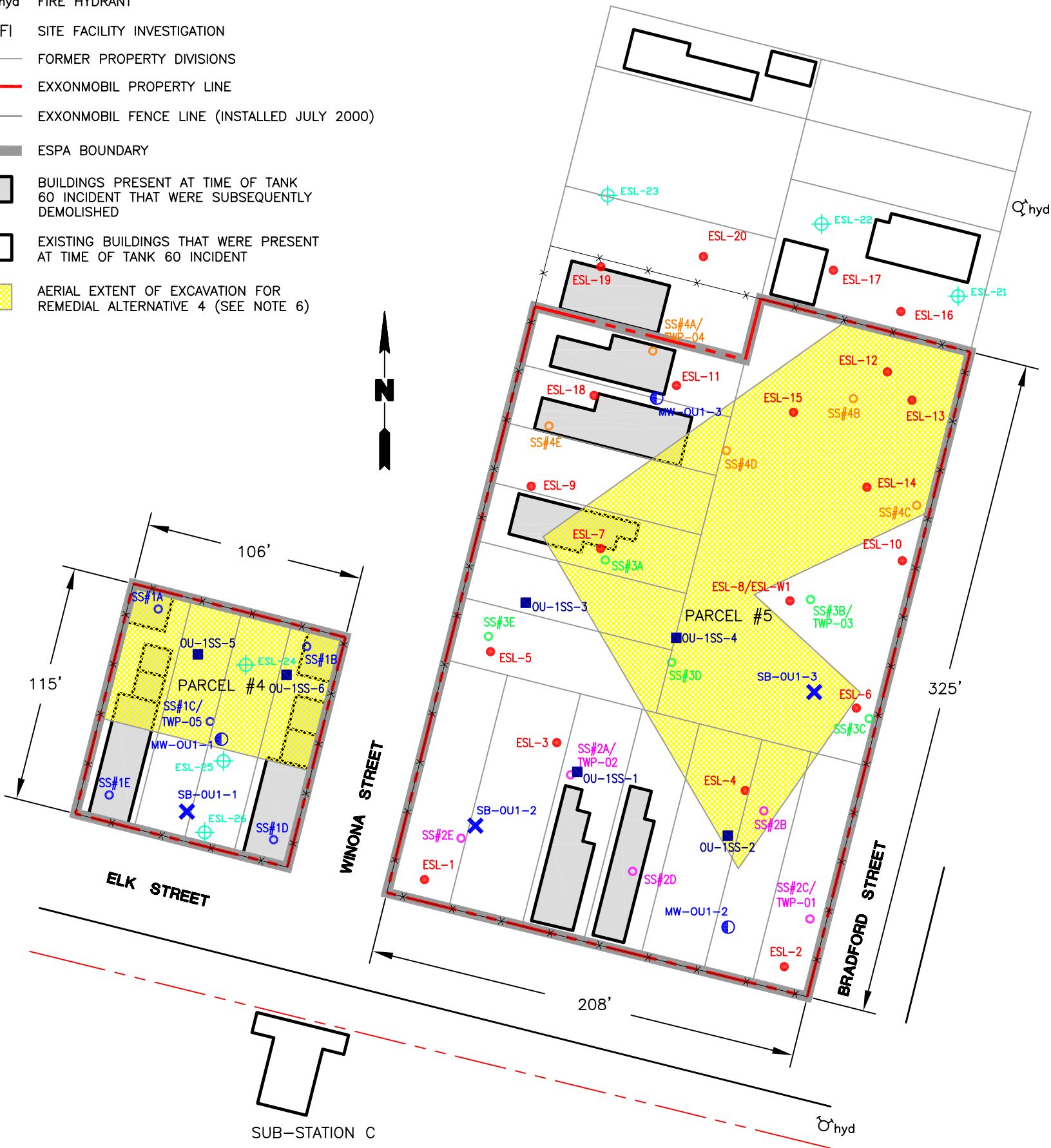
BUILDINGS PRESENT AT TIME OF TANK
60 INCIDENT THAT WERE SUBSEQUENTLY
DEMOLISHED
- ▭

EXISTING BUILDINGS THAT WERE PRESENT
AT TIME OF TANK 60 INCIDENT
- ▨

AERIAL EXTENT OF EXCAVATION FOR
REMEDIAL ALTERNATIVE 4 (SEE NOTE 6)

NOTES:

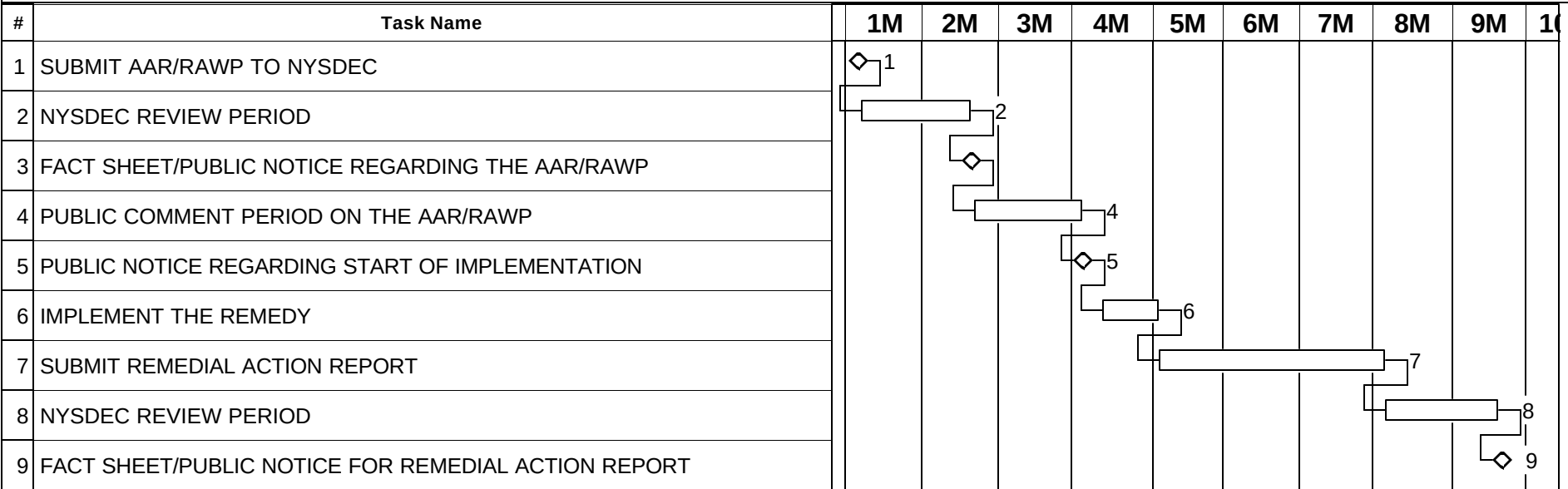
1. GROUNDWATER AT TEMPORARY WELL POINT TWP-01 WAS NOT SAMPLED IN DURING THE 1993 INVESTIGATION.
2. ESL-8/ESL-W1 WAS AN SFI SHALLOW SOIL BORING AND TEMPORARY GROUNDWATER SAMPLING LOCATION.
3. ESL-1 THROUGH ESL-12 WERE INSTALLED DURING THE 1998 SFI. ESL-13 THROUGH ESL-20 WERE INSTALLED DURING THE 1999 SFI COMPLETION. ESL-21 THROUGH ESL-26 WERE INSTALLED DURING THE ESPA INVESTIGATION COMPLETION, DECEMBER 14, 2001.
4. LOCATION OF FORMER BUILDINGS AND PROPERTY DIVISIONS ARE BASED ON SANBORN FIRE INSURANCE MAPS AND AERIAL PHOTOGRAPHS PRIOR TO 1976.
5. MW-OU1-1 THROUGH MW-OU1-3 AND SB-OU1-1 THROUGH SB-OU1-3 WERE INSTALLED AND SAMPLED IN AUGUST 2006.
6. REMEDIAL ALTERNATIVE 4 INCLUDES EXCAVATION OF THE HIGHLIGHTED AREAS TO A DEPTH OF ONE FOOT BELOW GRADE TO MEET PROPOSED RESTRICTED INDUSTRIAL CRITERIA.



Title: REMEDIAL ALTERNATIVE 4 TRACK 4 - RESTRICTED INDUSTRIAL USE			
FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK			
Prepared For: EXXONMOBIL OIL CORPORATION			
 ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i>	Compiled by: N.C.	Date: 27DEC06	FIGURE 9
	Prepared by: J.A.D.	Scale: AS SHOWN	
	Project Mgr: N.C.	Office: NY	
	File No: MC5233006	Project: 17252Y08	

**FIGURE 10. PROPOSED SCHEDULE FOR IMPLEMENTATION OF AAR/RAWP FOR OU-1
EXXONMOBIL OIL CORPORATION - FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK**

Revised 10/17/06



A 45 day NYSDEC review period is included after each submittal. A 45 day public comment period is included after approval of the AAR/RAWP by NYSDEC.

Task numbers provided in the left column of the chart and next to the schedule bars are provided to facilitate correlation of the schedule bars in the center of the chart with the corresponding tasks in the left hand column.

The schedule shown is based upon available information and should be considered preliminary. Schedules may need to be modified based upon the actual scope of work to be performed, changes in field conditions, availability of specialized contractor personnel, equipment or facilities, seasonal weather conditions, permitting and approval requirements, or other factors.

MC5231601.PSB

ROUX ASSOCIATES, INC.

APPENDIX A

Well Construction and Soil Boring Logs



Monitoring Well Log

ID NO. **MW-OU1-1**

Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: **Buffalo - Former XOM Terminal** SURFACE ELEV.: TOTAL DEPTH: **13 ft.**
ADDRESS: **OU-1** WATER DEPTH **~10.5 ft** CASING EL.:
JOB NO. **0900968** BOREHOLE DIA.: WELL DIA.: **2"**

Logged By: **Andy Janik** Drilling Method: **Hollow Stem Auger**
Dates Drilled: **8/9/06** Sampling Method: **Split Spoon**
Drilling Company: **SJB Services** Soil Class. System: **Modified Burmeister**
Drill Rig Type: **CME-55** Field Screening: **PID**

Depth (feet)	Sample Interval	Field Screen	Blow Counts	Rec- overy	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0	0-1.75'	ND			UPPER BACKFILL: Black, FILL material. Glass, brick fragments, sand, slag, and gravel.		
	1.75-5'	ND			SILTY CLAY: Light brown, silty/sandy CLAY	Duplicate soil sample taken	
						Hand cleared to 5 ftbg	
5	5-7'	ND	3-6 7-10	100	SILTY CLAY: Grey - brown, silty CLAY.		Bentonite
	7-9'	ND	15-16 12-18	60			
	9-11'	ND	4-5-5-5	100			#0 Morie Gravel pack
10	11-13'	ND	3-4-3-3	100	CLAY: Wet, grey, CLAY.		Screened from 8 to 13 ftbg. 0.010-slot screen.
15							

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Well installed as temporary monitoring point.

Symbol Key:

Observed Water Level

Lab Sample Location

MW-OU1-1

p. 1 of 1



Monitoring Well Log

ID NO. **MW-OU1-2**

Page 1 of 1

Groundwater and Environmental Services, Inc.

PROJECT: Buffalo - Former XOM Terminal	SURFACE ELEV.: _____	TOTAL DEPTH: 13 ft.
ADDRESS: OU-1	WATER DEPTH ~10.8ftbg	CASING EL.: _____
JOB NO. 0900968	BOREHOLE DIA.: _____	WELL DIA.: 2"

Logged By: Andy Janik	Drilling Method: Hollow Stem Auger
Dates Drilled: 8/9/06	Sampling Method: Split Spoon
Drilling Company: SJB Services	Soil Class. System: Modified Burmeister
Drill Rig Type: CME-55	Field Screening: PID

Depth (feet)	Sample Interval	Field Screen	Blow Counts	Rec- overy	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0	0-0.5'	ND			TOPSOIL: Organics - TOPSOIL		
	0.5-5'	ND			SILTY CLAY: Brown, silty CLAY.	Hand cleared to 5 ftbg	
5	5-7'	ND	6-9 12-11	100	SILTY CLAY: Grey - brown, silty CLAY.		Bentonite
	7-9'	ND	11-10 14-14	100			
	9-11'	ND	3-3-3-3	100			#0 Morie Gravel pack
10	11-13'	ND	2-3-3-4	65	CLAY: Wet, grey, CLAY.		Screened from 8 to 13 ftbg. 0.010-slot screen.
15							

Location:

Northing/Latitude:
Easting/Longitude:
Horizontal Datum:
Vertical Datum:

General Comments:

Well installed as temporary monitoring point.

Symbol Key:

Observed Water Level 
Lab Sample Location 

MW-OU1-2 p. 1 of 1



Monitoring Well Log

ID NO. **MW-OU1-3**

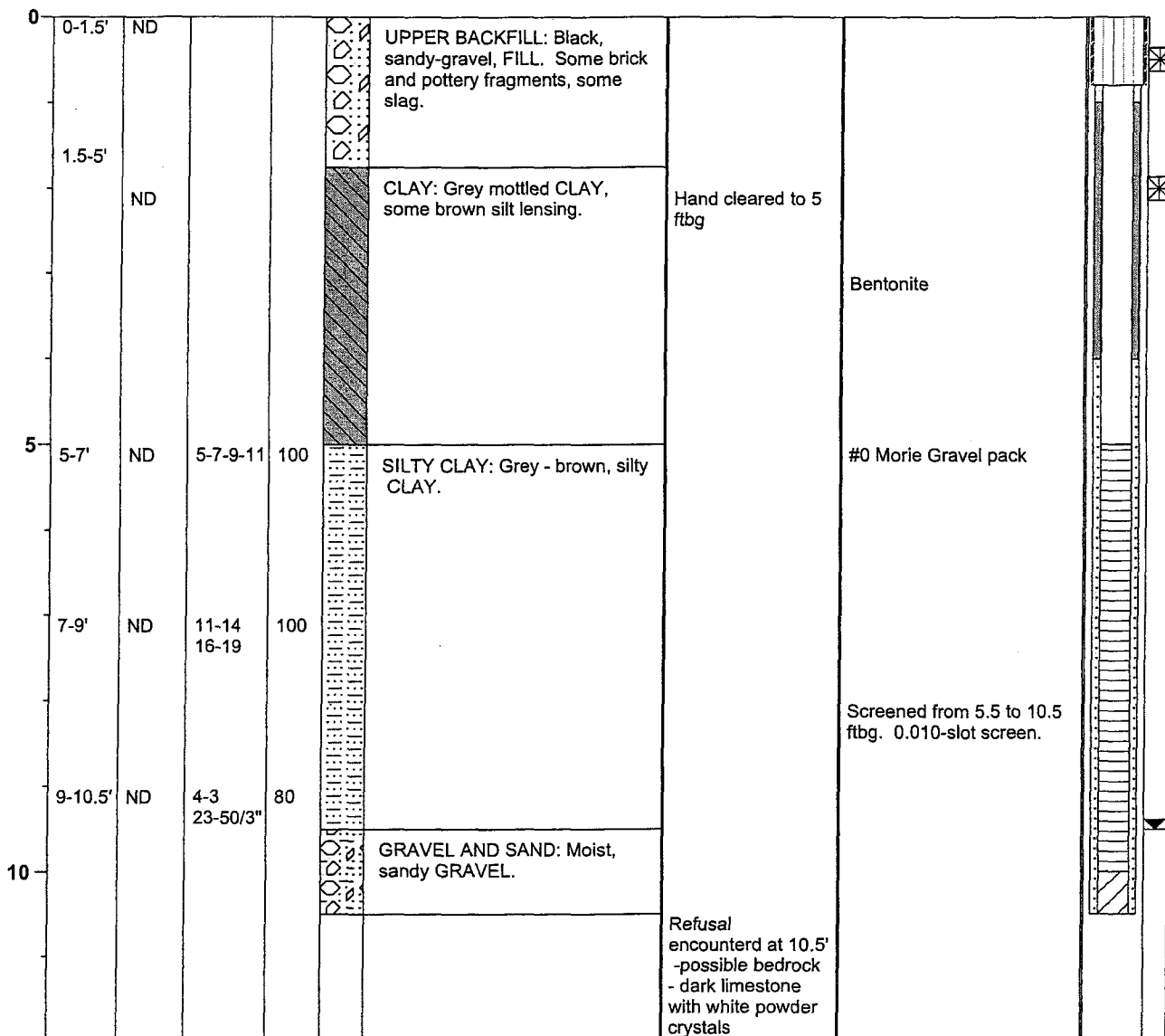
Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: Buffalo - Former XOM Terminal	SURFACE ELEV.: _____	TOTAL DEPTH: 10.5 ft
ADDRESS: OU-1	WATER DEPTH ~9.5ftbg	CASING EL.: _____
JOB NO. 0900968	BOREHOLE DIA.: _____	WELL DIA.: 2"

Logged By: Andy Janik	Drilling Method: Hollow Stem Auger
Dates Drilled: 8/9/06	Sampling Method: Split Spoon
Drilling Company: SJB Services	Soil Class. System: Modified Burmeister
Drill Rig Type: CME-55	Field Screening: PID

Depth (feet)	Sample Interval	Field Screen	Blow Counts	Rec- overy	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS

**Location:**

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Well installed as temporary monitoring point.

Symbol Key:

Observed Water Level

Lab Sample Location

MW-OU1-3

p. 1 of 1



Monitoring Well Log

ID NO. **SB-OU1-1**

Page 1 of 1

Groundwater and Environmental Services, Inc.

PROJECT: **Buffalo - Former XOM Terminal** SURFACE ELEV.: TOTAL DEPTH: **2 ft.**
ADDRESS: **OU-1** WATER DEPTH: CASING EL.:
JOB NO. **0900968** BOREHOLE DIA.: WELL DIA.:

Logged By: **Joseph Undercoffer**Drilling Method: **Hand Auger**Dates Drilled: **8/9/06**Sampling Method: **Hand Auger**

Drilling Company:

Soil Class. System: **Modified Burmeister**

Drill Rig Type:

Field Screening: **PID**

Depth (feet)	Sample Interval	Field Screen	Blow Counts	Rec- overy	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS

0	0-1'	0.0		100	TOPSOIL: Topsoil, organics, some gravel.		
	1-2'	0.0		60	SILTY CLAY: Brown, silty clay.		
						Hand augered to 2 ftbgs	

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:Symbol Key:Observed Water Level ☒Lab Sample Location ☒

SB-OU1-1

p. 1 of 1



Monitoring Well Log

ID NO. **SB-OU1-2**

Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: **Buffalo - Former XOM Terminal**

SURFACE ELEV.:

TOTAL DEPTH: **3 ft.**

ADDRESS: **OU-1**

WATER DEPTH

CASING EL.:

JOB NO. **0900968**

BOREHOLE DIA.:

WELL DIA.:

Logged By: **Joseph Undercoffer**

Drilling Method: **Hand Auger**

Dates Drilled: **8/9/06**

Sampling Method: **Hand Auger**

Drilling Company:

Soil Class. System: **Modified Burmeister**

Drill Rig Type:

Field Screening: **PID**

Depth (feet)	Sample Interval	Field Screen	Blow Counts	Rec- overy	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0	0-1'	0.0		100	TOPSOIL: Topsoil, organics, some gravel, black fill material.		
	1-2'	0.0		100	UPPER BACKFILL: Black fill material, some gravel, some silty clay.		
	2-3'	0.0		100	SILTY CLAY: Brown silty clay, trace black fill.	Hand augered to 3 ftbgs	

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Symbol Key:

Observed Water Level ▼

Lab Sample Location ☒

SB-OU1-2

p. 1 of 1



Monitoring Well Log

ID NO. **SB-OU1-3**

Page 1 of 1

Groundwater and Environmental Services, Inc.

PROJECT: **Buffalo - Former XOM Terminal**
ADDRESS: **OU-1**
JOB NO. **0900968**

SURFACE ELEV.:
WATER DEPTH
BOREHOLE DIA.:

TOTAL DEPTH: **4 ft.**
CASING EL.:
WELL DIA.:

Logged By: **Joseph Undercoffer**
Dates Drilled: **8/9/06**
Drilling Company:
Drill Rig Type:

Drilling Method: **Hand Auger**
Sampling Method: **Hand Auger**
Soil Class. System: **Modified Burmeister**
Field Screening: **PID**

Depth (feet)	Sample Interval	Field Screen	Blow Counts	Rec- overy	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0	0-1'	0.0		100	TOPSOIL: Topsoil, organics, some gravel.		
	1-2'	0.0		100	UPPER BACKFILL: Sandy fill material with brick fragments.		
	2-4'	0.0		100	SILTY CLAY: Brown silty clay.	Hand augered to 4 ftbgs	
5							

Location:

Northing/Latitude:
Easting/Longitude:
Horizontal Datum:
Vertical Datum:

General Comments:

Symbol Key:

Observed Water Level 
Lab Sample Location 

SB-OU1-3

p. 1 of 1

Groundwater and Environmental Services, Inc.

PROJECT: Buffalo - Former XOM Terminal
ADDRESS: 625 Elk Street, Buffalo, NY
JOB NO. 0900968

SURFACE ELEV.:
WATER DEPTH
BOREHOLE DIA.:

TOTAL DEPTH: 2 ft
CASING EL.:
WELL DIA.:

Logged By: **Andrew Janik**
 Dates Drilled: **11/16/20096**
 Drilling Company:
 Drill Rig Type:

Drilling Method: **Hand Auger**
Sampling Method: **Hand Auger**
Soil Class. System: **Modified Burmeister**
Field Screening: **PID**

Depth (feet)	Sample Interval	Rec- overy	Field Screen	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0						
	0-1'	100%	0.0	 TOPSOIL: Topsoil organics, gravel, some brown silt		
	1-2'	100%	0.0	 FILL: Debris, glass, gravel, some brown silt	Sample taken from 1-2' interval.	

Location:

Northing/Latitude:
Easting/Longitude:
Horizontal Datum:
Vertical Datum:

General Comments:

Symbol Key:

Apparent Water Level 

Lab Sample Location



Monitoring Well Log

ID NO. **OU-1 SS-1**

Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: **Buffalo - Former XOM Terminal** SURFACE ELEV.: TOTAL DEPTH: **2 ft**
ADDRESS: **625 Elk Street, Buffalo, NY** WATER DEPTH: CASING EL.:
JOB NO. **0900968** BOREHOLE DIA.: WELL DIA.:

Logged By: **Andrew Janik** Drilling Method: **Hand Auger**
Dates Drilled: **11/16/20096** Sampling Method: **Hand Auger**
Drilling Company: Soil Class. System: **Modified Burmeister**
Drill Rig Type: Field Screening: **PID**

Depth (feet)	Sample Interval	Rec- overy	Field Screen	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0				TOPSOIL: Topsoil, organics, silt		
0-1'	100%	0.0				
1-2'	100%	0.0		SILT: Brown Silt	Composite sample taken from 1-2' interval.	

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Symbol Key:

Apparent Water Level ▼

Lab Sample Location ☒

OU-1 SS-1

p. 1 of 1



Monitoring Well Log

ID NO. **OU-1 SS-2**

Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: **Buffalo - Former XOM Terminal** SURFACE ELEV.: TOTAL DEPTH: **2 ft**
ADDRESS: **625 Elk Street, Buffalo, NY** WATER DEPTH: CASING EL.:
JOB NO. **0900968** BOREHOLE DIA.: WELL DIA.:

Logged By: **Andrew Janik** Drilling Method: **Hand Auger**
Dates Drilled: **11/16/20096** Sampling Method: **Hand Auger**
Drilling Company: Soil Class. System: **Modified Burmeister**
Drill Rig Type: Field Screening: **PID**

Depth (feet)	Sample Interval	Rec- overy	Field Screen	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0						
0-1'	100%	0.0		TOPSOIL: Topsoil, organics, slag, ash		
1-2'	100%	0.0		FILL: Moist, ash, cinders Clay at 2'	Composite sample taken from 1-2' interval.	

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Symbol Key:

Apparent Water Level 

Lab Sample Location 

OU-1 SS-2

p. 1 of 1

PROJECT: Buffalo - Former XOM Terminal

SURFACE ELEV.:

TOTAL DEPTH: 2 ft

ADDRESS: 625 Elk Street, Buffalo, NY

WATER DEPTH

CASING EL.:

JOB NO. 0900968

BOREHOLE DIA.:

WELL DIA.:

Logged By: **Andrew Janik**

Drilling Method: **Hand Auger**

Dates Drilled: 11/16/20096

Sampling Method: **Hand Auger**

Drilling Company:

Soil Class. System: **Modified Burmeister**

Drill Rig Type:

Field Screening: **PID**

Depth (feet)	Sample Interval	Rec- overy	Field Screen	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0						
0-1'	100%	0.0		TOPSOIL: Topsoil, organics, black granular material, glass, wood, brick		
1-2'	100%	0.0		FILL: Black granular material, glass, wood, brick Silt at 2'	Sample taken from 1-2' interval.	

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Symbol Key:

Apparent Water Level

Lab Sample Location



Monitoring Well Log

ID NO. **OU-1 SS-4**

Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: **Buffalo - Former XOM Terminal** SURFACE ELEV.: TOTAL DEPTH: **2 ft**
ADDRESS: **625 Elk Street, Buffalo, NY** WATER DEPTH CASING EL.:
JOB NO. **0900968** BOREHOLE DIA.: WELL DIA.:

Logged By: **Andrew Janik** Drilling Method: **Hand Auger**
Dates Drilled: **11/16/2009** Sampling Method: **Hand Auger**
Drilling Company: Soil Class. System: **Modified Burmeister**
Drill Rig Type: Field Screening: **PID**

Depth (feet)	Sample Interval	Rec- overy	Field Screen	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS
0						
0-1'	100%	0.0		TOPSOIL: Topsoil, organics, brick/concrete, moist, some silt		
1-2'	100%	0.0		SILT: Moist brown silt	Sample taken from 1-2' interval. Duplicate sample, Matrix Spike sample and Matrix Spike Duplicate sample taken from this boring location.	

Location:

Northing/Latitude:

Easting/Longitude:

Horizontal Datum:

Vertical Datum:

General Comments:

Symbol Key:

Apparent Water Level

Lab Sample Location

OU-1 SS-4

p. 1 of 1



Monitoring Well Log

ID NO. **OU-1 SS-5**

Groundwater and Environmental Services, Inc.

Page 1 of 1

PROJECT: **Buffalo - Former XOM Terminal** SURFACE ELEV.: TOTAL DEPTH: **2 ft**
ADDRESS: **625 Elk Street, Buffalo, NY** WATER DEPTH CASING EL.:
JOB NO. **0900968** BOREHOLE DIA.: WELL DIA.:

Logged By: **Andrew Janik** Drilling Method: **Hand Auger**
Dates Drilled: **11/16/2009** Sampling Method: **Hand Auger**
Drilling Company: Soil Class. System: **Modified Burmeister**
Drill Rig Type: Field Screening: **PID**

Depth (feet)	Sample Interval	Rec- overy	Field Screen	SAMPLE LITHOLOGY	Comments	COMPLETION DETAILS

0
0-1' 100% 0.0
TOPSOIL: Topsoil organics, gravel, slag, black granulated material

1-2' 100% 0.0
FILL: Ash, moist, glass, black granulated material

Sample taken from 1-2' interval.

Location:

Northing/Latitude:
Easting/Longitude:
Horizontal Datum:
Vertical Datum:

General Comments:

Symbol Key:

Apparent Water Level ▼
Lab Sample Location ☒

OU-1 SS-5

p. 1 of 1

APPENDIX B

Data Usability Summary Report

Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, N. Y. 12853

Phone 518-251-4429

Facsimile 518-251-4428

October 17, 2006

Noelle Clarke
Roux Associates
209 Shafter St.
Islandia, NY 11749

RE: Data Usability Summary Report for the Former Buffalo Terminal ExxonMobil site # 915201
TestAmerica SDG Nos. NHP1370, NPH1419, and NPH2199

Dear Ms. Clarke:

Review has been completed for the data packages generated by TestAmerica that pertain to samples collected 8/06/06 through 8/16/06 at the ExxonMobil Former Buffalo Terminal site. Fifteen soil and two aqueous samples (including a field duplicate for each matrix) were processed for the NYSDEC Part 375-5 parameter list organics and inorganics (volatiles, semivolatiles, pesticides, PCBs, silvex, metals, hexavalent chromium, and trivalent chromium). The samples were also processed for total cyanide, and filtered fractions of the aqueous samples were also analyzed for the metals analytes. Field and trip blanks were also processed. Laboratory methodologies utilized are those of the USEPA SW846.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the QC summary results have been reviewed for application of validation qualifiers, with guidance from the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, and with consideration for the requirements of the project QAPP. The following items were reviewed:

- * Laboratory Narrative Discussion
- * Custody Documentation
- * Holding Times
- * Surrogate and Internal Standard Recoveries
- * Matrix Spike Recoveries/Duplicate Correlations
- * Field Duplicate Correlation
- * Preparation/Calibration Blanks
- * Control Spike/Laboratory Control Samples
- * Instrumental Tunes
- * Calibration/CRI/CRA Standards
- * ICP Serial Dilution Correlations
- * Instrument IDLs
- * Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, almost all sample results are usable as reported, or usable with minor edit or qualification due to typical processing or matrix effects. The exceptions are that there are no usable results for silvex in either fraction of one aqueous samples and its duplicate, in the total fraction of another sample, and in the filtered fraction of a third due to processing. Some low level detections are considered external contamination or a result of matrix interference.

Red-ink qualified/edited copies of laboratory sample analytical reports, edited to reflect the sample results with the qualifications and edits discussed in this narrative, are included in this submission. Also attached are data qualifier definitions and laboratory case narratives.

The following text discusses quality issues of concern.

General

Blind field duplicate evaluation was performed for soil sample MW-OU1-1(1-2) and aqueous sample MW-OU1-1 (both Total and Filtered). All correlations were good, with the exception of those for several elements in the soil whose concentrations varied more than twofold. Values for lead and zinc vary by enough (more than 100%RPD) that those two results are qualified as estimated in the parent sample and its duplicate.

Due to presence in the associated field blanks, the following analytes are considered external contamination and are edited to nondetection at either the CRDL, or the originally reported concentration, whichever is greater:

- Cyanide and zinc in all aqueous samples
- Beryllium in all aqueous samples except MW-OU1-2 Filtrate and MW-OU-3 Filtrate

Volatile Analyses by EPA 8260B

The detection of benzene in MW-OU1-1(0-1) is qualified as tentative in identification and estimated in value ("NJ") due to interferences in the mass spectrum.

The surrogate standard d8-toluene recovery of SB-OU1-3(0-1) was elevated by one percentage point. Therefore the results for detected compounds in that sample are qualified as estimated, and may have a marginally high bias.

Calibrations standards show acceptable responses, with the following exceptions, results for which are qualified as estimated in the indicated samples due to low response factors:

- Acetone, 2-butanone, and 1,4-dioxane in soil samples
- 2-butanone (RRF 0.030) in the aqueous samples

Matrix spikes of MW-OU1-2(0-1), SB-OU1-1(0-1), and MW-OU1-1 produced acceptable accuracy and precision.

Holding times were met and instrumental tunes were acceptable. Internal standard responses are within required limits. Some of the blanks show low level contamination of analytes either not present in the associated samples are present at levels well above those of the associated blank. No qualification is indicated.

There is no documentation in the data package as to the sample/standard volumes being purged.

Semivolatile Analyses by EPA 8270C

Holding times, surrogate recoveries, and instrumental tunes were acceptable. Internal standard responses are within required limits. Calibrations standards showed acceptable responses. Blanks show no contamination.

Matrix spikes of SBOU1-1(1-2), SB-OU1-1(1-2), and MW-OU1-1 (both Total and Filtered) produced acceptable accuracy and precision.

Pesticide, Silvex and PCB Analyses by EPA 8081A, EPA 8082, and EPA8151

There are no usable results ("R", rejected, qualifier) for silvex in the total or filtered fractions of the samples MW-OU1-1 and DUP-1, and the silvex results are also rejected in the total fraction of MW-OU1-2. There are no usable silvex results in the filtered fractions of MW-OU1-3, FB-1, and FB-2, but the total fractions of those samples were acceptable and show no silvex, so the loss of those three data points is of less importance. These samples exhibit no recovery of the surrogate standard, which is most likely a lab processing error, as the field blank failures dispute the idea of matrix being the cause. The associated preparation blank shows low noncompliant low surrogate recoveries as well.

The following pesticide detections show poor dual column quantitative correlation (indicating matrix interference and potential false positives). Based upon the percent difference (%D) in dual column quantitative correlation, those results are qualified either as estimated or are edited to non-detection at either the CRDL or originally reported concentration (whichever is greater):

- 4,4-DDD in MW-OU1-1(0-1) edited to non-detection
- 4,4-DDT in MW-OU1-1(0-1) qualified as estimated
- beta-BHC in SB-OU1-3(0-1) edited to non-detection

Pesticide surrogate standard DCB recoveries in MW-OU1-1(0-1) were elevated on both columns. Detected results for the pesticides in that sample are therefore qualified as estimated, with a high bias.

PCB surrogate standard TCX recoveries of SB-OU1-2(1-2), SB-OU1-2(3), SB-OU1-3(4), and MW-OU1-2 Filtered were low on both columns. Results for the Aroclor mixtures in those samples are therefore qualified as estimated, with low bias.

The herbicide surrogate standard recoveries were low in MW-OU1-2(0-1); the result for silvex in that sample is qualified as estimated, with a possible low bias

Pesticide matrix spikes of SB-OU1-1(1-2) and MW-OU1-1 (Total and Filtered), and the Aroclor 1242 matrix spikes of MW-OU1-2(1-2), SB-OU1-1(0-1), and MW-OU1-1 (Total and Filtered) show recoveries and correlations within recommended limits.

Matrix spikes of silvex in MW-OU1-3(0-1) and SB-OU1-1(0-1) produced acceptable accuracy and precision. No aqueous matrix spikes for silvex were processed.

The pesticide calibration standards processed 8/14/06 have outlying responses on both columns for all analytes except one. Some vary significantly from the required 15%D limit. Therefore, pesticide results for SB-OU1-1(0-1) and MW-OU1-1(1-2) are qualified as estimated.

The analysis for silvex in SB-OU1-3(0-1) was performed at dilution due to matrix interferences. This results in elevated reporting limits.

Metals by 6010B/7471

The matrix spike and duplicate evaluations of SB-OU1-1(0-1) and MW-OU1-1 (both Total and Filtered) show acceptable accuracy and precision, with the exception of slightly elevated recoveries (126%) for silver in the filtrate. Associated silver results are already estimated due to concentrations below the CRDL, and no significant effect on the data is indicated.

A selenium calibration blank of 8/22/06 shows a non-compliant detection above CRDL. Therefore results for that element in SB-OU1-2(1-2), SB-OU1-3(1-2), and MW-OU1-3(0-1) are considered external contamination and are edited to reflect non-detection at the reported concentrations. This should have been discussed in the case narrative.

The ICP serial dilutions of soil DUP-1 shows elevated correlations (16%D to 32%D) for chromium, copper, and zinc. Detected results for those elements in the soil samples are qualified as estimated.

The aqueous serial dilution was performed on the total and filtered fractions of the field blank, and are therefore not useful for evaluating matrix and are not useful due to the low concentrations. A field sample should have been selected for that evaluation.

The following analytes showed higher concentrations in the filtered than the total fractions. Results for the stated analytes in both fractions of the given sample are qualified as estimated:

MW-OU1-1	barium
MW-OU1-3	arsenic
DUP-1	manganese and nickel
FB-1	cyanide

Wet Chemistry Analyses

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All were acceptable unless noted below.

Matrix spike recovery and duplicate correlation evaluations were performed for cyanide on SB-OU1-2(3), MW-OU1-3(0-1), SB-OU1-1(0-1), MW-OU1-1 (Total and Filtered), and for hexavalent chromium on SB-OU1-1(0-1), and MW-OU1-1 (Total and Filtered), and show acceptable results.

One cyanide LCS produced an elevated recovery. The associated samples show no detection and are therefore not affected.

Trivalent chromium results in soil samples are qualified as estimated, as they are derived from total chromium values that are qualified as estimated.

Data Completeness

Items discussed in this section reflect omissions in data deliverables. However, none of them prohibits validation of the data.

Zinc results were not present on some of the aqueous sample analytical reports (attached with qualifiers). They were present on the Forms 1 within the data package, and those results have been entered onto the attachment.

Laboratory case narratives are not comprehensive in discussion of outlying QC parameters, and one of them does not specify which analytical fraction has the stated outliers. Some of the narratives discuss outliers affecting compounds not required for this project. The narratives do not include the "verbatim" statement required of the NYSDEC ASP deliverables.

The NYSDEC ASP sample identification and analysis summary forms were not included in the data packages.

The example calculations required of the deliverables were not provided. Entries for units on some of the pesticide standard QC summary forms are not correct, and the information provided there is not that defined by the deliverables. Therefore derivation of reported pesticide results is not immediately obvious; however, the algorithms leading to reported results have been validated.

Pesticide Forms 10A for detected analytes in the field samples were not provided.

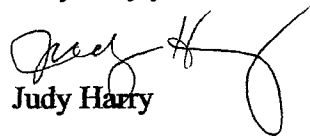
Results for metals and volatiles were not flagged with the laboratory qualifiers that indicate outlying QC parameters or associated blank detection.

One of the custodies associated with the aqueous samples does not include the laboratory receive date and signature. The custody pertains only to a matrix spike, and the integrity of the field samples' custody is not affected.

Edits to sample IDs in the raw data should be dated and initialed.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,


Judy Harry

VALIDATION QUALIFIER DEFINITIONS

DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

- U** - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ** - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

LABORATORY SAMPLE IDs AND CASE NARRATIVES

September 22, 2006

Client: Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn: Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Nbr: Exxon 3-1010
P/O Nbr: 4507032947
Date Received: 08/10/06

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
SB-OU1-2(3')	NPH1370-01	08/09/06 11:00
SB-OU1-2(1'-2')	NPH1370-02	08/09/06 10:45
SB-OU1-3(1'-2')	NPH1370-03	08/09/06 14:00
SB-OU1-2(0-1')	NPH1370-04	08/09/06 10:10
SB-OU1-3(4')	NPH1370-05	08/09/06 14:10
MW-OU1-2(1'-2')	NPH1370-06	08/09/06 10:25
MW-OU1-3(1'-2')	NPH1370-07	08/09/06 09:45
MW-OU1-3(0-1')	NPH1370-08	08/09/06 08:45
MW-OU1-2(0-1')	NPH1370-09	08/09/06 10:15
Trip Blank	NPH1370-10	08/09/06 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

Additional Laboratory Comments:

Per enclosed Chain of Custody, "samples were properly preserved and received in good condition on 8/10/06. Analyses were extracted and performed within method required holding times following Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)". All QC was within laboratory acceptable QC limit except for the QC batch listed below. Initial and Continuing Calibration requirements were met for all analysis except for Herbicides. Package was completed as a "Level IV" with 'ASCII' electronic data deliverables.

Please note for QC batch 6082459 "Semi-Volatiles": The % recovery for N-Nitrosodi-n-propylamine in both the matrix spike/matrix spike duplicate and LCS were outside laboratory acceptable QC limit biased high. This compound was not detected in the samples for this QC batch, therefore no impact on data results.

Please note for QC batch 6082560 "Pesticides": The % recovery for TCMX in SB-OUI-3 (1'-2') on column I was outside laboratory acceptable QC limit biased low due to matrix interference. The %recovery for DCB in SB-OUI-3 (1'-2') on both column I and column II were outside laboratory acceptable QC limit biased low due to matrix interference. The %recovery for DCB in MW-OUI-3 (0-1') on column II was outside laboratory acceptable QC limit biased high. All other QC for this batch was within laboratory acceptable QC limit. No impact on data results.

Please note for QC batch 6082148 "PCB's": The % recovery for TCMX in several samples on both column I and column II were outside laboratory acceptable QC limit due to matrix interference. All other QC for this batch was within laboratory acceptable QC limit. No impact on data results.

Please note for QC batch 6082455 "PCB's": The % recovery for DCB in several samples on both column I and column II were outside laboratory acceptable QC limit biased high. All other QC for this batch was within laboratory acceptable QC limit. No impact on data results.

Please note for QC batch 6082154 "Herbicides": The % recovery for surrogate DCAA in HBLK01, SB-OUI-3(1-2'), and SB-OUI-2(0-1") were outside laboratory acceptable QC limit biased low. The % RPD for CCV02, CCV03, and CCV04 were outside acceptable QC limits on column I due to high recoveries. The results for this QC batch were reported from column II.

Please note for QC batch 6083911 "Herbicides": Several surrogates for this QC batch were outside laboratory acceptable QC limit biased low. These samples were reprepared and reanalyzed with low surrogates. The % RPD for CCV03 and CCV04 were outside acceptable limits due to high recoveries. Samples were outside seven day hold time to reprep for outlying QC recoveries.

Please note for QC batch 6083660 "Metals": Silver in the preparation blank was detected above the MDL but less than the MRL. The % recovery for Arsenic in the matrix spike was outside method QC limit biased low. The % recovery for Manganese in the matrix spike duplicate was outside method QC limit biased high. The % Difference for Chromium, Copper, and Zinc in the Serial Dilution were outside acceptable QC limits.

Please note for QC batch 6084477 "Cyanide": The % recovery for Cyanide in the LCS was outside laboratory acceptable QC limits biased high. The recovery was within method limit of 80-120%, therefore the results were accepted for this QC batch.

Organics: Unknown analyte concentrations were determined using the average response factor from the initial calibration curve for all analytes whose % RSD is less than or equal to 15. All other analyte concentrations were determined using linear regression analysis. Copies of curves for compounds with %RSD's greater than 15 are supplied.

September 14, 2006

Client: Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn: Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Nbr: Exxon 3-1010
P/O Nbr: 4507032947
Date Received: 08/10/06

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
SB-OU1-1(1-2)	NPH1419-01	08/09/06 14:45
SB-OU1-1(0-1)	NPH1419-02	08/09/06 14:35
MW-OU1-1(0-1)	NPH1419-03	08/09/06 13:15
MW-OU1-1(1-2)	NPH1419-04	08/09/06 13:20
SB-OU1-3(0-1)	NPH1419-05	08/09/06 13:40
Trip Blank	NPH1419-06	08/09/06 00:01
DUP-1	NPH1419-07	08/09/06 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Additional Laboratory Comments:
Conformance/Non-Conformance Summary:

Samples were properly preserved and received in good condition on 08/10/06. Analyses were performed within method required holding times. There were no anomalies noted at sample log-in. Surrogate % recoveries were outside QC criteria due to sample dilution/matrix. The lab control (LCS) analyzed for batch #6082459 yielded % recoveries outside QC limits. MS/MSD was not performed on batch #6083033 due to insufficient sample volume. Initial and Continuing Calibration requirements were met. See Data Qualifiers and Definitions at end of this report for further explanation.

Please note: Reporting limit was elevated for sample #SB-OU1-3(0-1) due to matrix effects.

As you review this data package, please call me if you require any additional information at # 1-800-765-0980.
New York Certification Number: 11342

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:



September 15, 2006

Client: Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn: Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Nbr: Exxon 3-1010
P/O Nbr: 4507032947
Date Received: 08/16/06

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MW-OU1-1 Total	NPH2199-01	08/15/06 10:30
Trip Blank	NPH2199-02	08/15/06 00:01
Trip Blank	NPH2199-03	08/15/06
Trip Blank	NPH2199-04	08/15/06
MW-OU1-2 Total	NPH2199-05	08/15/06 10:10
Trip Blank	NPH2199-06	08/15/06
MW-OU1-3 Total	NPH2199-07	08/15/06 09:10
Trip Blank	NPH2199-08	08/15/06
MW-OU1-1 Filtered	NPH2199-09	08/15/06 11:10
DUP.-1 Filtered	NPH2199-10	08/15/06 11:20
Dup-1 Total	NPH2199-11	08/15/06
Trip Blank	NPH2199-12	08/15/06
MW-OU1-2 Filtered	NPH2199-13	08/16/06 08:25
MW-OU1-3 Filtered	NPH2199-14	08/16/06 08:40
FB-1	NPH2199-15	08/15/06 20:35
FB-1 Filtered	NPH2199-16	08/15/06 20:40
Trip Blank	NPH2199-17	08/15/06 00:01
FB-2 Filtered	NPH2199-18	08/16/06 10:30

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

Additional Laboratory Comments:

Per enclosed Chain of Custody, "samples were properly preserved and received in good condition on 8/16/06. Analyses were extracted and performed within method required holding times following Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)". All QC was within laboratory acceptable QC limit except for the QC batch listed below. Initial and Continuing Calibration requirements were met for all analysis except for Herbicides. Package was completed as a "Level IV" with 'ASCII' in EXCEL electronic data deliverables.

Please note for QC batch 6083837 "Volatiles": The % RPD for 1,2-Dichlorobenzene was outside laboratory acceptable QC limit biased high. All other QC was within acceptable QC limit for this QC batch.

Please note for QC batch 6083327 "Semi-Volatiles": Several % recovery in both the matrix spike and matrix spike duplicate were outside laboratory acceptable QC limit. Several % RPD were outside laboratory acceptable QC limit. Please note the LCS for QC for this compounds that are outside acceptable QC limits. The % recovery for N-Nitrosodi-n-propylamine in LCS was outside laboratory acceptable QC limit biased high. This compound was not detected in the samples of this QC batch, therefore no impact on data results.

Please note for QC batch 6083576 "Semi-Volatiles": The % recovery for several compounds in both the LCS and LCSD were outside laboratory acceptable QC limit biased high. These Compound were not detected in the samples of this QC batch, therefore no impact on data results.

Please note for QC batch 6083564 "Pesticides": The % recovery for TCMX in MW-OUI-2 Filtered on both column I and column II were outside laboratory acceptable QC limit biased low. The %recovery for DCB in MW-OUI-1 Filtered MS and CONTROLW on column II were outside laboratory acceptable QC limit biased high.

Please note for QC batch 6083584 "Herbicides": Several surrogates for this QC batch were outside laboratory acceptable QC limit biased low. These samples were repped and reanalyzed with low surrogates. The % RPD for CCV02 and CCV03 were outside acceptable limits due to high recoveries. Samples were outside seven day hold time to reprep for low surrogate recoveries.

Organics: Unknown analyte concentrations were determined using the average response factor from the initial calibration curve for all analytes whose % RSD is less than or equal to 15. All other analyte concentrations were determined using linear regression analysis. Copies of curves for compounds with %RSD's greater than 15 are supplied.

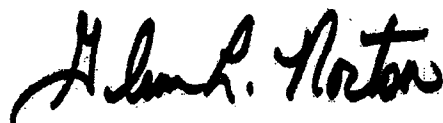
As you review this data package, please call me if you require any additional information at # 1-800-765-0980 ext 1256.

New York Certification Number: 11342

The Chain(s) of Custody, 28 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:



Glenn Lee Norton

Data Package Coordinator

QUALIFIED SAMPLE RESULTS

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-01 (SB-OU1-2(3') - Soil) Sampled: 08/09/06 11:00									
General Chemistry Parameters									
% Dry Solids	82.8		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	0.870	J	mg/kg dry	0.725	2.42	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND		mg/kg dry	1.01	2.42	1	08/22/06 10:59	SW846 9012A	6083912
Chromium, Trivalent	22.0	J	mg/kg dry		NA	1	08/22/06 09:43	SW846 7196A [CALC]	

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-01 (SB-OU1-2(3') - Soil) - cont. Sampled: 08/09/06 11:00									
Total Metals by EPA Method 6010B									
Arsenic	13.4		mg/kg dry	1.07	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Barium	121		mg/kg dry	0.238	2.38	1	08/22/06 09:43	SW846 6010B	6083660
Beryllium	0.856	J	mg/kg dry	0.238	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0951	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Chromium	22.9	J	mg/kg dry	0.357	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Copper	33.0	J	mg/kg dry	1.31	2.38	1	08/22/06 09:43	SW846 6010B	6083660
Lead	19.4		mg/kg dry	0.594	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Manganese	657		mg/kg dry	0.238	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Nickel	35.2		mg/kg dry	0.357	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.90	2.38	1	08/22/06 09:43	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.475	1.19	1	08/22/06 09:43	SW846 6010B	6083660
Zinc	77.7	J	mg/kg dry	0.357	11.9	1	08/22/06 09:43	SW846 6010B	6083660

Mercury by EPA Methods 7470A/7471A

Mercury	ND	U	mg/kg dry	0.0604	0.121	1	08/21/06 13:03	SW846 7471A	6083662

Organochlorine Pesticides by EPA Method 8081A

Aldrin	ND	U	ug/kg dry	1.08	2.05	1	08/16/06 03:03	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.963	2.05	1	08/16/06 03:03	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.842	2.05	1	08/16/06 03:03	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.963	3.97	1	08/16/06 03:03	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.722	2.05	1	08/16/06 03:03	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.842	2.05	1	08/16/06 03:03	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.20	2.05	1	08/16/06 03:03	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.602	2.05	1	08/16/06 03:03	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.56	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.722	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.842	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.08	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.963	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.842	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.08	2.05	1	08/16/06 03:03	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	68 %					1	08/16/06 03:03	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	76 %					1	08/16/06 03:03	SW846 8081A	6082560

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	U	ug/kg dry	19.2	40.0	1	08/15/06 06:04	SW846 8082	608214
PCB-1221	ND	U	ug/kg dry	5.89	40.0	1	08/15/06 06:04	SW846 8082	608214
PCB-1232	ND	U	ug/kg dry	13.2	40.0	1	08/15/06 06:04	SW846 8082	608214
PCB-1242	ND	U	ug/kg dry	16.8	40.0	1	08/15/06 06:04	SW846 8082	608214
PCB-1248	ND	U	ug/kg dry	6.97	40.0	1	08/15/06 06:04	SW846 8082	608214
PCB-1254	ND	U	ug/kg dry	16.8	40.0	1	08/15/06 06:04	SW846 8082	608214
PCB-1260	ND	U	ug/kg dry	6.62	40.0	1	08/15/06 06:04	SW846 8082	608214
Surr: Tetrachloro-meta-xylene (63-132%)	56 %	Z5				1	08/15/06 06:04	SW846 8082	608214
Surr: Decachlorobiphenyl (39-108%)	68 %					1	08/15/06 06:04	SW846 8082	608214

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-01 (SB-OU1-2(3') - Soil) - cont. Sampled: 08/09/06 11:00									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	11.0	20.5	1	08/15/06 07:07	SW846 8151A	6082154
Surr: Dichloroacetic Acid (55-132%)	86 %					1	08/15/06 07:07	SW846 8151A	6082154
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND	U	ug/kg dry	24.2	60.4	1	08/18/06 01:07	SW846 8260B	6081975
Benzene	2.52		ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
2-Butanone	ND	U	ug/kg dry	7.97	60.4	1	08/18/06 01:07	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.640	2.42	1	08/18/06 01:07	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.725	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.676	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.930	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.640	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.797	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.809	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.749	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.12	2.42	1	08/18/06 01:07	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.918	2.42	1	08/18/06 01:07	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.725	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	132	242 500	1	08/18/06 01:07	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.06	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	2.95	12.1	1	08/18/06 01:07	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.894	6.04	1	08/18/06 01:07	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.604	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.906	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Toluene	4.82		ug/kg dry	1.17	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.531	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	0.978	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.556	2.42	1	08/18/06 01:07	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.568	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.906	2.42	1	08/18/06 01:07	SW846 8260B	6081975
Xylenes, total	2.39	J	ug/kg dry	1.79	6.04	1	08/18/06 01:07	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	103 %					1	08/18/06 01:07	SW846 8260B	6081975
Surr: Dibromofluoromethane (73-124%)	101 %					1	08/18/06 01:07	SW846 8260B	6081975
Surr: Toluene-d8 (80-124%)	96 %					1	08/18/06 01:07	SW846 8260B	6081975
Surr: 4-Bromofluorobenzene (25-185%)	94 %					1	08/18/06 01:07	SW846 8260B	6081975
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	20.4	399	1	08/16/06 16:08	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	19.2	399	1	08/16/06 16:08	SW846 8270C	608245
Anthracene	ND	U	ug/kg dry	15.6	399	1	08/16/06 16:08	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-01 (SB-OU1-2(3') - Soil) - cont. Sampled: 08/09/06 11:00									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	18.0	399	1	08/16/06 16:08	SW846 8270C	6082459
Benzo (a) pyrene	ND	U	ug/kg dry	13.2	399	1	08/16/06 16:08	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	21.6	399	1	08/16/06 16:08	SW846 8270C	6082459
Benzo (g,h,i) perylene	ND	U	ug/kg dry	20.4	399	1	08/16/06 16:08	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	27.6	399	1	08/16/06 16:08	SW846 8270C	6082459
Chrysene	ND	U	ug/kg dry	27.6	399	1	08/16/06 16:08	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	18.0	399	1	08/16/06 16:08	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	67.1	399	1	08/16/06 16:08	SW846 8270C	6082459
Fluoranthene	ND	U	ug/kg dry	18.0	399	1	08/16/06 16:08	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	46.7	399	1	08/16/06 16:08	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	64.7	399	1	08/16/06 16:08	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	18.0	399	1	08/16/06 16:08	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	94.7	399	1	08/16/06 16:08	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	132	399	1	08/16/06 16:08	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	30.0	399	1	08/16/06 16:08	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	180	998	1	08/16/06 16:08	SW846 8270C	6082459
Phenanthrene	ND	U	ug/kg dry	14.4	399	1	08/16/06 16:08	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	82.7	399	1	08/16/06 16:08	SW846 8270C	6082459
Pyrene	ND	U	ug/kg dry	16.8	399	1	08/16/06 16:08	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	112 %					1	08/16/06 16:08	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	95 %					1	08/16/06 16:08	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	82 %					1	08/16/06 16:08	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	73 %					1	08/16/06 16:08	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	76 %					1	08/16/06 16:08	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	75 %					1	08/16/06 16:08	SW846 8270C	6082459

Sample ID: NPH1370-02 (SB-OU1-2(1'-2') - Soil) Sampled: 08/09/06 10:45

General Chemistry Parameters

% Dry Solids	86.1		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND		mg/kg dry	0.697	2.32	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND		mg/kg dry	0.976	2.32	1	08/22/06 10:59	SW846 9012A	6083911
Chromium, Trivalent	8.88	J	mg/kg dry		NA	1	08/22/06 09:47	SW846 7196A	JCALC

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-02 (SB-OU1-2(1'-2') - Soil) - cont. Sampled: 08/09/06 10:45									
Total Metals by EPA Method 6010B									
Arsenic	2.66		mg/kg dry	1.01	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Barium	51.5		mg/kg dry	0.224	2.24	1	08/22/06 09:47	SW846 6010B	6083660
Beryllium	0.425	J	mg/kg dry	0.224	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0895	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Chromium	8.88	J	mg/kg dry	0.336	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Copper	4.95	J	mg/kg dry	1.23	2.24	1	08/22/06 09:47	SW846 6010B	6083660
Lead	26.4		mg/kg dry	0.559	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Manganese	128		mg/kg dry	0.224	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Nickel	8.15		mg/kg dry	0.336	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Selenium	ND 4.86	JU	mg/kg dry	4.79	2.24	1	08/22/06 09:47	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.448	1.12	1	08/22/06 09:47	SW846 6010B	6083660
Zinc	61.7	J	mg/kg dry	0.336	11.2	1	08/22/06 09:47	SW846 6010B	6083660

Mercury by EPA Methods 7470A/7471A

Mercury	ND	U	mg/kg dry	0.0582	0.116	1	08/21/06 13:05	SW846 7471A	6083662

Organochlorine Pesticides by EPA Method 8081A

Aldrin	ND	U	ug/kg dry	1.04	1.97	1	08/16/06 03:32	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.926	1.97	1	08/16/06 03:32	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.810	1.97	1	08/16/06 03:32	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.926	3.82	1	08/16/06 03:32	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.694	1.97	1	08/16/06 03:32	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.810	1.97	1	08/16/06 03:32	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.16	1.97	1	08/16/06 03:32	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.579	1.97	1	08/16/06 03:32	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.50	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.694	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.810	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.04	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.926	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.810	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.04	1.97	1	08/16/06 03:32	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	70 %					1	08/16/06 03:32	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	78 %					1	08/16/06 03:32	SW846 8081A	6082560

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	U	ug/kg dry	18.1	37.6	1	08/15/06 06:25	SW846 8082	608214
PCB-1221	ND	U	ug/kg dry	5.53	37.6	1	08/15/06 06:25	SW846 8082	608214
PCB-1232	ND	U	ug/kg dry	12.4	37.6	1	08/15/06 06:25	SW846 8082	608214
PCB-1242	ND	U	ug/kg dry	15.8	37.6	1	08/15/06 06:25	SW846 8082	608214
PCB-1248	ND	U	ug/kg dry	6.55	37.6	1	08/15/06 06:25	SW846 8082	608214
PCB-1254	ND	U	ug/kg dry	15.8	37.6	1	08/15/06 06:25	SW846 8082	608214
PCB-1260	ND	U	ug/kg dry	6.22	37.6	1	08/15/06 06:25	SW846 8082	608214
Surr: Tetrachloro-meta-xylene (63-132%)	55 %	Z5				1	08/15/06 06:25	SW846 8082	608214
Surr: Decachlorobiphenyl (39-108%)	64 %					1	08/15/06 06:25	SW846 8082	608214

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-02 (SB-OU1-2(1'-2') - Soil) - cont. Sampled: 08/09/06 10:45									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.6	19.7	1	08/15/06 07:38	SW846 8151A	6082154
Surr: Dichloroacetic Acid (55-132%)	92 %					1	08/15/06 07:38	SW846 8151A	6082154
Volatile Organic Compounds by EPA Method 8260B									
Acetone	60.6	J	ug/kg dry	23.2	58.1	1	08/18/06 01:38	SW846 8260B	6081975
Benzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
2-Butanone	ND	U	ug/kg dry	7.67	58.1	1	08/18/06 01:38	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.616	2.32	1	08/18/06 01:38	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.697	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.650	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.894	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.616	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.767	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.778	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.720	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.08	2.32	1	08/18/06 01:38	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.883	2.32	1	08/18/06 01:38	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.697	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	127	232 500	1	08/18/06 01:38	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.02	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	2.83	11.6	1	08/18/06 01:38	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.859	5.81	1	08/18/06 01:38	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.871	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Toluene	ND	U	ug/kg dry	1.13	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.511	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	0.941	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.534	2.32	1	08/18/06 01:38	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.546	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.871	2.32	1	08/18/06 01:38	SW846 8260B	6081975
Xylenes, total	ND	U	ug/kg dry	1.72	5.81	1	08/18/06 01:38	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	106 %					1	08/18/06 01:38	SW846 8260B	6081975
Surr: Dibromofluoromethane (73-124%)	101 %					1	08/18/06 01:38	SW846 8260B	6081975
Surr: Toluene-d8 (80-124%)	95 %					1	08/18/06 01:38	SW846 8260B	6081975
Surr: 4-Bromofluorobenzene (25-185%)	100 %					1	08/18/06 01:38	SW846 8260B	6081975
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	19.5	382	1	08/16/06 16:30	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	18.3	382	1	08/16/06 16:30	SW846 8270C	608245
Anthracene	ND	U	ug/kg dry	14.9	382	1	08/16/06 16:30	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-02 (SB-OU1-2(1'-2') - Soil) - cont. Sampled: 08/09/06 10:45									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	17.2	382	1	08/16/06 16:30	SW846 8270C	6082459
Benzo (a) pyrene	ND	U	ug/kg dry	12.6	382	1	08/16/06 16:30	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	20.6	382	1	08/16/06 16:30	SW846 8270C	6082459
Benzo (g,h,i) perylene	ND	U	ug/kg dry	19.5	382	1	08/16/06 16:30	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	26.4	382	1	08/16/06 16:30	SW846 8270C	6082459
Chrysene	ND	U	ug/kg dry	26.4	382	1	08/16/06 16:30	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	17.2	382	1	08/16/06 16:30	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	64.2	382	1	08/16/06 16:30	SW846 8270C	6082459
Fluoranthene	ND	U	ug/kg dry	17.2	382	1	08/16/06 16:30	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	44.7	382	1	08/16/06 16:30	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	61.9	382	1	08/16/06 16:30	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	17.2	382	1	08/16/06 16:30	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	90.5	382	1	08/16/06 16:30	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	126	382	1	08/16/06 16:30	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	28.6	382	1	08/16/06 16:30	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	172	954	1	08/16/06 16:30	SW846 8270C	6082459
Phenanthrene	ND	U	ug/kg dry	13.7	382	1	08/16/06 16:30	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.1	382	1	08/16/06 16:30	SW846 8270C	6082459
Pyrene	ND	U	ug/kg dry	16.0	382	1	08/16/06 16:30	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	114 %					1	08/16/06 16:30	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	101 %					1	08/16/06 16:30	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	91 %					1	08/16/06 16:30	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	84 %					1	08/16/06 16:30	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	82 %					1	08/16/06 16:30	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	87 %					1	08/16/06 16:30	SW846 8270C	6082459

Sample ID: NPH1370-03 (SB-OU1-3(1'-2') - Soil) Sampled: 08/09/06 14:00

General Chemistry Parameters									
% Dry Solids	86.0		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND		mg/kg dry	0.698	2.33	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND		mg/kg dry	0.977	2.33	1	08/22/06 10:59	SW846 9012A	6083912
Chromium, Trivalent	14.7	J	mg/kg dry		NA	1	08/22/06 09:51	SW846 7196A [CALC]	

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-03 (SB-OU1-3(1'-2') - Soil) - cont. Sampled: 08/09/06 14:00									
Total Metals by EPA Method 6010B									
Arsenic	5.40		mg/kg dry	1.04	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Barium	67.9		mg/kg dry	0.231	2.31	1	08/22/06 09:51	SW846 6010B	6083660
Beryllium	0.600	J	mg/kg dry	0.231	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0923	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Chromium	14.7	J	mg/kg dry	0.346	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Copper	20.3	J	mg/kg dry	1.27	2.31	1	08/22/06 09:51	SW846 6010B	6083660
Lead	8.86		mg/kg dry	0.577	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Manganese	128		mg/kg dry	0.231	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Nickel	14.1		mg/kg dry	0.346	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Selenium	ND ~~2.24~~	J U	mg/kg dry	~~1.85~~	2.31	1	08/22/06 09:51	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.461	1.15	1	08/22/06 09:51	SW846 6010B	6083660
Zinc	44.8	J	mg/kg dry	0.346	11.5	1	08/22/06 09:51	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/kg dry	0.0581	0.116	1	08/21/06 13:09	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	5.22	9.87	5	08/16/06 04:01	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	4.64	9.87	5	08/16/06 04:01	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	4.06	9.87	5	08/16/06 04:01	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	4.64	19.2	5	08/16/06 04:01	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	3.48	9.87	5	08/16/06 04:01	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	4.06	9.87	5	08/16/06 04:01	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	5.80	9.87	5	08/16/06 04:01	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	2.90	9.87	5	08/16/06 04:01	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	7.55	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	3.48	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	4.06	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	5.22	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	4.64	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	4.06	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	5.22	9.87	5	08/16/06 04:01	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	80 %					5	08/16/06 04:01	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	70 %					5	08/16/06 04:01	SW846 8081A	6082560
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.4	38.4	1	08/15/06 06:45	SW846 8082	608214
PCB-1221	ND	U	ug/kg dry	5.65	38.4	1	08/15/06 06:45	SW846 8082	608214
PCB-1232	ND	U	ug/kg dry	12.7	38.4	1	08/15/06 06:45	SW846 8082	608214
PCB-1242	ND	U	ug/kg dry	16.1	38.4	1	08/15/06 06:45	SW846 8082	608214
PCB-1248	ND	U	ug/kg dry	6.68	38.4	1	08/15/06 06:45	SW846 8082	608214
PCB-1254	ND	U	ug/kg dry	16.1	38.4	1	08/15/06 06:45	SW846 8082	608214
PCB-1260	ND	U	ug/kg dry	6.35	38.4	1	08/15/06 06:45	SW846 8082	608214
Surr: Tetrachloro-meta-xylene (63-132%)	77 %					1	08/15/06 06:45	SW846 8082	608214
Surr: Decachlorobiphenyl (39-108%)	72 %					1	08/15/06 06:45	SW846 8082	608214

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-03 (SB-OU1-3(1'-2') - Soil) - cont. Sampled: 08/09/06 14:00									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.6	19.8	1	08/15/06 08:09	SW846 8151A	6082154
Surr: Dichloroacetic Acid (55-132%)	74 %					1	08/15/06 08:09	SW846 8151A	6082154
Volatile Organic Compounds by EPA Method 8260B									
Acetone	144	J	ug/kg dry	23.3	58.1	1	08/18/06 02:09	SW846 8260B	6081975
Benzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
2-Butanone	17.6	J	ug/kg dry	7.67	58.1	1	08/18/06 02:09	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.616	2.33	1	08/18/06 02:09	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.698	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.651	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.895	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.616	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.767	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.779	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.721	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.08	2.33	1	08/18/06 02:09	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.884	2.33	1	08/18/06 02:09	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.698	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	127	233 STD	1	08/18/06 02:09	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.02	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	2.84	11.6	1	08/18/06 02:09	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.860	5.81	1	08/18/06 02:09	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.872	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Toluene	ND	U	ug/kg dry	1.13	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.512	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	0.942	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.535	2.33	1	08/18/06 02:09	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.547	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.872	2.33	1	08/18/06 02:09	SW846 8260B	6081975
Xylenes, total	ND	U	ug/kg dry	1.72	5.81	1	08/18/06 02:09	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	105 %					1	08/18/06 02:09	SW846 8260B	6081975
Surr: Dibromofluoromethane (73-124%)	98 %					1	08/18/06 02:09	SW846 8260B	6081975
Surr: Toluene-d8 (80-124%)	96 %					1	08/18/06 02:09	SW846 8260B	6081975
Surr: 4-Bromofluorobenzene (25-185%)	101 %					1	08/18/06 02:09	SW846 8260B	6081975
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	19.6	384	1	08/16/06 16:51	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	18.5	384	1	08/16/06 16:51	SW846 8270C	608245
Anthracene	ND	U	ug/kg dry	15.0	384	1	08/16/06 16:51	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-03 (SB-OU1-3(1'-2') - Soil) - cont. Sampled: 08/09/06 14:00									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	80.3	J	ug/kg dry	17.3	384	1	08/16/06 16:51	SW846 8270C	6082459
Benzo (a) pyrene	73.8	J	ug/kg dry	12.7	384	1	08/16/06 16:51	SW846 8270C	6082459
Benzo (b) fluoranthene	50.0	J	ug/kg dry	20.8	384	1	08/16/06 16:51	SW846 8270C	6082459
Benzo (g,h,i) perylene	43.8	J	ug/kg dry	19.6	384	1	08/16/06 16:51	SW846 8270C	6082459
Benzo (k) fluoranthene	79.6	J	ug/kg dry	26.5	384	1	08/16/06 16:51	SW846 8270C	6082459
Chrysene	81.9	J	ug/kg dry	26.5	384	1	08/16/06 16:51	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	17.3	384	1	08/16/06 16:51	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	64.6	384	1	08/16/06 16:51	SW846 8270C	6082459
Fluoranthene	171	J	ug/kg dry	17.3	384	1	08/16/06 16:51	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	45.0	384	1	08/16/06 16:51	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	62.3	384	1	08/16/06 16:51	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	17.3	384	1	08/16/06 16:51	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	91.1	384	1	08/16/06 16:51	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	127	384	1	08/16/06 16:51	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	28.8	384	1	08/16/06 16:51	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	173	961	1	08/16/06 16:51	SW846 8270C	6082459
Phenanthrene	133	J	ug/kg dry	13.8	384	1	08/16/06 16:51	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.6	384	1	08/16/06 16:51	SW846 8270C	6082459
Pyrene	154	J	ug/kg dry	16.1	384	1	08/16/06 16:51	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	117 %					1	08/16/06 16:51	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	103 %					1	08/16/06 16:51	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	84 %					1	08/16/06 16:51	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	87 %					1	08/16/06 16:51	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	78 %					1	08/16/06 16:51	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	85 %					1	08/16/06 16:51	SW846 8270C	6082459

Sample ID: NPH1370-04 (SB-OU1-2(0-1') - Soil) Sampled: 08/09/06 10:10

General Chemistry Parameters									
% Dry Solids	76.8		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND		mg/kg dry	0.781	2.60	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND		mg/kg dry	1.09	2.60	1	08/22/06 10:59	SW846 9012A	6083917
Chromium, Trivalent	17.1	J	mg/kg dry		NA	1	08/22/06 09:55	SW846 7196A	JCALC

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-04 (SB-OUI-2(0-1') - Soil) - cont. Sampled: 08/09/06 10:10									
Total Metals by EPA Method 6010B									
Arsenic	3.54		mg/kg dry	1.16	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Barium	104		mg/kg dry	0.257	2.57	1	08/22/06 09:55	SW846 6010B	6083660
Beryllium	0.616	J	mg/kg dry	0.257	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.103	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Chromium	17.1	J	mg/kg dry	0.385	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Copper	15.4	J	mg/kg dry	1.41	2.57	1	08/22/06 09:55	SW846 6010B	6083660
Lead	76.9		mg/kg dry	0.642	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Manganese	250		mg/kg dry	0.257	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Nickel	10.9		mg/kg dry	0.385	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	2.05	2.57	1	08/22/06 09:55	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.514	1.28	1	08/22/06 09:55	SW846 6010B	6083660
Zinc	91.0	J	mg/kg dry	0.385	12.8	1	08/22/06 09:55	SW846 6010B	6083660

Mercury by EPA Methods 7470A/7471A

Mercury	0.437		mg/kg dry	0.0630	0.126	1	08/21/06 13:11	SW846 7471A	6083662

Organochlorine Pesticides by EPA Method 8081A

Aldrin	ND	U	ug/kg dry	1.15	2.18	1	08/16/06 10:49	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	1.03	2.18	1	08/16/06 10:49	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.898	2.18	1	08/16/06 10:49	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	1.03	4.23	1	08/16/06 10:49	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.770	2.18	1	08/16/06 10:49	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.898	2.18	1	08/16/06 10:49	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.28	2.18	1	08/16/06 10:49	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.641	2.18	1	08/16/06 10:49	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.67	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.770	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.898	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.15	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	1.03	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.898	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.15	2.18	1	08/16/06 10:49	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	64 %					1	08/16/06 10:49	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	70 %					1	08/16/06 10:49	SW846 8081A	6082560

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	U	ug/kg dry	20.2	42.1	1	08/15/06 07:06	SW846 8082	608214
PCB-1221	ND	U	ug/kg dry	6.19	42.1	1	08/15/06 07:06	SW846 8082	608214
PCB-1232	ND	U	ug/kg dry	13.9	42.1	1	08/15/06 07:06	SW846 8082	608214
PCB-1242	ND	U	ug/kg dry	17.7	42.1	1	08/15/06 07:06	SW846 8082	608214
PCB-1248	ND	U	ug/kg dry	7.33	42.1	1	08/15/06 07:06	SW846 8082	608214
PCB-1254	ND	U	ug/kg dry	17.7	42.1	1	08/15/06 07:06	SW846 8082	608214
PCB-1260	ND	U	ug/kg dry	6.96	42.1	1	08/15/06 07:06	SW846 8082	608214
Surr: Tetrachloro-meta-xylene (63-132%)	73 %					1	08/15/06 07:06	SW846 8082	608214
Surr: Decachlorobiphenyl (39-108%)	74 %					1	08/15/06 07:06	SW846 8082	608214

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209 Shafter Street
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Work Order: NPH1370
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Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-04 (SB-OU1-2(0-1') - Soil) - cont. Sampled: 08/09/06 10:10									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	11.8	22.1	1	08/15/06 08:40	SW846 8151A	6082154
Surr: Dichloroacetic Acid (55-132%)	85 %					1	08/15/06 08:40	SW846 8151A	6082154
Volatile Organic Compounds by EPA Method 8260B									
Acetone	121	J	ug/kg dry	26.0	65.1	1	08/18/06 02:39	SW846 8260B	6081975
Benzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
2-Butanone	ND	J	ug/kg dry	8.59	65.1	1	08/18/06 02:39	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.690	2.60	1	08/18/06 02:39	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.781	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.729	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	1.00	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.690	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.859	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.872	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.807	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.21	2.60	1	08/18/06 02:39	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.990	2.60	1	08/18/06 02:39	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.781	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,4-Dioxane	ND	J	ug/kg dry	142	260 500	1	08/18/06 02:39	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.15	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	3.18	13.0	1	08/18/06 02:39	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.964	6.51	1	08/18/06 02:39	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.651	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.977	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Toluene	ND	U	ug/kg dry	1.26	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.573	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	1.05	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.599	2.60	1	08/18/06 02:39	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.612	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.977	2.60	1	08/18/06 02:39	SW846 8260B	6081975
Xylenes, total	ND	U	ug/kg dry	1.93	6.51	1	08/18/06 02:39	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	106 %					1	08/18/06 02:39	SW846 8260B	60819
Surr: Dibromofluoromethane (73-124%)	101 %					1	08/18/06 02:39	SW846 8260B	60819
Surr: Toluene-d8 (80-124%)	99 %					1	08/18/06 02:39	SW846 8260B	60819
Surr: 4-Bromofluorobenzene (25-185%)	112 %					1	08/18/06 02:39	SW846 8260B	60819
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	22.1	432	1	08/16/06 17:12	SW846 8270C	60824:
Acenaphthylene	ND	U	ug/kg dry	20.8	432	1	08/16/06 17:12	SW846 8270C	60824:
Anthracene	ND	U	ug/kg dry	16.9	432	1	08/16/06 17:12	SW846 8270C	60824:

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-04 (SB-OU1-2(0-1') - Soil) - cont. Sampled: 08/09/06 10:10									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	19.5	432	1	08/16/06 17:12	SW846 8270C	6082459
Benzo (a) pyrene	55.4	J	ug/kg dry	14.3	432	1	08/16/06 17:12	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	23.4	432	1	08/16/06 17:12	SW846 8270C	6082459
Benzo (g,h,i) perylene	77.0	J	ug/kg dry	22.1	432	1	08/16/06 17:12	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	29.9	432	1	08/16/06 17:12	SW846 8270C	6082459
Chrysene	48.9	J	ug/kg dry	29.9	432	1	08/16/06 17:12	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	19.5	432	1	08/16/06 17:12	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	72.7	432	1	08/16/06 17:12	SW846 8270C	6082459
Fluoranthene	62.7	J	ug/kg dry	19.5	432	1	08/16/06 17:12	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	50.6	432	1	08/16/06 17:12	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	70.1	432	1	08/16/06 17:12	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	19.5	432	1	08/16/06 17:12	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	103	432	1	08/16/06 17:12	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	143	432	1	08/16/06 17:12	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	32.5	432	1	08/16/06 17:12	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	195	1080	1	08/16/06 17:12	SW846 8270C	6082459
Phenanthrene	47.6	J	ug/kg dry	15.6	432	1	08/16/06 17:12	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	89.6	432	1	08/16/06 17:12	SW846 8270C	6082459
Pyrene	64.5	J	ug/kg dry	18.2	432	1	08/16/06 17:12	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	88 %					1	08/16/06 17:12	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	76 %					1	08/16/06 17:12	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	71 %					1	08/16/06 17:12	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	71 %					1	08/16/06 17:12	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	63 %					1	08/16/06 17:12	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	68 %					1	08/16/06 17:12	SW846 8270C	6082459

Sample ID: NPH1370-05 (SB-OU1-3(4') - Soil) Sampled: 08/09/06 14:10

General Chemistry Parameters

% Dry Solids	86.0		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND		mg/kg dry	0.698	2.33	1	08/14/06 21:10	SW846 7196A	6082031
Cyanide	ND		mg/kg dry	0.977	2.33	1	08/22/06 10:59	SW846 9012A	6083911
Chromium, Trivalent	13.9	J	mg/kg dry		NA	1	08/22/06 09:59	SW846 7196A	ICALC

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-05 (SB-OU1-3(4') - Soil) - cont. Sampled: 08/09/06 14:10									
Total Metals by EPA Method 6010B									
Arsenic	7.00		mg/kg dry	1.02	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Barium	80.8		mg/kg dry	0.226	2.26	1	08/22/06 09:59	SW846 6010B	6083660
Beryllium	0.610	J	mg/kg dry	0.226	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0903	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Chromium	13.9	J	mg/kg dry	0.339	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Copper	21.0	J	mg/kg dry	1.24	2.26	1	08/22/06 09:59	SW846 6010B	6083660
Lead	38.5		mg/kg dry	0.564	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Manganese	174		mg/kg dry	0.226	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Nickel	16.8		mg/kg dry	0.339	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.81	2.26	1	08/22/06 09:59	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.452	1.13	1	08/22/06 09:59	SW846 6010B	6083660
Zinc	72.5	J	mg/kg dry	0.339	11.3	1	08/22/06 09:59	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/kg dry	0.0566	0.113	1	08/21/06 13:13	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	1.00	1.89	1	08/16/06 04:59	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.889	1.89	1	08/16/06 04:59	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.778	1.89	1	08/16/06 04:59	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.889	3.67	1	08/16/06 04:59	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.667	1.89	1	08/16/06 04:59	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.778	1.89	1	08/16/06 04:59	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.11	1.89	1	08/16/06 04:59	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.556	1.89	1	08/16/06 04:59	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.44	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.667	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.778	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.00	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.889	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.778	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.00	1.89	1	08/16/06 04:59	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	76 %					1	08/16/06 04:59	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	84 %					1	08/16/06 04:59	SW846 8081A	6082560
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.2	37.9	1	08/15/06 07:26	SW846 8082	608214
PCB-1221	ND	U	ug/kg dry	5.57	37.9	1	08/15/06 07:26	SW846 8082	608214
PCB-1232	ND	U	ug/kg dry	12.5	37.9	1	08/15/06 07:26	SW846 8082	608214
PCB-1242	ND	U	ug/kg dry	15.9	37.9	1	08/15/06 07:26	SW846 8082	608214
PCB-1248	ND	U	ug/kg dry	6.59	37.9	1	08/15/06 07:26	SW846 8082	608214
PCB-1254	ND	U	ug/kg dry	15.9	37.9	1	08/15/06 07:26	SW846 8082	608214
PCB-1260	ND	U	ug/kg dry	6.26	37.9	1	08/15/06 07:26	SW846 8082	608214
Surr: Tetrachloro-meta-xylene (63-132%)	53 %	Z5				1	08/15/06 07:26	SW846 8082	608214
Surr: Decachlorobiphenyl (39-108%)	62 %					1	08/15/06 07:26	SW846 8082	608214

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch	
Sample ID: NPH1370-05 (SB-OU1-3(4') - Soil) - cont. Sampled: 08/09/06 14:10										
Chlorinated Herbicides by EPA Method 8151A										
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.6	19.8	1	08/15/06 09:11	SW846 8151A	6082154	
Surr: Dichloroacetic Acid (55-132%)	77 %					1	08/15/06 09:11	SW846 8151A	6082154	
Volatile Organic Compounds by EPA Method 8260B										
Acetone	106	J	ug/kg dry	23.3	58.1	1	08/18/06 03:10	SW846 8260B	6081975	
Benzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
2-Butanone	9.05	J	ug/kg dry	7.67	58.1	1	08/18/06 03:10	SW846 8260B	6081975	
tert-Butylbenzene	ND	U	ug/kg dry	0.616	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
n-Butylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
sec-Butylbenzene	ND	U	ug/kg dry	0.698	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Carbon Tetrachloride	ND	U	ug/kg dry	0.651	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Chlorobenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Chloroform	ND	U	ug/kg dry	0.895	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.616	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.767	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,2-Dichloroethane	ND	U	ug/kg dry	0.779	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,1-Dichloroethane	ND	U	ug/kg dry	0.721	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,1-Dichloroethene	ND	U	ug/kg dry	1.08	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.884	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.698	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,4-Dioxane	ND	J	ug/kg dry	127	233	50	1	08/18/06 03:10	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Isopropylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.02	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Methylene Chloride	ND	U	ug/kg dry	2.84	11.6	1	08/18/06 03:10	SW846 8260B	6081975	
Naphthalene	ND	U	ug/kg dry	0.860	5.81	1	08/18/06 03:10	SW846 8260B	6081975	
n-Propylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Tetrachloroethene	ND	U	ug/kg dry	0.872	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Toluene	ND	U	ug/kg dry	1.13	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.512	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Trichloroethene	ND	U	ug/kg dry	0.942	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.535	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.547	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Vinyl chloride	ND	U	ug/kg dry	0.872	2.33	1	08/18/06 03:10	SW846 8260B	6081975	
Xylenes, total	ND	U	ug/kg dry	1.72	5.81	1	08/18/06 03:10	SW846 8260B	6081975	
Surr: 1,2-Dichloroethane-d4 (72-125%)	110 %					1	08/18/06 03:10	SW846 8260B	60819	
Surr: Dibromofluoromethane (73-124%)	100 %					1	08/18/06 03:10	SW846 8260B	60819	
Surr: Toluene-d8 (80-124%)	98 %					1	08/18/06 03:10	SW846 8260B	60819	
Surr: 4-Bromofluorobenzene (25-185%)	105 %					1	08/18/06 03:10	SW846 8260B	60819	
Semivolatile Organic Compounds by EPA Method 8270C										
Acenaphthene	ND	U	ug/kg dry	19.6	383	1	08/16/06 17:33	SW846 8270C	608241	
Acenaphthylene	ND	U	ug/kg dry	18.4	383	1	08/16/06 17:33	SW846 8270C	608241	
Anthracene	ND	U	ug/kg dry	15.0	383	1	08/16/06 17:33	SW846 8270C	608241	

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-05 (SB-OU1-3(4') - Soil) - cont. Sampled: 08/09/06 14:10									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	17.3	383	1	08/16/06 17:33	SW846 8270C	6082459
Benzo (a) pyrene	ND	U	ug/kg dry	12.7	383	1	08/16/06 17:33	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	20.7	383	1	08/16/06 17:33	SW846 8270C	6082459
Benzo (g,h,i) perylene	ND	U	ug/kg dry	19.6	383	1	08/16/06 17:33	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	26.5	383	1	08/16/06 17:33	SW846 8270C	6082459
Chrysene	ND	U	ug/kg dry	26.5	383	1	08/16/06 17:33	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	17.3	383	1	08/16/06 17:33	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	64.4	383	1	08/16/06 17:33	SW846 8270C	6082459
Fluoranthene	ND	U	ug/kg dry	17.3	383	1	08/16/06 17:33	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	44.9	383	1	08/16/06 17:33	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	62.1	383	1	08/16/06 17:33	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	17.3	383	1	08/16/06 17:33	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	90.9	383	1	08/16/06 17:33	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	127	383	1	08/16/06 17:33	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	28.8	383	1	08/16/06 17:33	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	173	958	1	08/16/06 17:33	SW846 8270C	6082459
Phenanthrene	ND	U	ug/kg dry	13.8	383	1	08/16/06 17:33	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.4	383	1	08/16/06 17:33	SW846 8270C	6082459
Pyrene	ND	U	ug/kg dry	16.1	383	1	08/16/06 17:33	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	102 %					1	08/16/06 17:33	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	89 %					1	08/16/06 17:33	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	73 %					1	08/16/06 17:33	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	65 %					1	08/16/06 17:33	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	66 %					1	08/16/06 17:33	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	68 %					1	08/16/06 17:33	SW846 8270C	6082459

Sample ID: NPH1370-06 (MW-OU1-2(1'-2') - Soil) Sampled: 08/09/06 10:25

General Chemistry Parameters

% Dry Solids	88.4		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084041
Chromium (VI)	ND		mg/kg dry	0.679	2.26	1	08/14/06 21:10	SW846 7196A	6082031
Cyanide	ND		mg/kg dry	0.950	2.26	1	08/22/06 10:59	SW846 9012A	6083911
Chromium, Trivalent	13.7	J	mg/kg dry		NA	1	08/22/06 10:03	SW846 7196A	[CALC

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209 Shafter Street
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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-06 (MW-OU1-2(1'-2') - Soil) - cont. Sampled: 08/09/06 10:25									
Total Metals by EPA Method 6010B									
Arsenic	8.54		mg/kg dry	0.981	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Barium	100		mg/kg dry	0.218	2.18	1	08/22/06 10:03	SW846 6010B	6083660
Beryllium	0.719	J	mg/kg dry	0.218	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0872	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Chromium	13.7	J	mg/kg dry	0.327	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Copper	27.5	J	mg/kg dry	1.20	2.18	1	08/22/06 10:03	SW846 6010B	6083660
Lead	13.5		mg/kg dry	0.545	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Manganese	631		mg/kg dry	0.218	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Nickel	26.5		mg/kg dry	0.327	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.74	2.18	1	08/22/06 10:03	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.436	1.09	1	08/22/06 10:03	SW846 6010B	6083660
Zinc	68.2	J	mg/kg dry	0.327	10.9	1	08/22/06 10:03	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/kg dry	0.0568	0.114	1	08/21/06 13:15	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	0.994	1.88	1	08/16/06 05:27	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.883	1.88	1	08/16/06 05:27	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.773	1.88	1	08/16/06 05:27	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.883	3.64	1	08/16/06 05:27	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.663	1.88	1	08/16/06 05:27	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.773	1.88	1	08/16/06 05:27	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.10	1.88	1	08/16/06 05:27	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.552	1.88	1	08/16/06 05:27	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.44	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.663	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.773	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	0.994	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.883	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.773	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	0.994	1.88	1	08/16/06 05:27	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	76 %					1	08/16/06 05:27	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	84 %					1	08/16/06 05:27	SW846 8081A	6082560
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	17.7	36.9	1	08/17/06 17:44	SW846 8082	608245
PCB-1221	ND	U	ug/kg dry	5.43	36.9	1	08/17/06 17:44	SW846 8082	608245
PCB-1232	ND	U	ug/kg dry	12.2	36.9	1	08/17/06 17:44	SW846 8082	608245
PCB-1242	ND	U	ug/kg dry	15.5	36.9	1	08/17/06 17:44	SW846 8082	608245
PCB-1248	ND	U	ug/kg dry	6.43	36.9	1	08/17/06 17:44	SW846 8082	608245
PCB-1254	ND	U	ug/kg dry	15.5	36.9	1	08/17/06 17:44	SW846 8082	608245
PCB-1260	ND	U	ug/kg dry	6.11	36.9	1	08/17/06 17:44	SW846 8082	608245
Surr: Tetrachloro-meta-xylene (63-132%)	77 %					1	08/17/06 17:44	SW846 8082	608245
Surr: Decachlorobiphenyl (39-108%)	99 %					1	08/17/06 17:44	SW846 8082	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-06RE1 (MW-OU1-2(1'-2') - Soil) - cont. Sampled: 08/09/06 10:25									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.3	19.2	1	08/22/06 00:41	SW846 8151A	6083911
Surr: Dichloroacetic Acid (55-132%)	94 %					1	08/22/06 00:41	SW846 8151A	6083911
Volatile Organic Compounds by EPA Method 8260B									
Acetone	55.5	J	ug/kg dry	22.6	56.6	1	08/18/06 03:40	SW846 8260B	6081975
Benzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
2-Butanone	ND	U	ug/kg dry	7.47	56.6	1	08/18/06 03:40	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.600	2.26	1	08/18/06 03:40	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.679	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.633	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.871	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.600	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.747	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.758	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.701	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.05	2.26	1	08/18/06 03:40	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.860	2.26	1	08/18/06 03:40	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.679	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	123	226	1	08/18/06 03:40	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	0.995	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	2.76	11.3	1	08/18/06 03:40	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.837	5.66	1	08/18/06 03:40	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.566	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.848	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Toluene	ND	U	ug/kg dry	1.10	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.498	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	0.916	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.520	2.26	1	08/18/06 03:40	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.532	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.848	2.26	1	08/18/06 03:40	SW846 8260B	6081975
Xylenes, total	ND	U	ug/kg dry	1.67	5.66	1	08/18/06 03:40	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	108 %					1	08/18/06 03:40	SW846 8260B	60819
Surr: Dibromofluoromethane (73-124%)	104 %					1	08/18/06 03:40	SW846 8260B	60819
Surr: Toluene-d8 (80-124%)	96 %					1	08/18/06 03:40	SW846 8260B	60819
Surr: 4-Bromofluorobenzene (25-185%)	99 %					1	08/18/06 03:40	SW846 8260B	60819
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	18.8	368	1	08/16/06 17:55	SW846 8270C	60824:
Acenaphthylene	ND	U	ug/kg dry	17.7	368	1	08/16/06 17:55	SW846 8270C	60824:
Anthracene	ND	U	ug/kg dry	14.4	368	1	08/16/06 17:55	SW846 8270C	60824:

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-06 (MW-OU1-2(1'-2') - Soil) - cont. Sampled: 08/09/06 10:25									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	16.6	368	1	08/16/06 17:55	SW846 8270C	6082459
Benzo (a) pyrene	ND	U	ug/kg dry	12.2	368	1	08/16/06 17:55	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	19.9	368	1	08/16/06 17:55	SW846 8270C	6082459
Benzo (g,h,i) perylene	ND	U	ug/kg dry	18.8	368	1	08/16/06 17:55	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	25.4	368	1	08/16/06 17:55	SW846 8270C	6082459
Chrysene	ND	U	ug/kg dry	25.4	368	1	08/16/06 17:55	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	16.6	368	1	08/16/06 17:55	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	61.9	368	1	08/16/06 17:55	SW846 8270C	6082459
Fluoranthene	ND	U	ug/kg dry	16.6	368	1	08/16/06 17:55	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	43.1	368	1	08/16/06 17:55	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	59.7	368	1	08/16/06 17:55	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	16.6	368	1	08/16/06 17:55	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	87.4	368	1	08/16/06 17:55	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	122	368	1	08/16/06 17:55	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	27.6	368	1	08/16/06 17:55	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	166	921	1	08/16/06 17:55	SW846 8270C	6082459
Phenanthrene	ND	U	ug/kg dry	13.3	368	1	08/16/06 17:55	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	76.3	368	1	08/16/06 17:55	SW846 8270C	6082459
Pyrene	ND	U	ug/kg dry	15.5	368	1	08/16/06 17:55	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	100 %					1	08/16/06 17:55	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	83 %					1	08/16/06 17:55	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	68 %					1	08/16/06 17:55	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	68 %					1	08/16/06 17:55	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	57 %					1	08/16/06 17:55	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	65 %					1	08/16/06 17:55	SW846 8270C	6082459

Sample ID: NPH1370-07 (MW-OU1-3(1'-2') - Soil) Sampled: 08/09/06 09:45

General Chemistry Parameters

% Dry Solids	86.1		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084041
Chromium (VI)	ND		mg/kg dry	0.697	2.32	1	08/14/06 21:10	SW846 7196A	6082031
Cyanide	ND		mg/kg dry	0.976	2.32	1	08/22/06 10:59	SW846 9012A	6083911
Chromium, Trivalent	19.9	J	mg/kg dry		NA	1	08/22/06 10:08	SW846 7196A	JCALC

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-07 (MW-OU1-3(1'-2')) - Soil) - cont. Sampled: 08/09/06 09:45									
Total Metals by EPA Method 6010B									
Arsenic	6.25		mg/kg dry	1.03	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Barium	86.3		mg/kg dry	0.229	2.29	1	08/22/06 10:08	SW846 6010B	6083660
Beryllium	0.802	J	mg/kg dry	0.229	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0916	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Chromium	19.9	J	mg/kg dry	0.344	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Copper	25.2	J	mg/kg dry	1.26	2.29	1	08/22/06 10:08	SW846 6010B	6083660
Lead	14.2		mg/kg dry	0.573	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Manganese	337		mg/kg dry	0.229	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Nickel	27.3		mg/kg dry	0.344	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.83	2.29	1	08/22/06 10:08	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.458	1.15	1	08/22/06 10:08	SW846 6010B	6083660
Zinc	74.6	J	mg/kg dry	0.344	11.5	1	08/22/06 10:08	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/kg dry	0.0585	0.117	1	08/21/06 13:17	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	1.01	1.91	1	08/16/06 05:56	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.898	1.91	1	08/16/06 05:56	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.786	1.91	1	08/16/06 05:56	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.898	3.70	1	08/16/06 05:56	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.674	1.91	1	08/16/06 05:56	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.786	1.91	1	08/16/06 05:56	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.12	1.91	1	08/16/06 05:56	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.561	1.91	1	08/16/06 05:56	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.46	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.674	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.786	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.01	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.898	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.786	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.01	1.91	1	08/16/06 05:56	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	72 %					1	08/16/06 05:56	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	84 %					1	08/16/06 05:56	SW846 8081A	6082560
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.2	37.9	1	08/17/06 18:07	SW846 8082	608245
PCB-1221	ND	U	ug/kg dry	5.57	37.9	1	08/17/06 18:07	SW846 8082	608245
PCB-1232	ND	U	ug/kg dry	12.5	37.9	1	08/17/06 18:07	SW846 8082	608245
PCB-1242	ND	U	ug/kg dry	15.9	37.9	1	08/17/06 18:07	SW846 8082	608245
PCB-1248	ND	U	ug/kg dry	6.60	37.9	1	08/17/06 18:07	SW846 8082	608245
PCB-1254	ND	U	ug/kg dry	15.9	37.9	1	08/17/06 18:07	SW846 8082	608245
PCB-1260	ND	U	ug/kg dry	6.27	37.9	1	08/17/06 18:07	SW846 8082	608245
Surr: Tetrachloro-meta-xylene (63-132%)	71 %					1	08/17/06 18:07	SW846 8082	608245
Surr: Decachlorobiphenyl (39-108%)	102 %					1	08/17/06 18:07	SW846 8082	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-07RE1 (MW-OU1-3(1'-2') - Soil) - cont. Sampled: 08/09/06 09:45									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.6	19.7	1	08/22/06 01:11	SW846 8151A	6083911
Surr: Dichloroacetic Acid (55-132%)	81 %					1	08/22/06 01:11	SW846 8151A	6083911
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND	U	ug/kg dry	23.2	58.1	1	08/18/06 04:11	SW846 8260B	6081975
Benzene	2.07	J	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
2-Butanone	ND	U	ug/kg dry	7.67	58.1	1	08/18/06 04:11	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.616	2.32	1	08/18/06 04:11	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.697	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.650	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.894	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.616	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.767	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.778	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.720	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.08	2.32	1	08/18/06 04:11	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.883	2.32	1	08/18/06 04:11	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.697	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	127	232 500	1	08/18/06 04:11	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.02	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	2.83	11.6	1	08/18/06 04:11	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.859	5.81	1	08/18/06 04:11	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.581	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.871	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Toluene	2.98		ug/kg dry	1.13	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.511	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	0.941	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.534	2.32	1	08/18/06 04:11	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.546	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.871	2.32	1	08/18/06 04:11	SW846 8260B	6081975
Xylenes, total	ND	U	ug/kg dry	1.72	5.81	1	08/18/06 04:11	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	116 %					1	08/18/06 04:11	SW846 8260B	60819
Surr: Dibromofluoromethane (73-124%)	105 %					1	08/18/06 04:11	SW846 8260B	60819
Surr: Toluene-d8 (80-124%)	99 %					1	08/18/06 04:11	SW846 8260B	60819
Surr: 4-Bromofluorobenzene (25-185%)	104 %					1	08/18/06 04:11	SW846 8260B	60819
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	19.5	381	1	08/16/06 18:16	SW846 8270C	60824
Acenaphthylene	ND	U	ug/kg dry	18.3	381	1	08/16/06 18:16	SW846 8270C	60824
Anthracene	ND	U	ug/kg dry	14.9	381	1	08/16/06 18:16	SW846 8270C	60824

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-07 (MW-OU1-3(1'-2') - Soil) - cont. Sampled: 08/09/06 09:45									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	17.2	381	1	08/16/06 18:16	SW846 8270C	6082459
Benzo (a) pyrene	ND	U	ug/kg dry	12.6	381	1	08/16/06 18:16	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	20.6	381	1	08/16/06 18:16	SW846 8270C	6082459
Benzo (g,h,i) perylene	ND	U	ug/kg dry	19.5	381	1	08/16/06 18:16	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	26.3	381	1	08/16/06 18:16	SW846 8270C	6082459
Chrysene	ND	U	ug/kg dry	26.3	381	1	08/16/06 18:16	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	17.2	381	1	08/16/06 18:16	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	64.1	381	1	08/16/06 18:16	SW846 8270C	6082459
Fluoranthene	ND	U	ug/kg dry	17.2	381	1	08/16/06 18:16	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	44.7	381	1	08/16/06 18:16	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	61.8	381	1	08/16/06 18:16	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	17.2	381	1	08/16/06 18:16	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	90.5	381	1	08/16/06 18:16	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	126	381	1	08/16/06 18:16	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	28.6	381	1	08/16/06 18:16	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	172	954	1	08/16/06 18:16	SW846 8270C	6082459
Phenanthrene	ND	U	ug/kg dry	13.7	381	1	08/16/06 18:16	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.0	381	1	08/16/06 18:16	SW846 8270C	6082459
Pyrene	ND	U	ug/kg dry	16.0	381	1	08/16/06 18:16	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	103 %					1	08/16/06 18:16	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	83 %					1	08/16/06 18:16	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	78 %					1	08/16/06 18:16	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	74 %					1	08/16/06 18:16	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	72 %					1	08/16/06 18:16	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	76 %					1	08/16/06 18:16	SW846 8270C	6082459

Sample ID: NPH1370-08 (MW-OU1-3(0-1') - Soil) Sampled: 08/09/06 08:45

General Chemistry Parameters									
% Dry Solids	80.0		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND		mg/kg dry	0.750	2.50	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND		mg/kg dry	1.05	2.50	1	08/23/06 13:04	SW846 9012A	6084477
Chromium, Trivalent	6.44	J	mg/kg dry		NA	1	08/22/06 10:12	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-08 (MW-OU1-3(0-1') - Soil) - cont. Sampled: 08/09/06 08:45									
Total Metals by EPA Method 6010B									
Arsenic	13.5		mg/kg dry	1.09	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Barium	161		mg/kg dry	0.241	2.41	1	08/22/06 10:12	SW846 6010B	6083660
Beryllium	0.724	J	mg/kg dry	0.241	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0965	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Chromium	6.44	J	mg/kg dry	0.362	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Copper	62.1	J	mg/kg dry	1.33	2.41	1	08/22/06 10:12	SW846 6010B	6083660
Lead	126		mg/kg dry	0.603	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Manganese	134		mg/kg dry	0.241	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Nickel	12.6		mg/kg dry	0.362	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Selenium	ND 2.75	U	mg/kg dry	1.93	2.41 2.05	1	08/22/06 10:12	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.483	1.21	1	08/22/06 10:12	SW846 6010B	6083660
Zinc	239	J	mg/kg dry	0.362	12.1	1	08/22/06 10:12	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	0.231		mg/kg dry	0.0618	0.124	1	08/21/06 13:19	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	1.08	2.05	1	08/16/06 11:18	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.964	2.05	1	08/16/06 11:18	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.844	2.05	1	08/16/06 11:18	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.964	3.98	1	08/16/06 11:18	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.723	2.05	1	08/16/06 11:18	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.844	2.05	1	08/16/06 11:18	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.21	2.05	1	08/16/06 11:18	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.603	2.05	1	08/16/06 11:18	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.57	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.723	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.844	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.08	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.964	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.844	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.08	2.05	1	08/16/06 11:18	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	76 %					1	08/16/06 11:18	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	92 %					1	08/16/06 11:18	SW846 8081A	6082560
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	19.7	41.0	1	08/17/06 18:30	SW846 8082	608245
PCB-1221	ND	U	ug/kg dry	6.03	41.0	1	08/17/06 18:30	SW846 8082	608245
PCB-1232	ND	U	ug/kg dry	13.5	41.0	1	08/17/06 18:30	SW846 8082	608245
PCB-1242	ND	U	ug/kg dry	17.2	41.0	1	08/17/06 18:30	SW846 8082	608245
PCB-1248	ND	U	ug/kg dry	7.14	41.0	1	08/17/06 18:30	SW846 8082	608245
PCB-1254	ND	U	ug/kg dry	17.2	41.0	1	08/17/06 18:30	SW846 8082	608245
PCB-1260	ND	U	ug/kg dry	6.79	41.0	1	08/17/06 18:30	SW846 8082	608245
Surr: Tetrachloro-meta-xylene (63-132%)	78 %					1	08/17/06 18:30	SW846 8082	608245
Surr: Decachlorobiphenyl (39-108%)	101 %					1	08/17/06 18:30	SW846 8082	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-08RE1 (MW-OU1-3(0-1') - Soil) - cont. Sampled: 08/09/06 08:45									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	11.4	21.2	1	08/22/06 02:13	SW846 8151A	6083911
Surr: Dichloroacetic Acid (55-132%)	79 %					1	08/22/06 02:13	SW846 8151A	6083911
Volatile Organic Compounds by EPA Method 8260B									
Acetone	146	J	ug/kg dry	25.0	62.5	1	08/18/06 04:41	SW846 8260B	6081975
Benzene	1.85	J	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
2-Butanone	12.8	J	ug/kg dry	8.25	62.5	1	08/18/06 04:41	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.662	2.50	1	08/18/06 04:41	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.750	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.700	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.962	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.662	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.825	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.838	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.775	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.16	2.50	1	08/18/06 04:41	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.950	2.50	1	08/18/06 04:41	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.750	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	136	250	1	08/18/06 04:41	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.10	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	3.05	12.5	1	08/18/06 04:41	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.925	6.25	1	08/18/06 04:41	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.625	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.938	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Toluene	3.36		ug/kg dry	1.21	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.550	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	1.01	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.575	2.50	1	08/18/06 04:41	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.588	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.938	2.50	1	08/18/06 04:41	SW846 8260B	6081975
Xylenes, total	ND	U	ug/kg dry	1.85	6.25	1	08/18/06 04:41	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	110 %					1	08/18/06 04:41	SW846 8260B	6081975
Surr: Dibromofluoromethane (73-124%)	102 %					1	08/18/06 04:41	SW846 8260B	6081975
Surr: Toluene-d8 (80-124%)	103 %					1	08/18/06 04:41	SW846 8260B	6081975
Surr: 4-Bromofluorobenzene (25-185%)	116 %					1	08/18/06 04:41	SW846 8260B	6081975
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	21.2	415	1	08/16/06 18:37	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	20.0	415	1	08/16/06 18:37	SW846 8270C	608245
Anthracene	ND	U	ug/kg dry	16.2	415	1	08/16/06 18:37	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-08 (MW-OU1-3(0-1') - Soil) - cont. Sampled: 08/09/06 08:45									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	193	J	ug/kg dry	18.7	415	1	08/16/06 18:37	SW846 8270C	6082459
Benzo (a) pyrene	233	J	ug/kg dry	13.7	415	1	08/16/06 18:37	SW846 8270C	6082459
Benzo (b) fluoranthene	179	J	ug/kg dry	22.4	415	1	08/16/06 18:37	SW846 8270C	6082459
Benzo (g,h,i) perylene	176	J	ug/kg dry	21.2	415	1	08/16/06 18:37	SW846 8270C	6082459
Benzo (k) fluoranthene	154	J	ug/kg dry	28.7	415	1	08/16/06 18:37	SW846 8270C	6082459
Chrysene	239	J	ug/kg dry	28.7	415	1	08/16/06 18:37	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	18.7	415	1	08/16/06 18:37	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	69.8	415	1	08/16/06 18:37	SW846 8270C	6082459
Fluoranthene	325	J	ug/kg dry	18.7	415	1	08/16/06 18:37	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	48.6	415	1	08/16/06 18:37	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	67.3	415	1	08/16/06 18:37	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	98.9	J	ug/kg dry	18.7	415	1	08/16/06 18:37	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	98.5	415	1	08/16/06 18:37	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	137	415	1	08/16/06 18:37	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	31.2	415	1	08/16/06 18:37	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	187	1040	1	08/16/06 18:37	SW846 8270C	6082459
Phenanthrene	179	J	ug/kg dry	15.0	415	1	08/16/06 18:37	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	86.0	415	1	08/16/06 18:37	SW846 8270C	6082459
Pyrene	350	J	ug/kg dry	17.5	415	1	08/16/06 18:37	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	102 %					1	08/16/06 18:37	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	93 %					1	08/16/06 18:37	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	77 %					1	08/16/06 18:37	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	81 %					1	08/16/06 18:37	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	67 %					1	08/16/06 18:37	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	80 %					1	08/16/06 18:37	SW846 8270C	6082459

Sample ID: NPH1370-09 (MW-OU1-2(0-1') - Soil) Sampled: 08/09/06 10:15

General Chemistry Parameters									
% Dry Solids	85.0		%	0.500	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND		mg/kg dry	0.706	2.35	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND		mg/kg dry	0.988	2.35	1	08/22/06 10:59	SW846 9012A	6083918
Chromium, Trivalent	14.9	J	mg/kg dry		NA	1	08/22/06 10:31	SW846 7196A	JCALC

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-09 (MW-OU1-2(0-1') - Soil) - cont. Sampled: 08/09/06 10:15									
Total Metals by EPA Method 6010B									
Arsenic	13.0		mg/kg dry	1.04	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Barium	92.0		mg/kg dry	0.232	2.32	1	08/22/06 10:31	SW846 6010B	6083660
Beryllium	0.602	J	mg/kg dry	0.232	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0926	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Chromium	14.9	J	mg/kg dry	0.347	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Copper	34.5	J	mg/kg dry	1.27	2.32	1	08/22/06 10:31	SW846 6010B	6083660
Lead	150		mg/kg dry	0.579	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Manganese	557		mg/kg dry	0.232	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Nickel	26.5		mg/kg dry	0.347	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.85	2.32	1	08/22/06 10:31	SW846 6010B	6083660
Silver	ND		mg/kg dry	0.463	1.16	1	08/22/06 10:31	SW846 6010B	6083660
Zinc	117	J	mg/kg dry	0.347	11.6	1	08/22/06 10:31	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	0.113	J	mg/kg dry	0.0581	0.116	1	08/21/06 13:26	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	1.05	1.98	1	08/16/06 06:54	SW846 8081A	6082560
delta-BHC	ND	U	ug/kg dry	0.930	1.98	1	08/16/06 06:54	SW846 8081A	6082560
alpha-BHC	ND	U	ug/kg dry	0.813	1.98	1	08/16/06 06:54	SW846 8081A	6082560
beta-BHC	ND	U	ug/kg dry	0.930	3.84	1	08/16/06 06:54	SW846 8081A	6082560
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.697	1.98	1	08/16/06 06:54	SW846 8081A	6082560
alpha-Chlordane	ND	U	ug/kg dry	0.813	1.98	1	08/16/06 06:54	SW846 8081A	6082560
4,4'-DDD	ND	U	ug/kg dry	1.16	1.98	1	08/16/06 06:54	SW846 8081A	6082560
4,4'-DDE	ND	U	ug/kg dry	0.581	1.98	1	08/16/06 06:54	SW846 8081A	6082560
4,4'-DDT	ND	U	ug/kg dry	1.51	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Dieldrin	ND	U	ug/kg dry	0.697	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Endosulfan I	ND	U	ug/kg dry	0.813	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Endosulfan II	ND	U	ug/kg dry	1.05	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Endosulfan sulfate	ND	U	ug/kg dry	0.930	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Endrin	ND	U	ug/kg dry	0.813	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Heptachlor	ND	U	ug/kg dry	1.05	1.98	1	08/16/06 06:54	SW846 8081A	6082560
Surr: Tetrachloro-meta-xylene (63-132%)	78 %					1	08/16/06 06:54	SW846 8081A	6082560
Surr: Decachlorobiphenyl (39-108%)	86 %					1	08/16/06 06:54	SW846 8081A	6082560
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.6	38.8	1	08/17/06 18:52	SW846 8082	608245
PCB-1221	ND	U	ug/kg dry	5.71	38.8	1	08/17/06 18:52	SW846 8082	608245
PCB-1232	ND	U	ug/kg dry	12.8	38.8	1	08/17/06 18:52	SW846 8082	608245
PCB-1242	ND	U	ug/kg dry	16.3	38.8	1	08/17/06 18:52	SW846 8082	608245
PCB-1248	ND	U	ug/kg dry	6.75	38.8	1	08/17/06 18:52	SW846 8082	608245
PCB-1254	ND	U	ug/kg dry	16.3	38.8	1	08/17/06 18:52	SW846 8082	608245
PCB-1260	ND	U	ug/kg dry	6.42	38.8	1	08/17/06 18:52	SW846 8082	608245
Surr: Tetrachloro-meta-xylene (63-132%)	76 %					1	08/17/06 18:52	SW846 8082	608245
Surr: Decachlorobiphenyl (39-108%)	100 %					1	08/17/06 18:52	SW846 8082	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-09RE1 (MW-OU1-2(0-1') - Soil) - cont. Sampled: 08/09/06 10:15									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.7	20.0	1	08/22/06 02:44	SW846 8151A	6083911
Surr: Dichloroacetic Acid (55-132%)	51 %	ZX				1	08/22/06 02:44	SW846 8151A	6083911
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND	U	ug/kg dry	23.5	58.8	1	08/18/06 05:12	SW846 8260B	6081975
Benzene	2.82		ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
2-Butanone	ND	U	ug/kg dry	7.76	58.8	1	08/18/06 05:12	SW846 8260B	6081975
tert-Butylbenzene	ND	U	ug/kg dry	0.624	2.35	1	08/18/06 05:12	SW846 8260B	6081975
n-Butylbenzene	ND	U	ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
sec-Butylbenzene	ND	U	ug/kg dry	0.706	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Carbon Tetrachloride	ND	U	ug/kg dry	0.659	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Chlorobenzene	ND	U	ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Chloroform	ND	U	ug/kg dry	0.906	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.624	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.776	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,2-Dichloroethane	ND	U	ug/kg dry	0.788	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,1-Dichloroethane	ND	U	ug/kg dry	0.729	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,1-Dichloroethene	ND	U	ug/kg dry	1.09	2.35	1	08/18/06 05:12	SW846 8260B	6081975
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.894	2.35	1	08/18/06 05:12	SW846 8260B	6081975
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.706	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,4-Dioxane	ND	U	ug/kg dry	128	235	1	08/18/06 05:12	SW846 8260B	6081975
Ethylbenzene	ND	U	ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Isopropylbenzene	ND	U	ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.04	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Methylene Chloride	ND	U	ug/kg dry	2.87	11.8	1	08/18/06 05:12	SW846 8260B	6081975
Naphthalene	ND	U	ug/kg dry	0.871	5.88	1	08/18/06 05:12	SW846 8260B	6081975
n-Propylbenzene	ND	U	ug/kg dry	0.588	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Tetrachloroethene	ND	U	ug/kg dry	0.882	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Toluene	4.81		ug/kg dry	1.14	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.518	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Trichloroethene	ND	U	ug/kg dry	0.953	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.541	2.35	1	08/18/06 05:12	SW846 8260B	6081975
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.553	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Vinyl chloride	ND	U	ug/kg dry	0.882	2.35	1	08/18/06 05:12	SW846 8260B	6081975
Xylenes, total	2.72	J	ug/kg dry	1.74	5.88	1	08/18/06 05:12	SW846 8260B	6081975
Surr: 1,2-Dichloroethane-d4 (72-125%)	112 %					1	08/18/06 05:12	SW846 8260B	6081975
Surr: Dibromofluoromethane (73-124%)	102 %					1	08/18/06 05:12	SW846 8260B	6081975
Surr: Toluene-d8 (80-124%)	99 %					1	08/18/06 05:12	SW846 8260B	6081975
Surr: 4-Bromofluorobenzene (25-185%)	103 %					1	08/18/06 05:12	SW846 8260B	6081975
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	19.6	384	1	08/16/06 18:59	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	18.5	384	1	08/16/06 18:59	SW846 8270C	608245
Anthracene	ND	U	ug/kg dry	15.0	384	1	08/16/06 18:59	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-09 (MW-OU1-2(0-1') - Soil) - cont. Sampled: 08/09/06 10:15									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	93.5	J	ug/kg dry	17.3	384	1	08/16/06 18:59	SW846 8270C	6082459
Benzo (a) pyrene	103	J	ug/kg dry	12.7	384	1	08/16/06 18:59	SW846 8270C	6082459
Benzo (b) fluoranthene	88.1	J	ug/kg dry	20.8	384	1	08/16/06 18:59	SW846 8270C	6082459
Benzo (g,h,i) perylene	88.5	J	ug/kg dry	19.6	384	1	08/16/06 18:59	SW846 8270C	6082459
Benzo (k) fluoranthene	120	J	ug/kg dry	26.5	384	1	08/16/06 18:59	SW846 8270C	6082459
Chrysene	128	J	ug/kg dry	26.5	384	1	08/16/06 18:59	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	17.3	384	1	08/16/06 18:59	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	64.6	384	1	08/16/06 18:59	SW846 8270C	6082459
Fluoranthene	167	J	ug/kg dry	17.3	384	1	08/16/06 18:59	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	45.0	384	1	08/16/06 18:59	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	62.3	384	1	08/16/06 18:59	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	63.1	J	ug/kg dry	17.3	384	1	08/16/06 18:59	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	91.2	384	1	08/16/06 18:59	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	127	384	1	08/16/06 18:59	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	28.9	384	1	08/16/06 18:59	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	173	961	1	08/16/06 18:59	SW846 8270C	6082459
Phenanthrene	75.4	J	ug/kg dry	13.8	384	1	08/16/06 18:59	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.6	384	1	08/16/06 18:59	SW846 8270C	6082459
Pyrene	166	J	ug/kg dry	16.2	384	1	08/16/06 18:59	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	87 %					1	08/16/06 18:59	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	77 %					1	08/16/06 18:59	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	60 %					1	08/16/06 18:59	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	64 %					1	08/16/06 18:59	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	53 %					1	08/16/06 18:59	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	59 %					1	08/16/06 18:59	SW846 8270C	6082459

Sample ID: NPH1370-10 (Trip Blank - Water) Sampled: 08/09/06 00:01

Volatile Organic Compounds by EPA Method 8260B

Acetone	ND	U	ug/L	5.91	50.0	1	08/22/06 18:31	SW846 8260B	6084488
Benzene	ND	U	ug/L	0.290	1.00	1	08/22/06 18:31	SW846 8260B	6084488
2-Butanone	ND	U	ug/L	5.09	50.0	1	08/22/06 18:31	SW846 8260B	6084488
tert-Butylbenzene	ND	U	ug/L	0.390	1.00	1	08/22/06 18:31	SW846 8260B	6084488
n-Butylbenzene	ND	U	ug/L	0.460	1.00	1	08/22/06 18:31	SW846 8260B	6084488
sec-Butylbenzene	ND	U	ug/L	0.380	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Carbon Tetrachloride	ND	U	ug/L	0.480	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Chlorobenzene	ND	U	ug/L	0.320	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Chloroform	ND	U	ug/L	0.380	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,2-Dichlorobenzene	ND	U	ug/L	0.370	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,3-Dichlorobenzene	ND	U	ug/L	0.360	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,4-Dichlorobenzene	ND	U	ug/L	0.460	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,2-Dichloroethane	ND	U	ug/L	0.280	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,1-Dichloroethane	ND	U	ug/L	0.320	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,1-Dichloroethene	ND	U	ug/L	0.450	1.00	1	08/22/06 18:31	SW846 8260B	6084488
trans-1,2-Dichloroethene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:31	SW846 8260B	6084488

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1370
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1370-10 (Trip Blank - Water) - cont. Sampled: 08/09/06 00:01									
Volatile Organic Compounds by EPA Method 8260B - cont.									
cis-1,2-Dichloroethene	ND	U	ug/L	0.390	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,4-Dioxane	ND	U	ug/L	79.5	200 500	1	08/22/06 18:31	SW846 8260B	6084488
Ethylbenzene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Isopropylbenzene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Methyl tert-Butyl Ether	ND	U	ug/L	0.320	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Methylene Chloride	ND	U	ug/L	1.26	5.00	1	08/22/06 18:31	SW846 8260B	6084488
Naphthalene	ND	U	ug/L	1.13	5.00	1	08/22/06 18:31	SW846 8260B	6084488
n-Propylbenzene	ND	U	ug/L	0.370	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Tetrachloroethene	ND	U	ug/L	0.390	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Toluene	ND	U	ug/L	0.280	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,1,1-Trichloroethane	ND	U	ug/L	0.400	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Trichloroethene	ND	U	ug/L	0.450	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,3,5-Trimethylbenzene	ND	U	ug/L	0.280	1.00	1	08/22/06 18:31	SW846 8260B	6084488
1,2,4-Trimethylbenzene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Vinyl chloride	ND	U	ug/L	0.430	1.00	1	08/22/06 18:31	SW846 8260B	6084488
Xylenes, total	ND	U	ug/L	0.820	3.00	1	08/22/06 18:31	SW846 8260B	6084488
Surr: 1,2-Dichloroethane-d4 (70-130%)	107 %					1	08/22/06 18:31	SW846 8260B	6084488
Surr: Dibromofluoromethane (79-122%)	102 %					1	08/22/06 18:31	SW846 8260B	6084488
Surr: Toluene-d8 (78-121%)	104 %					1	08/22/06 18:31	SW846 8260B	6084488
Surr: 4-Bromofluorobenzene (78-126%)	100 %					1	08/22/06 18:31	SW846 8260B	6084488

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-01 (SB-OU1-1(1-2) - Soil) Sampled: 08/09/06 14:45								
General Chemistry Parameters								
% Dry Solids	86.2		%	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND	U	mg/kg dry 0.696	2.32	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND	U	mg/kg dry 0.974	2.32	1	08/23/06 13:19	SW846 9012A	6083902
Chromium, Trivalent	14.8	J	mg/kg dry	NA	1	08/22/06 10:35	SW846 7196A	[CALC]

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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-01 (SB-OU1-1(1-2) - Soil) - cont. Sampled: 08/09/06 14:45									
Total Metals by EPA Method 6010B									
Arsenic	10.6		mg/kg dry	1.05	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Barium	82.4		mg/kg dry	0.233	2.33	1	08/22/06 10:35	SW846 6010B	6083660
Beryllium	0.607	J	mg/kg dry	0.233	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0934	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Chromium	14.8	J	mg/kg dry	0.350	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Copper	8.47	J	mg/kg dry	1.28	2.33	1	08/22/06 10:35	SW846 6010B	6083660
Lead	18.1	J	mg/kg dry	0.584	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Manganese	269		mg/kg dry	0.233	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Nickel	12.1		mg/kg dry	0.350	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.87	2.33	1	08/22/06 10:35	SW846 6010B	6083660
Silver	ND	U	mg/kg dry	0.467	1.17	1	08/22/06 10:35	SW846 6010B	6083660
Zinc	57.7	J	mg/kg dry	0.350	11.7	1	08/22/06 10:35	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/kg dry	0.0571	0.114	1	08/21/06 13:28	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	1.04	1.97	1	08/15/06 10:14	SW846 8081A	6082146
delta-BHC	ND	U	ug/kg dry	0.928	1.97	1	08/15/06 10:14	SW846 8081A	6082146
alpha-BHC	ND	U	ug/kg dry	0.812	1.97	1	08/15/06 10:14	SW846 8081A	6082146
beta-BHC	ND	U	ug/kg dry	0.928	3.83	1	08/15/06 10:14	SW846 8081A	6082146
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.696	1.97	1	08/15/06 10:14	SW846 8081A	6082146
alpha-Chlordane	ND	U	ug/kg dry	0.812	1.97	1	08/15/06 10:14	SW846 8081A	6082146
4,4'-DDD	ND	U	ug/kg dry	1.16	1.97	1	08/15/06 10:14	SW846 8081A	6082146
4,4'-DDE	ND	U	ug/kg dry	0.580	1.97	1	08/15/06 10:14	SW846 8081A	6082146
4,4'-DDT	ND	U	ug/kg dry	1.51	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Dieldrin	ND	U	ug/kg dry	0.696	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Endosulfan I	ND	U	ug/kg dry	0.812	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Endosulfan II	ND	U	ug/kg dry	1.04	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Endosulfan sulfate	ND	U	ug/kg dry	0.928	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Endrin	ND	U	ug/kg dry	0.812	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Heptachlor	ND	U	ug/kg dry	1.04	1.97	1	08/15/06 10:14	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	66 %					1	08/15/06 10:14	SW846 8081A	6082146
Surr: Decachlorobiphenyl (39-108%)	76 %					1	08/15/06 10:14	SW846 8081A	6082146
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.5	38.5	1	08/14/06 19:12	SW846 8082	6082146
PCB-1221	ND	U	ug/kg dry	5.67	38.5	1	08/14/06 19:12	SW846 8082	6082146
PCB-1232	ND	U	ug/kg dry	12.7	38.5	1	08/14/06 19:12	SW846 8082	6082146
PCB-1242	ND	U	ug/kg dry	16.2	38.5	1	08/14/06 19:12	SW846 8082	6082146
PCB-1248	ND	U	ug/kg dry	6.71	38.5	1	08/14/06 19:12	SW846 8082	6082146
PCB-1254	ND	U	ug/kg dry	16.2	38.5	1	08/14/06 19:12	SW846 8082	6082146
PCB-1260	ND	U	ug/kg dry	6.37	38.5	1	08/14/06 19:12	SW846 8082	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	72 %					1	08/14/06 19:12	SW846 8082	6082146
Surr: Decachlorobiphenyl (39-108%)	78 %					1	08/14/06 19:12	SW846 8082	6082146

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-01RE1 (SB-OU1-1(1-2) - Soil) - cont. Sampled: 08/09/06 14:45									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.6	19.7	1	08/22/06 03:15	SW846 8151A	6083911
Surr: Dichloroacetic Acid (55-132%)	113 %					1	08/22/06 03:15	SW846 8151A	6083911
Volatile Organic Compounds by EPA Method 8260B									
Acetone	69.0	J	ug/kg dry	23.2	58.0	1	08/12/06 03:12	SW846 8260B	6081646
Benzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
2-Butanone	ND	J	ug/kg dry	7.66	58.0	1	08/12/06 03:12	SW846 8260B	6081646
tert-Butylbenzene	ND	U	ug/kg dry	0.615	2.32	1	08/12/06 03:12	SW846 8260B	6081646
n-Butylbenzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
sec-Butylbenzene	ND	U	ug/kg dry	0.696	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Carbon Tetrachloride	ND	U	ug/kg dry	0.650	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Chlorobenzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Chloroform	ND	U	ug/kg dry	0.893	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.615	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.766	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,2-Dichloroethane	ND	U	ug/kg dry	0.777	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,1-Dichloroethane	ND	U	ug/kg dry	0.719	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,1-Dichloroethene	ND	U	ug/kg dry	1.08	2.32	1	08/12/06 03:12	SW846 8260B	6081646
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.882	2.32	1	08/12/06 03:12	SW846 8260B	6081646
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.696	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,4-Dioxane	ND	J	ug/kg dry	126	232 SW	1	08/12/06 03:12	SW846 8260B	6081646
Ethylbenzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Isopropylbenzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.02	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Methylene Chloride	ND	U	ug/kg dry	2.83	11.6	1	08/12/06 03:12	SW846 8260B	6081646
Naphthalene	ND	U	ug/kg dry	0.858	5.80	1	08/12/06 03:12	SW846 8260B	6081646
n-Propylbenzene	ND	U	ug/kg dry	0.580	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Tetrachloroethene	ND	U	ug/kg dry	0.870	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Toluene	ND	U	ug/kg dry	1.13	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.510	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Trichloroethene	ND	U	ug/kg dry	0.940	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.534	2.32	1	08/12/06 03:12	SW846 8260B	6081646
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.545	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Vinyl chloride	ND	U	ug/kg dry	0.870	2.32	1	08/12/06 03:12	SW846 8260B	6081646
Xylenes, total	ND	U	ug/kg dry	1.72	5.80	1	08/12/06 03:12	SW846 8260B	6081646
Surr: 1,2-Dichloroethane-d4 (72-125%)	107 %					1	08/12/06 03:12	SW846 8260B	6081646
Surr: Dibromofluoromethane (73-124%)	106 %					1	08/12/06 03:12	SW846 8260B	6081646
Surr: Toluene-d8 (80-124%)	108 %					1	08/12/06 03:12	SW846 8260B	6081646
Surr: 4-Bromofluorobenzene (25-185%)	111 %					1	08/12/06 03:12	SW846 8260B	6081646
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	19.5	383	1	08/16/06 19:20	SW846 8270C	6082
Acenaphthylene	ND	U	ug/kg dry	18.4	383	1	08/16/06 19:20	SW846 8270C	6082
Anthracene	ND	U	ug/kg dry	14.9	383	1	08/16/06 19:20	SW846 8270C	6082

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-01 (SB-OU1-1(1-2) - Soil) - cont. Sampled: 08/09/06 14:45									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	ND	U	ug/kg dry	17.2	383	1	08/16/06 19:20	SW846 8270C	6082459
Benzo (a) pyrene	ND	U	ug/kg dry	12.6	383	1	08/16/06 19:20	SW846 8270C	6082459
Benzo (b) fluoranthene	ND	U	ug/kg dry	20.7	383	1	08/16/06 19:20	SW846 8270C	6082459
Benzo (g,h,i) perylene	ND	U	ug/kg dry	19.5	383	1	08/16/06 19:20	SW846 8270C	6082459
Benzo (k) fluoranthene	ND	U	ug/kg dry	26.4	383	1	08/16/06 19:20	SW846 8270C	6082459
Chrysene	ND	U	ug/kg dry	26.4	383	1	08/16/06 19:20	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	17.2	383	1	08/16/06 19:20	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	64.4	383	1	08/16/06 19:20	SW846 8270C	6082459
Fluoranthene	ND	U	ug/kg dry	17.2	383	1	08/16/06 19:20	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	44.8	383	1	08/16/06 19:20	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	62.1	383	1	08/16/06 19:20	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	ND	U	ug/kg dry	17.2	383	1	08/16/06 19:20	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	90.8	383	1	08/16/06 19:20	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	126	383	1	08/16/06 19:20	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	28.7	383	1	08/16/06 19:20	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	172	957	1	08/16/06 19:20	SW846 8270C	6082459
Phenanthrene	ND	U	ug/kg dry	13.8	383	1	08/16/06 19:20	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.3	383	1	08/16/06 19:20	SW846 8270C	6082459
Pyrene	ND	U	ug/kg dry	16.1	383	1	08/16/06 19:20	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	104 %					1	08/16/06 19:20	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	89 %					1	08/16/06 19:20	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	73 %					1	08/16/06 19:20	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	75 %					1	08/16/06 19:20	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	67 %					1	08/16/06 19:20	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	73 %					1	08/16/06 19:20	SW846 8270C	6082459

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-02 (SB-OU1-1(0-1) - Soil) Sampled: 08/09/06 14:35								
General Chemistry Parameters								
% Dry Solids	86.0		%	0.500	1	08/15/06 08:57	SW-846	6082619
Chromium (VI)	ND	U	mg/kg dry	0.698	2.33	1	08/14/06 21:10 SW846 7196A	6082038
Cyanide	ND	U	mg/kg dry	0.977	2.33	1	08/23/06 13:19 SW846 9012A	6083902
Chromium, Trivalent	18.3	J	mg/kg dry	NA	1	08/22/06 10:39	SW846 7196A [CALC]	

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Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-02 (SB-OUI-1(0-1) - Soil) - cont. Sampled: 08/09/06 14:35									
Total Metals by EPA Method 6010B									
Arsenic	12.3		mg/kg dry	1.05	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Barium	76.0		mg/kg dry	0.233	2.33	1	08/22/06 10:39	SW846 6010B	6083660
Beryllium	0.721	J	mg/kg dry	0.233	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0930	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Chromium	18.3	U	mg/kg dry	0.349	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Copper	29.0	U	mg/kg dry	1.28	2.33	1	08/22/06 10:39	SW846 6010B	6083660
Lead	21.8		mg/kg dry	0.581	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Manganese	298		mg/kg dry	0.233	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Nickel	28.6		mg/kg dry	0.349	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.86	2.33	1	08/22/06 10:39	SW846 6010B	6083660
Silver	ND	U	mg/kg dry	0.465	1.16	1	08/22/06 10:39	SW846 6010B	6083660
Zinc	74.4	J	mg/kg dry	0.349	11.6	1	08/22/06 10:39	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/kg dry	0.0574	0.115	1	08/21/06 13:30	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	1.04	1.96	1	08/14/06 05:02	SW846 8081A	6082146
delta-BHC	ND	U	ug/kg dry	0.925	1.96	1	08/14/06 05:02	SW846 8081A	6082146
alpha-BHC	ND	U	ug/kg dry	0.809	1.96	1	08/14/06 05:02	SW846 8081A	6082146
beta-BHC	ND	U	ug/kg dry	0.925	3.81	1	08/14/06 05:02	SW846 8081A	6082146
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.694	1.96	1	08/14/06 05:02	SW846 8081A	6082146
alpha-Chlordane	ND	U	ug/kg dry	0.809	1.96	1	08/14/06 05:02	SW846 8081A	6082146
4,4'-DDD	ND	U	ug/kg dry	1.16	1.96	1	08/14/06 05:02	SW846 8081A	6082146
4,4'-DDE	ND	U	ug/kg dry	0.578	1.96	1	08/14/06 05:02	SW846 8081A	6082146
4,4'-DDT	ND	U	ug/kg dry	1.50	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Dieldrin	ND	U	ug/kg dry	0.694	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Endosulfan I	ND	U	ug/kg dry	0.809	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Endosulfan II	ND	U	ug/kg dry	1.04	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Endosulfan sulfate	ND	U	ug/kg dry	0.925	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Endrin	ND	U	ug/kg dry	0.809	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Heptachlor	ND	U	ug/kg dry	1.04	1.96	1	08/14/06 05:02	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	72 %					1	08/14/06 05:02	SW846 8081A	60821
Surr: Decachlorobiphenyl (39-108%)	78 %					1	08/14/06 05:02	SW846 8081A	60821
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.3	38.1	1	08/14/06 19:33	SW846 8082	60821
PCB-1221	ND	U	ug/kg dry	5.61	38.1	1	08/14/06 19:33	SW846 8082	60821
PCB-1232	ND	U	ug/kg dry	12.6	38.1	1	08/14/06 19:33	SW846 8082	60821
PCB-1242	ND	U	ug/kg dry	16.0	38.1	1	08/14/06 19:33	SW846 8082	60821
PCB-1248	ND	U	ug/kg dry	6.64	38.1	1	08/14/06 19:33	SW846 8082	60821
PCB-1254	ND	U	ug/kg dry	16.0	38.1	1	08/14/06 19:33	SW846 8082	60821
PCB-1260	ND	U	ug/kg dry	6.31	38.1	1	08/14/06 19:33	SW846 8082	60821
Surr: Tetrachloro-meta-xylene (63-132%)	66 %					1	08/14/06 19:33	SW846 8082	6082
Surr: Decachlorobiphenyl (39-108%)	79 %					1	08/14/06 19:33	SW846 8082	6082

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-02 (SB-OU1-1(0-1) - Soil) - cont. Sampled: 08/09/06 14:35									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.6	19.8	1	08/15/06 10:13	SW846 8151A	6082154
Surr: Dichloroacetic Acid (55-132%)	58 %					1	08/15/06 10:13	SW846 8151A	6082154
Volatile Organic Compounds by EPA Method 8260B									
Acetone	26.6	J	ug/kg dry	23.3	58.1	1	08/12/06 03:43	SW846 8260B	6081646
Benzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
2-Butanone	ND	U	ug/kg dry	7.67	58.1	1	08/12/06 03:43	SW846 8260B	6081646
tert-Butylbenzene	ND	U	ug/kg dry	0.616	2.33	1	08/12/06 03:43	SW846 8260B	6081646
n-Butylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
sec-Butylbenzene	ND	U	ug/kg dry	0.698	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Carbon Tetrachloride	ND	U	ug/kg dry	0.651	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Chlorobenzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Chloroform	ND	U	ug/kg dry	0.895	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.616	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.767	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,2-Dichloroethane	ND	U	ug/kg dry	0.779	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,1-Dichloroethane	ND	U	ug/kg dry	0.721	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,1-Dichloroethene	ND	U	ug/kg dry	1.08	2.33	1	08/12/06 03:43	SW846 8260B	6081646
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.884	2.33	1	08/12/06 03:43	SW846 8260B	6081646
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.698	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,4-Dioxane	ND	U	ug/kg dry	127	233	1	08/12/06 03:43	SW846 8260B	6081646
Ethylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Isopropylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.02	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Methylene Chloride	3.10	J	ug/kg dry	2.84	11.6	1	08/12/06 03:43	SW846 8260B	6081646
Naphthalene	ND	U	ug/kg dry	0.860	5.81	1	08/12/06 03:43	SW846 8260B	6081646
n-Propylbenzene	ND	U	ug/kg dry	0.581	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Tetrachloroethene	ND	U	ug/kg dry	0.872	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Toluene	ND	U	ug/kg dry	1.13	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.512	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Trichloroethene	ND	U	ug/kg dry	0.942	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.535	2.33	1	08/12/06 03:43	SW846 8260B	6081646
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.547	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Vinyl chloride	ND	U	ug/kg dry	0.872	2.33	1	08/12/06 03:43	SW846 8260B	6081646
Xylenes, total	ND	U	ug/kg dry	1.72	5.81	1	08/12/06 03:43	SW846 8260B	6081646
Surr: 1,2-Dichloroethane-d4 (72-125%)	107 %					1	08/12/06 03:43	SW846 8260B	6081646
Surr: Dibromofluoromethane (73-124%)	107 %					1	08/12/06 03:43	SW846 8260B	6081646
Surr: Toluene-d8 (80-124%)	109 %					1	08/12/06 03:43	SW846 8260B	6081646
Surr: 4-Bromofluorobenzene (25-185%)	109 %					1	08/12/06 03:43	SW846 8260B	6081646
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	19.4	379	1	08/16/06 19:41	SW846 8270C	6082
Acenaphthylene	46.0	J	ug/kg dry	18.2	379	1	08/16/06 19:41	SW846 8270C	6082
Anthracene	93.1	J	ug/kg dry	14.8	379	1	08/16/06 19:41	SW846 8270C	6082

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-02 (SB-OU1-1(0-1) - Soil) - cont. Sampled: 08/09/06 14:35									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	386		ug/kg dry	17.1	379	1	08/16/06 19:41	SW846 8270C	6082459
Benzo (a) pyrene	421		ug/kg dry	12.5	379	1	08/16/06 19:41	SW846 8270C	6082459
Benzo (b) fluoranthene	441		ug/kg dry	20.5	379	1	08/16/06 19:41	SW846 8270C	6082459
Benzo (g,h,i) perylene	305	J	ug/kg dry	19.4	379	1	08/16/06 19:41	SW846 8270C	6082459
Benzo (k) fluoranthene	314	J	ug/kg dry	26.2	379	1	08/16/06 19:41	SW846 8270C	6082459
Chrysene	467		ug/kg dry	26.2	379	1	08/16/06 19:41	SW846 8270C	6082459
Dibenz (a,h) anthracene	111	J	ug/kg dry	17.1	379	1	08/16/06 19:41	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	63.8	379	1	08/16/06 19:41	SW846 8270C	6082459
Fluoranthene	780		ug/kg dry	17.1	379	1	08/16/06 19:41	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	44.4	379	1	08/16/06 19:41	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	61.5	379	1	08/16/06 19:41	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	239	J	ug/kg dry	17.1	379	1	08/16/06 19:41	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	90.0	379	1	08/16/06 19:41	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	125	379	1	08/16/06 19:41	SW846 8270C	6082459
Naphthalene	51.3	J	ug/kg dry	28.5	379	1	08/16/06 19:41	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	171	949	1	08/16/06 19:41	SW846 8270C	6082459
Phenanthrene	481		ug/kg dry	13.7	379	1	08/16/06 19:41	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	78.6	379	1	08/16/06 19:41	SW846 8270C	6082459
Pyrene	696		ug/kg dry	16.0	379	1	08/16/06 19:41	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	94 %					1	08/16/06 19:41	SW846 8270C	608245
Surr: 2,4,6-Tribromophenol (21-125%)	86 %					1	08/16/06 19:41	SW846 8270C	608245
Surr: Phenol-d5 (33-109%)	79 %					1	08/16/06 19:41	SW846 8270C	608245
Surr: 2-Fluorobiphenyl (35-106%)	80 %					1	08/16/06 19:41	SW846 8270C	608245
Surr: 2-Fluorophenol (26-105%)	71 %					1	08/16/06 19:41	SW846 8270C	608245
Surr: Nitrobenzene-d5 (10-153%)	80 %					1	08/16/06 19:41	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-03 (MW-OU1-1(0-1) - Soil) Sampled: 08/09/06 13:15								
General Chemistry Parameters								
% Dry Solids	84.4		%	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND	U	mg/kg dry 0.711	2.37	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND	U	mg/kg dry 0.995	2.37	1	08/23/06 13:19	SW846 9012A	6083902
Chromium, Trivalent	50.5	J	mg/kg dry	NA	1	08/22/06 10:52	SW846 7196A [CALC]	

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Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-03 (MW-OU1-1(0-1) - Soil) - cont. Sampled: 08/09/06 13:15									
Total Metals by EPA Method 6010B									
Arsenic	26.5		mg/kg dry	1.07	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Barium	167		mg/kg dry	0.239	2.39	1	08/22/06 10:52	SW846 6010B	6083660
Beryllium	0.621	J	mg/kg dry	0.239	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Cadmium	0.669	J	mg/kg dry	0.0956	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Chromium	50.5	J	mg/kg dry	0.358	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Copper	92.6	J	mg/kg dry	1.31	2.39	1	08/22/06 10:52	SW846 6010B	6083660
Lead	774		mg/kg dry	0.597	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Manganese	756		mg/kg dry	0.239	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Nickel	27.7		mg/kg dry	0.358	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Selenium	2.39		mg/kg dry	1.91	2.39	1	08/22/06 10:52	SW846 6010B	6083660
Silver	ND	U	mg/kg dry	0.478	1.19	1	08/22/06 10:52	SW846 6010B	6083660
Zinc	487	J	mg/kg dry	0.358	11.9	1	08/22/06 10:52	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	1.27		mg/kg dry	0.179	0.357	3	08/21/06 13:46	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	3.66	6.91	1	08/15/06 10:43	SW846 8081A	6082146
delta-BHC	ND	U	ug/kg dry	3.25	6.91	1	08/15/06 10:43	SW846 8081A	6082146
alpha-BHC	ND	U	ug/kg dry	2.84	6.91	1	08/15/06 10:43	SW846 8081A	6082146
beta-BHC	ND	U	ug/kg dry	3.25	13.4	1	08/15/06 10:43	SW846 8081A	6082146
gamma-BHC (Lindane)	ND	U	ug/kg dry	2.44	6.91	1	08/15/06 10:43	SW846 8081A	6082146
alpha-Chlordane	ND	U	ug/kg dry	2.84	6.91	1	08/15/06 10:43	SW846 8081A	6082146
4,4'-DDD	ND 6.77	R10, J	ug/kg dry	4.47	6.91	1	08/15/06 10:43	SW846 8081A	6082146
4,4'-DDE	ND	U	ug/kg dry	2.03	6.91	1	08/15/06 10:43	SW846 8081A	6082146
4,4'-DDT	8.12	R10 J	ug/kg dry	5.28	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Dieldrin	ND	U	ug/kg dry	2.44	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Endosulfan I	ND	U	ug/kg dry	2.84	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Endosulfan II	ND	U	ug/kg dry	3.66	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Endosulfan sulfate	ND	U	ug/kg dry	3.25	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Endrin	ND	U	ug/kg dry	2.84	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Heptachlor	ND	U	ug/kg dry	3.66	6.91	1	08/15/06 10:43	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	82 %					1	08/15/06 10:43	SW846 8081A	60821
Surr: Decachlorobiphenyl (39-108%)	154 %	Z5				1	08/15/06 10:43	SW846 8081A	60821
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	18.8	39.2	1	08/14/06 19:53	SW846 8082	60821
PCB-1221	ND	U	ug/kg dry	5.76	39.2	1	08/14/06 19:53	SW846 8082	60821
PCB-1232	ND	U	ug/kg dry	12.9	39.2	1	08/14/06 19:53	SW846 8082	60821
PCB-1242	ND	U	ug/kg dry	16.5	39.2	1	08/14/06 19:53	SW846 8082	60821
PCB-1248	ND	U	ug/kg dry	6.82	39.2	1	08/14/06 19:53	SW846 8082	60821
PCB-1254	ND	U	ug/kg dry	16.5	39.2	1	08/14/06 19:53	SW846 8082	60821
PCB-1260	ND	U	ug/kg dry	6.48	39.2	1	08/14/06 19:53	SW846 8082	60821
Surr: Tetrachloro-meta-xylene (63-132%)	80 %					1	08/14/06 19:53	SW846 8082	6082
Surr: Decachlorobiphenyl (39-108%)	81 %					1	08/14/06 19:53	SW846 8082	6082

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-03RE1 (MW-OU1-1(0-1) - Soil) - cont. Sampled: 08/09/06 13:15									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	10.8	20.1	1	08/19/06 17:53	SW846 8151A	6083033
Surr: Dichloroacetic Acid (55-132%)	92 %					1	08/19/06 17:53	SW846 8151A	6083033
Volatile Organic Compounds by EPA Method 8260B									
Acetone	159	J	ug/kg dry	23.7	59.2	1	08/15/06 16:17	SW846 8260B	6081644
Benzene	2.22	J	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
2-Butanone	10.0	J	ug/kg dry	7.82	59.2	1	08/15/06 16:17	SW846 8260B	6081644
tert-Butylbenzene	ND	U	ug/kg dry	0.628	2.37	1	08/15/06 16:17	SW846 8260B	6081644
n-Butylbenzene	ND	U	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
sec-Butylbenzene	ND	U	ug/kg dry	0.711	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Carbon Tetrachloride	ND	U	ug/kg dry	0.664	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Chlorobenzene	ND	U	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Chloroform	ND	U	ug/kg dry	0.912	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.628	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.782	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,2-Dichloroethane	ND	U	ug/kg dry	0.794	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,1-Dichloroethane	ND	U	ug/kg dry	0.735	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,1-Dichloroethene	ND	U	ug/kg dry	1.10	2.37	1	08/15/06 16:17	SW846 8260B	6081644
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.900	2.37	1	08/15/06 16:17	SW846 8260B	6081644
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.711	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,4-Dioxane	ND	U	ug/kg dry	129	237 500	1	08/15/06 16:17	SW846 8260B	6081644
Ethylbenzene	ND	U	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Isopropylbenzene	ND	U	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.04	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Methylene Chloride	ND	U	ug/kg dry	2.89	11.8	1	08/15/06 16:17	SW846 8260B	6081644
Naphthalene	ND	U	ug/kg dry	0.877	5.92	1	08/15/06 16:17	SW846 8260B	6081644
n-Propylbenzene	ND	U	ug/kg dry	0.592	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Tetrachloroethene	ND	U	ug/kg dry	0.889	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Toluene	1.72	J	ug/kg dry	1.15	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.521	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Trichloroethene	ND	U	ug/kg dry	0.960	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.545	2.37	1	08/15/06 16:17	SW846 8260B	6081644
1,2,4-Trimethylbenzene	1.16	J	ug/kg dry	0.557	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Vinyl chloride	ND	U	ug/kg dry	0.889	2.37	1	08/15/06 16:17	SW846 8260B	6081644
Xylenes, total	ND	U	ug/kg dry	1.75	5.92	1	08/15/06 16:17	SW846 8260B	6081644
Surr: 1,2-Dichloroethane-d4 (72-125%)	106 %					1	08/15/06 16:17	SW846 8260B	6081644
Surr: Dibromofluoromethane (73-124%)	100 %					1	08/15/06 16:17	SW846 8260B	6081644
Surr: Toluene-d8 (80-124%)	119 %					1	08/15/06 16:17	SW846 8260B	6081644
Surr: 4-Bromofluorobenzene (25-185%)	135 %					1	08/15/06 16:17	SW846 8260B	6081644
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	70.2	J	ug/kg dry	19.9	390	1	08/16/06 20:03	SW846 8270C	6082
Acenaphthylene	146	J	ug/kg dry	18.7	390	1	08/16/06 20:03	SW846 8270C	6082
Anthracene	251	J	ug/kg dry	15.2	390	1	08/16/06 20:03	SW846 8270C	6082

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Work Order: NPH1419
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Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-03 (MW-OUI-1(0-1) - Soil) - cont. Sampled: 08/09/06 13:15									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	1140		ug/kg dry	17.6	390	1	08/16/06 20:03	SW846 8270C	6082459
Benzo (a) pyrene	1160		ug/kg dry	12.9	390	1	08/16/06 20:03	SW846 8270C	6082459
Benzo (b) fluoranthene	1030		ug/kg dry	21.1	390	1	08/16/06 20:03	SW846 8270C	6082459
Benzo (g,h,i) perylene	827		ug/kg dry	19.9	390	1	08/16/06 20:03	SW846 8270C	6082459
Benzo (k) fluoranthene	1120		ug/kg dry	26.9	390	1	08/16/06 20:03	SW846 8270C	6082459
Chrysene	1250		ug/kg dry	26.9	390	1	08/16/06 20:03	SW846 8270C	6082459
Dibenz (a,h) anthracene	279	J	ug/kg dry	17.6	390	1	08/16/06 20:03	SW846 8270C	6082459
Dibenzofuran	77.7	J	ug/kg dry	65.6	390	1	08/16/06 20:03	SW846 8270C	6082459
Fluoranthene	2230		ug/kg dry	17.6	390	1	08/16/06 20:03	SW846 8270C	6082459
Fluorene	96.8	J	ug/kg dry	45.7	390	1	08/16/06 20:03	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	63.2	390	1	08/16/06 20:03	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	677		ug/kg dry	17.6	390	1	08/16/06 20:03	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	92.5	390	1	08/16/06 20:03	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	129	390	1	08/16/06 20:03	SW846 8270C	6082459
Naphthalene	108	J	ug/kg dry	29.3	390	1	08/16/06 20:03	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	176	975	1	08/16/06 20:03	SW846 8270C	6082459
Phenanthrene	1220		ug/kg dry	14.0	390	1	08/16/06 20:03	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	80.8	390	1	08/16/06 20:03	SW846 8270C	6082459
Pyrene	1990		ug/kg dry	16.4	390	1	08/16/06 20:03	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	88 %					1	08/16/06 20:03	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	79 %					1	08/16/06 20:03	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	66 %					1	08/16/06 20:03	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	75 %					1	08/16/06 20:03	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	55 %					1	08/16/06 20:03	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	75 %					1	08/16/06 20:03	SW846 8270C	6082459

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Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-04 (MW-OU1-1(1-2) - Soil) Sampled: 08/09/06 13:20								
General Chemistry Parameters								
% Dry Solids	81.9		%	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND	U	mg/kg dry	0.733	2.44	1	08/14/06 21:10	SW846 7196A 6082038
Cyanide	ND	U	mg/kg dry	1.03	2.44	1	08/23/06 13:19	SW846 9012A 6083902
Chromium, Trivalent	19.6	J	mg/kg dry	NA	1	08/22/06 10:56	SW846 7196A	[CALC]

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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-04 (MW-OU1-1(1-2) - Soil) - cont. Sampled: 08/09/06 13:20									
Total Metals by EPA Method 6010B									
Arsenic	14.0		mg/kg dry	1.10	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Barium	115		mg/kg dry	0.244	2.44	1	08/22/06 10:56	SW846 6010B	6083660
Beryllium	0.806	J	mg/kg dry	0.244	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0977	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Chromium	19.6	J	mg/kg dry	0.366	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Copper	49.3	J	mg/kg dry	1.34	2.44	1	08/22/06 10:56	SW846 6010B	6083660
Lead	164	J	mg/kg dry	0.611	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Manganese	489		mg/kg dry	0.244	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Nickel	29.5		mg/kg dry	0.366	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.95	2.44	1	08/22/06 10:56	SW846 6010B	6083660
Silver	ND	U	mg/kg dry	0.488	1.22	1	08/22/06 10:56	SW846 6010B	6083660
Zinc	284	J	mg/kg dry	0.366	12.2	1	08/22/06 10:56	SW846 6010B	6083660

Mercury by EPA Methods 7470A/7471A

Mercury	0.663		mg/kg dry	0.0600	0.120	1	08/21/06 13:39	SW846 7471A	6083662

Organochlorine Pesticides by EPA Method 8081A

Aldrin	ND	U	ug/kg dry	1.28	2.43	1	08/14/06 06:00	SW846 8081A	6082146
delta-BHC	ND	U	ug/kg dry	1.14	2.43	1	08/14/06 06:00	SW846 8081A	6082146
alpha-BHC	ND	U	ug/kg dry	0.999	2.43	1	08/14/06 06:00	SW846 8081A	6082146
beta-BHC	ND	U	ug/kg dry	1.14	4.71	1	08/14/06 06:00	SW846 8081A	6082146
gamma-BHC (Lindane)	ND	U	ug/kg dry	0.857	2.43	1	08/14/06 06:00	SW846 8081A	6082146
alpha-Chlordane	ND	U	ug/kg dry	0.999	2.43	1	08/14/06 06:00	SW846 8081A	6082146
4,4'-DDD	ND	U	ug/kg dry	1.43	2.43	1	08/14/06 06:00	SW846 8081A	6082146
4,4'-DDE	ND	U	ug/kg dry	0.714	2.43	1	08/14/06 06:00	SW846 8081A	6082146
4,4'-DDT	ND	U	ug/kg dry	1.86	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Dieldrin	ND	U	ug/kg dry	0.857	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Endosulfan I	ND	U	ug/kg dry	0.999	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Endosulfan II	ND	U	ug/kg dry	1.28	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Endosulfan sulfate	ND	U	ug/kg dry	1.14	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Endrin	ND	U	ug/kg dry	0.999	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Heptachlor	ND	U	ug/kg dry	1.28	2.43	1	08/14/06 06:00	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	78 %					1	08/14/06 06:00	SW846 8081A	6082146
Surr: Decachlorobiphenyl (39-108%)	138 %	Z5				1	08/14/06 06:00	SW846 8081A	6082146

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	U	ug/kg dry	19.0	39.5	1	08/14/06 20:14	SW846 8082	6082146
PCB-1221	ND	U	ug/kg dry	5.82	39.5	1	08/14/06 20:14	SW846 8082	6082146
PCB-1232	ND	U	ug/kg dry	13.1	39.5	1	08/14/06 20:14	SW846 8082	6082146
PCB-1242	ND	U	ug/kg dry	16.6	39.5	1	08/14/06 20:14	SW846 8082	6082146
PCB-1248	ND	U	ug/kg dry	6.89	39.5	1	08/14/06 20:14	SW846 8082	6082146
PCB-1254	ND	U	ug/kg dry	16.6	39.5	1	08/14/06 20:14	SW846 8082	6082146
PCB-1260	ND	U	ug/kg dry	6.54	39.5	1	08/14/06 20:14	SW846 8082	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	67 %					1	08/14/06 20:14	SW846 8082	6082146
Surr: Decachlorobiphenyl (39-108%)	71 %					1	08/14/06 20:14	SW846 8082	6082146

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Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-04RE1 (MW-OU1-1(1-2) - Soil) - cont. Sampled: 08/09/06 13:20									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	11.1	20.8	1	08/19/06 18:24	SW846 8151A	6083033
Surr: Dichloroacetic Acid (55-132%)	77 %					1	08/19/06 18:24	SW846 8151A	6083033
Volatile Organic Compounds by EPA Method 8260B									
Acetone	36.1	J	ug/kg dry	24.4	61.1	1	08/12/06 04:45	SW846 8260B	6081646
Benzene	1.93	J	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
2-Butanone	ND	U	ug/kg dry	8.06	61.1	1	08/12/06 04:45	SW846 8260B	6081646
tert-Butylbenzene	ND	U	ug/kg dry	0.647	2.44	1	08/12/06 04:45	SW846 8260B	6081646
n-Butylbenzene	ND	U	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
sec-Butylbenzene	ND	U	ug/kg dry	0.733	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Carbon Tetrachloride	ND	U	ug/kg dry	0.684	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Chlorobenzene	ND	U	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Chloroform	ND	U	ug/kg dry	0.940	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.647	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.806	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,2-Dichloroethane	ND	U	ug/kg dry	0.818	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,1-Dichloroethane	ND	U	ug/kg dry	0.757	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,1-Dichloroethene	ND	U	ug/kg dry	1.14	2.44	1	08/12/06 04:45	SW846 8260B	6081646
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.928	2.44	1	08/12/06 04:45	SW846 8260B	6081646
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.733	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,4-Dioxane	ND	U	ug/kg dry	133	244-500	1	08/12/06 04:45	SW846 8260B	6081646
Ethylbenzene	ND	U	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Isopropylbenzene	ND	U	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.07	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Methylene Chloride	ND	U	ug/kg dry	2.98	12.2	1	08/12/06 04:45	SW846 8260B	6081646
Naphthalene	ND	U	ug/kg dry	0.904	6.11	1	08/12/06 04:45	SW846 8260B	6081646
n-Propylbenzene	ND	U	ug/kg dry	0.611	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Tetrachloroethene	ND	U	ug/kg dry	0.916	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Toluene	3.03		ug/kg dry	1.18	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.537	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Trichloroethene	ND	U	ug/kg dry	0.989	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.562	2.44	1	08/12/06 04:45	SW846 8260B	6081646
1,2,4-Trimethylbenzene	ND	U	ug/kg dry	0.574	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Vinyl chloride	ND	U	ug/kg dry	0.916	2.44	1	08/12/06 04:45	SW846 8260B	6081646
Xylenes, total	ND	U	ug/kg dry	1.81	6.11	1	08/12/06 04:45	SW846 8260B	6081646
Surr: 1,2-Dichloroethane-d4 (72-125%)	104 %					1	08/12/06 04:45	SW846 8260B	6081646
Surr: Dibromofluoromethane (73-124%)	107 %					1	08/12/06 04:45	SW846 8260B	6081646
Surr: Toluene-d8 (80-124%)	121 %					1	08/12/06 04:45	SW846 8260B	6081646
Surr: 4-Bromofluorobenzene (25-185%)	122 %					1	08/12/06 04:45	SW846 8260B	6081646
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	20.3	397	1	08/16/06 20:24	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	19.1	397	1	08/16/06 20:24	SW846 8270C	608245
Anthracene	77.1	J	ug/kg dry	15.5	397	1	08/16/06 20:24	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-04 (MW-OUI-1(1-2) - Soil) - cont. Sampled: 08/09/06 13:20									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	272	J	ug/kg dry	17.9	397	1	08/16/06 20:24	SW846 8270C	6082459
Benzo (a) pyrene	299	J	ug/kg dry	13.1	397	1	08/16/06 20:24	SW846 8270C	6082459
Benzo (b) fluoranthene	287	J	ug/kg dry	21.4	397	1	08/16/06 20:24	SW846 8270C	6082459
Benzo (g,h,i) perylene	238	J	ug/kg dry	20.3	397	1	08/16/06 20:24	SW846 8270C	6082459
Benzo (k) fluoranthene	184	J	ug/kg dry	27.4	397	1	08/16/06 20:24	SW846 8270C	6082459
Chrysene	315	J	ug/kg dry	27.4	397	1	08/16/06 20:24	SW846 8270C	6082459
Dibenz (a,h) anthracene	89.0	J	ug/kg dry	17.9	397	1	08/16/06 20:24	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	66.7	397	1	08/16/06 20:24	SW846 8270C	6082459
Fluoranthene	516		ug/kg dry	17.9	397	1	08/16/06 20:24	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	46.5	397	1	08/16/06 20:24	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	64.3	397	1	08/16/06 20:24	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	156	J	ug/kg dry	17.9	397	1	08/16/06 20:24	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	94.1	397	1	08/16/06 20:24	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	131	397	1	08/16/06 20:24	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	29.8	397	1	08/16/06 20:24	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	179	993	1	08/16/06 20:24	SW846 8270C	6082459
Phenanthrene	354	J	ug/kg dry	14.3	397	1	08/16/06 20:24	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	82.2	397	1	08/16/06 20:24	SW846 8270C	6082459
Pyrene	482		ug/kg dry	16.7	397	1	08/16/06 20:24	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	87 %					1	08/16/06 20:24	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	80 %					1	08/16/06 20:24	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	68 %					1	08/16/06 20:24	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	67 %					1	08/16/06 20:24	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	59 %					1	08/16/06 20:24	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	66 %					1	08/16/06 20:24	SW846 8270C	6082459

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Project Number: Exxon 3-1010
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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-05 (SB-OU1-3(0-1) - Soil) Sampled: 08/09/06 13:40								
General Chemistry Parameters								
% Dry Solids	84.9		%	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND	U	mg/kg dry 0.707	2.36	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND	U	mg/kg dry 0.989	2.36	1	08/23/06 13:19	SW846 9012A	6083902
Chromium, Trivalent	21.2	J	mg/kg dry	NA	1	08/22/06 11:00	SW846 7196A	[CALC]

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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-05 (SB-OU1-3(0-1) - Soil) - cont. Sampled: 08/09/06 13:40									
Total Metals by EPA Method 6010B									
Arsenic	8.18		mg/kg dry	1.05	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Barium	112		mg/kg dry	0.234	2.34	1	08/22/06 11:00	SW846 6010B	6083660
Beryllium	0.795	J	mg/kg dry	0.234	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0935	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Chromium	21.2	J	mg/kg dry	0.351	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Copper	29.4	J	mg/kg dry	1.29	2.34	1	08/22/06 11:00	SW846 6010B	6083660
Lead	34.2		mg/kg dry	0.584	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Manganese	252		mg/kg dry	0.234	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Nickel	29.2		mg/kg dry	0.351	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.87	2.34	1	08/22/06 11:00	SW846 6010B	6083660
Silver	ND	U	mg/kg dry	0.467	1.17	1	08/22/06 11:00	SW846 6010B	6083660
Zinc	116	J	mg/kg dry	0.351	11.7	1	08/22/06 11:00	SW846 6010B	6083660

Mercury by EPA Methods 7470A/7471A

Mercury	0.176		mg/kg dry	0.0591	0.118	1	08/21/06 13:41	SW846 7471A	6083662

Organochlorine Pesticides by EPA Method 8081A

Aldrin	ND	U	ug/kg dry	63.6	120	50	08/15/06 12:09	SW846 8081A	6082146
delta-BHC	ND	U	ug/kg dry	56.5	120	50	08/15/06 12:09	SW846 8081A	6082146
alpha-BHC	ND	U	ug/kg dry	49.5	120	50	08/15/06 12:09	SW846 8081A	6082146
beta-BHC	ND	U	ug/kg dry	212	233	50	08/15/06 12:09	SW846 8081A	6082146
gamma-BHC (Lindane)	ND	U	ug/kg dry	42.4	120	50	08/15/06 12:09	SW846 8081A	6082146
alpha-Chlordane	ND	U	ug/kg dry	49.5	120	50	08/15/06 12:09	SW846 8081A	6082146
4,4'-DDD	ND	U	ug/kg dry	70.7	120	50	08/15/06 12:09	SW846 8081A	6082146
4,4'-DDE	ND	U	ug/kg dry	35.3	120	50	08/15/06 12:09	SW846 8081A	6082146
4,4'-DDT	ND	U	ug/kg dry	91.9	120	50	08/15/06 12:09	SW846 8081A	6082146
Dieldrin	ND	U	ug/kg dry	42.4	120	50	08/15/06 12:09	SW846 8081A	6082146
Endosulfan I	ND	U	ug/kg dry	49.5	120	50	08/15/06 12:09	SW846 8081A	6082146
Endosulfan II	ND	U	ug/kg dry	63.6	120	50	08/15/06 12:09	SW846 8081A	6082146
Endosulfan sulfate	ND	U	ug/kg dry	56.5	120	50	08/15/06 12:09	SW846 8081A	6082146
Endrin	ND	U	ug/kg dry	49.5	120	50	08/15/06 12:09	SW846 8081A	6082146
Heptachlor	ND	U	ug/kg dry	63.6	120	50	08/15/06 12:09	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	*	Z3, U				50	08/15/06 12:09	SW846 8081A	6082146
Surr: Decachlorobiphenyl (39-108%)	*	U, Z3				50	08/15/06 12:09	SW846 8081A	6082146

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	U	ug/kg dry	18.8	39.1	1	08/14/06 16:58	SW846 8082	6082146
PCB-1221	ND	U	ug/kg dry	5.75	39.1	1	08/14/06 16:58	SW846 8082	6082146
PCB-1232	ND	U	ug/kg dry	12.9	39.1	1	08/14/06 16:58	SW846 8082	6082146
PCB-1242	ND	U	ug/kg dry	16.4	39.1	1	08/14/06 16:58	SW846 8082	6082146
PCB-1248	ND	U	ug/kg dry	6.81	39.1	1	08/14/06 16:58	SW846 8082	6082146
PCB-1254	ND	U	ug/kg dry	16.4	39.1	1	08/14/06 16:58	SW846 8082	6082146
PCB-1260	ND	U	ug/kg dry	6.47	39.1	1	08/14/06 16:58	SW846 8082	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	66 %					1	08/14/06 16:58	SW846 8082	6082146
Surr: Decachlorobiphenyl (39-108%)	73 %					1	08/14/06 16:58	SW846 8082	6082146

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Project Number: Exxon 3-1010
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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-05RE1 (SB-OU1-3(0-1) - Soil) - cont. Sampled: 08/09/06 13:40									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	RL1, U	ug/kg dry	214	400	20	08/23/06 09:25	SW846 8151A	6083911
Surr: Dichloroacetic Acid (55-132%)	*	Z3, U				20	08/23/06 09:25	SW846 8151A	6083911
Volatile Organic Compounds by EPA Method 8260B									
Acetone	93.4	J	ug/kg dry	23.6	58.9	1	08/15/06 17:18	SW846 8260B	6081644
Benzene	2.82	J	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
2-Butanone	ND	U	ug/kg dry	7.77	58.9	1	08/15/06 17:18	SW846 8260B	6081644
tert-Butylbenzene	ND	U	ug/kg dry	0.624	2.36	1	08/15/06 17:18	SW846 8260B	6081644
n-Butylbenzene	ND	U	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
sec-Butylbenzene	ND	U	ug/kg dry	0.707	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Carbon Tetrachloride	ND	U	ug/kg dry	0.660	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Chlorobenzene	ND	U	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Chloroform	ND	U	ug/kg dry	0.907	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.624	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.777	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,2-Dichloroethane	ND	U	ug/kg dry	0.789	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,1-Dichloroethane	ND	U	ug/kg dry	0.730	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,1-Dichloroethene	ND	U	ug/kg dry	1.10	2.36	1	08/15/06 17:18	SW846 8260B	6081644
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.895	2.36	1	08/15/06 17:18	SW846 8260B	6081644
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.707	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,4-Dioxane	ND	U	ug/kg dry	128	236.5	1	08/15/06 17:18	SW846 8260B	6081644
Ethylbenzene	ND	U	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Isopropylbenzene	ND	U	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.04	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Methylene Chloride	ND	U	ug/kg dry	2.87	11.8	1	08/15/06 17:18	SW846 8260B	6081644
Naphthalene	4.30	J	ug/kg dry	0.872	5.89	1	08/15/06 17:18	SW846 8260B	6081644
n-Propylbenzene	ND	U	ug/kg dry	0.589	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Tetrachloroethene	ND	U	ug/kg dry	0.883	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Toluene	3.39	J	ug/kg dry	1.14	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.518	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Trichloroethene	ND	U	ug/kg dry	0.954	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.542	2.36	1	08/15/06 17:18	SW846 8260B	6081644
1,2,4-Trimethylbenzene	1.33	J	ug/kg dry	0.554	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Vinyl chloride	ND	U	ug/kg dry	0.883	2.36	1	08/15/06 17:18	SW846 8260B	6081644
Xylenes, total	3.33	J	ug/kg dry	1.74	5.89	1	08/15/06 17:18	SW846 8260B	6081644
Surr: 1,2-Dichloroethane-d4 (72-125%)	102 %					1	08/15/06 17:18	SW846 8260B	6081644
Surr: Dibromofluoromethane (73-124%)	104 %					1	08/15/06 17:18	SW846 8260B	6081644
Surr: Toluene-d8 (80-124%)	125 %	Z10				1	08/15/06 17:18	SW846 8260B	6081644
Surr: 4-Bromofluorobenzene (25-185%)	128 %					1	08/15/06 17:18	SW846 8260B	6081644
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	1280		ug/kg dry	19.5	382	1	08/16/06 20:46	SW846 8270C	608245
Acenaphthylene	405		ug/kg dry	18.4	382	1	08/16/06 20:46	SW846 8270C	608245
Anthracene	3020		ug/kg dry	14.9	382	1	08/16/06 20:46	SW846 8270C	608245

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Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-05RE1 (SB-OU1-3(0-1) - Soil) - cont. Sampled: 08/09/06 13:40									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	5340		ug/kg dry	86.1	1910	5	08/17/06 14:15	SW846 8270C	6082459
Benzo (a) pyrene	4790		ug/kg dry	63.2	1910	5	08/17/06 14:15	SW846 8270C	6082459
Benzo (b) fluoranthene	3530		ug/kg dry	20.7	382	1	08/16/06 20:46	SW846 8270C	6082459
Benzo (g,h,i) perylene	2280		ug/kg dry	19.5	382	1	08/16/06 20:46	SW846 8270C	6082459
Benzo (k) fluoranthene	3990		ug/kg dry	132	1910	5	08/17/06 14:15	SW846 8270C	6082459
Chrysene	5370		ug/kg dry	132	1910	5	08/17/06 14:15	SW846 8270C	6082459
Dibenz (a,h) anthracene	1070		ug/kg dry	17.2	382	1	08/16/06 20:46	SW846 8270C	6082459
Dibenzofuran	1200		ug/kg dry	64.3	382	1	08/16/06 20:46	SW846 8270C	6082459
Fluoranthene	12500		ug/kg dry	86.1	1910	5	08/17/06 14:15	SW846 8270C	6082459
Fluorene	1600		ug/kg dry	44.8	382	1	08/16/06 20:46	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	62.0	382	1	08/16/06 20:46	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	2180		ug/kg dry	17.2	382	1	08/16/06 20:46	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	90.7	382	1	08/16/06 20:46	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	126	382	1	08/16/06 20:46	SW846 8270C	6082459
Naphthalene	643		ug/kg dry	28.7	382	1	08/16/06 20:46	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	172	957	1	08/16/06 20:46	SW846 8270C	6082459
Phenanthrene	11200		ug/kg dry	68.9	1910	5	08/17/06 14:15	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	79.2	382	1	08/16/06 20:46	SW846 8270C	6082459
Pyrene	10300		ug/kg dry	80.4	1910	5	08/17/06 14:15	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	88 %					1	08/16/06 20:46	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	85 %					1	08/16/06 20:46	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	73 %					1	08/16/06 20:46	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	79 %					1	08/16/06 20:46	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	67 %					1	08/16/06 20:46	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	77 %					1	08/16/06 20:46	SW846 8270C	6082459

Sample ID: NPH1419-06 (Trip Blank - Water) Sampled: 08/09/06 00:01

Volatile Organic Compounds by EPA Method 8260B

Acetone	ND	U	ug/L	5.91	50.0	1	08/22/06 18:56	SW846 8260B	608448
Benzene	ND	U	ug/L	0.290	1.00	1	08/22/06 18:56	SW846 8260B	608448
2-Butanone	ND	U	ug/L	5.09	50.0	1	08/22/06 18:56	SW846 8260B	608448
tert-Butylbenzene	ND	U	ug/L	0.390	1.00	1	08/22/06 18:56	SW846 8260B	608448
n-Butylbenzene	ND	U	ug/L	0.460	1.00	1	08/22/06 18:56	SW846 8260B	608448
sec-Butylbenzene	ND	U	ug/L	0.380	1.00	1	08/22/06 18:56	SW846 8260B	608448
Carbon Tetrachloride	ND	U	ug/L	0.480	1.00	1	08/22/06 18:56	SW846 8260B	608448
Chlorobenzene	ND	U	ug/L	0.320	1.00	1	08/22/06 18:56	SW846 8260B	608448
Chloroform	ND	U	ug/L	0.380	1.00	1	08/22/06 18:56	SW846 8260B	608448
1,2-Dichlorobenzene	ND	U	ug/L	0.370	1.00	1	08/22/06 18:56	SW846 8260B	608448
1,3-Dichlorobenzene	ND	U	ug/L	0.360	1.00	1	08/22/06 18:56	SW846 8260B	608448
1,4-Dichlorobenzene	ND	U	ug/L	0.460	1.00	1	08/22/06 18:56	SW846 8260B	608448
1,2-Dichloroethane	ND	U	ug/L	0.280	1.00	1	08/22/06 18:56	SW846 8260B	608448
1,1-Dichloroethane	ND	U	ug/L	0.320	1.00	1	08/22/06 18:56	SW846 8260B	608448
1,1-Dichloroethene	ND	U	ug/L	0.450	1.00	1	08/22/06 18:56	SW846 8260B	608448
trans-1,2-Dichloroethene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:56	SW846 8260B	608448

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-06 (Trip Blank - Water) - cont. Sampled: 08/09/06 00:01									
Volatile Organic Compounds by EPA Method 8260B - cont.									
cis-1,2-Dichloroethene	ND	U	ug/L	0.390	1.00	1	08/22/06 18:56	SW846 8260B	6084488
1,4-Dioxane	ND	U	ug/L	79.5	200	1	08/22/06 18:56	SW846 8260B	6084488
Ethylbenzene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Isopropylbenzene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Methyl tert-Butyl Ether	ND	U	ug/L	0.320	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Methylene Chloride	ND	U	ug/L	1.26	5.00	1	08/22/06 18:56	SW846 8260B	6084488
Naphthalene	ND	U	ug/L	1.13	5.00	1	08/22/06 18:56	SW846 8260B	6084488
n-Propylbenzene	ND	U	ug/L	0.370	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Tetrachloroethene	ND	U	ug/L	0.390	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Toluene	ND	U	ug/L	0.280	1.00	1	08/22/06 18:56	SW846 8260B	6084488
1,1,1-Trichloroethane	ND	U	ug/L	0.400	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Trichloroethene	ND	U	ug/L	0.450	1.00	1	08/22/06 18:56	SW846 8260B	6084488
1,3,5-Trimethylbenzene	ND	U	ug/L	0.280	1.00	1	08/22/06 18:56	SW846 8260B	6084488
1,2,4-Trimethylbenzene	ND	U	ug/L	0.340	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Vinyl chloride	ND	U	ug/L	0.430	1.00	1	08/22/06 18:56	SW846 8260B	6084488
Xylenes, total	ND	U	ug/L	0.820	3.00	1	08/22/06 18:56	SW846 8260B	6084488
Surr: 1,2-Dichloroethane-d4 (70-130%)	108 %					1	08/22/06 18:56	SW846 8260B	6084488
Surr: Dibromofluoromethane (79-122%)	99 %					1	08/22/06 18:56	SW846 8260B	6084488
Surr: Toluene-d8 (78-121%)	106 %					1	08/22/06 18:56	SW846 8260B	6084488
Surr: 4-Bromofluorobenzene (78-126%)	100 %					1	08/22/06 18:56	SW846 8260B	6084488

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-07 (DUP-1 - Soil) Sampled: 08/09/06 00:01								
General Chemistry Parameters								
% Dry Solids	81.7		%	0.500	1	08/22/06 10:46	SW-846	6084048
Chromium (VI)	ND	U	mg/kg dry 0.734	2.45	1	08/14/06 21:10	SW846 7196A	6082038
Cyanide	ND	U	mg/kg dry 1.03	2.45	1	08/23/06 13:19	SW846 9012A	6083902
Chromium, Trivalent	13.0	J	mg/kg dry	NA	1	08/22/06 11:04	SW846 7196A	[CALC]

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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-07 (DUP-1 - Soil) - cont. Sampled: 08/09/06 00:01									
Total Metals by EPA Method 6010B									
Arsenic	5.20		mg/kg dry	1.05	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Barium	70.3		mg/kg dry	0.234	2.34	1	08/22/06 11:04	SW846 6010B	6083660
Beryllium	0.562	J	mg/kg dry	0.234	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Cadmium	ND	U	mg/kg dry	0.0936	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Chromium	13.0		mg/kg dry	0.351	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Copper	30.2		mg/kg dry	1.29	2.34	1	08/22/06 11:04	SW846 6010B	6083660
Lead	33.9		mg/kg dry	0.585	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Manganese	155		mg/kg dry	0.234	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Nickel	20.2		mg/kg dry	0.351	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Selenium	ND	U	mg/kg dry	1.87	2.34	1	08/22/06 11:04	SW846 6010B	6083660
Silver	ND	U	mg/kg dry	0.468	1.17	1	08/22/06 11:04	SW846 6010B	6083660
Zinc	60.7		mg/kg dry	0.351	11.7	1	08/22/06 11:04	SW846 6010B	6083660
Mercury by EPA Methods 7470A/7471A									
Mercury	0.180		mg/kg dry	0.0611	0.122	1	08/21/06 13:44	SW846 7471A	6083662
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND	U	ug/kg dry	2.16	4.08	2	08/15/06 12:38	SW846 8081A	6082146
delta-BHC	ND	U	ug/kg dry	1.92	4.08	2	08/15/06 12:38	SW846 8081A	6082146
alpha-BHC	ND	U	ug/kg dry	1.68	4.08	2	08/15/06 12:38	SW846 8081A	6082146
beta-BHC	ND	U	ug/kg dry	1.92	7.93	2	08/15/06 12:38	SW846 8081A	6082146
gamma-BHC (Lindane)	ND	U	ug/kg dry	1.44	4.08	2	08/15/06 12:38	SW846 8081A	6082146
alpha-Chlordane	ND	U	ug/kg dry	1.68	4.08	2	08/15/06 12:38	SW846 8081A	6082146
4,4'-DDD	ND	U	ug/kg dry	2.40	4.08	2	08/15/06 12:38	SW846 8081A	6082146
4,4'-DDE	ND	U	ug/kg dry	1.20	4.08	2	08/15/06 12:38	SW846 8081A	6082146
4,4'-DDT	ND	U	ug/kg dry	3.12	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Dieldrin	ND	U	ug/kg dry	1.44	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Endosulfan I	ND	U	ug/kg dry	1.68	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Endosulfan II	ND	U	ug/kg dry	2.16	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Endosulfan sulfate	ND	U	ug/kg dry	1.92	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Endrin	ND	U	ug/kg dry	1.68	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Heptachlor	ND	U	ug/kg dry	2.16	4.08	2	08/15/06 12:38	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	68 %					2	08/15/06 12:38	SW846 8081A	6082146
Surr: Decachlorobiphenyl (39-108%)	100 %					2	08/15/06 12:38	SW846 8081A	6082146
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND	U	ug/kg dry	19.2	40.1	1	08/14/06 17:30	SW846 8082	6082146
PCB-1221	ND	U	ug/kg dry	5.89	40.1	1	08/14/06 17:30	SW846 8082	6082146
PCB-1232	ND	U	ug/kg dry	13.2	40.1	1	08/14/06 17:30	SW846 8082	6082146
PCB-1242	ND	U	ug/kg dry	16.8	40.1	1	08/14/06 17:30	SW846 8082	6082146
PCB-1248	ND	U	ug/kg dry	6.98	40.1	1	08/14/06 17:30	SW846 8082	6082146
PCB-1254	ND	U	ug/kg dry	16.8	40.1	1	08/14/06 17:30	SW846 8082	6082146
PCB-1260	ND	U	ug/kg dry	6.63	40.1	1	08/14/06 17:30	SW846 8082	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	92 %					1	08/14/06 17:30	SW846 8082	6082146
Surr: Decachlorobiphenyl (39-108%)	78 %					1	08/14/06 17:30	SW846 8082	6082146

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-07 (DUP-1 - Soil) - cont. Sampled: 08/09/06 00:01									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	U	ug/kg dry	11.1	20.8	1	08/15/06 11:46	SW846 8151A	6082154
Surr: Dichloroacetic Acid (55-132%)	58 %					1	08/15/06 11:46	SW846 8151A	6082154
Volatile Organic Compounds by EPA Method 8260B									
Acetone	33.5	J	ug/kg dry	24.5	61.2	1	08/12/06 05:47	SW846 8260B	6081646
Benzene	2.62		ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
2-Butanone	ND	U	ug/kg dry	8.08	61.2	1	08/12/06 05:47	SW846 8260B	6081646
tert-Butylbenzene	ND	U	ug/kg dry	0.649	2.45	1	08/12/06 05:47	SW846 8260B	6081646
n-Butylbenzene	ND	U	ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
sec-Butylbenzene	ND	U	ug/kg dry	0.734	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Carbon Tetrachloride	ND	U	ug/kg dry	0.685	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Chlorobenzene	ND	U	ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Chloroform	ND	U	ug/kg dry	0.942	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,2-Dichlorobenzene	ND	U	ug/kg dry	0.649	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,3-Dichlorobenzene	ND	U	ug/kg dry	0.808	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,4-Dichlorobenzene	ND	U	ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,2-Dichloroethane	ND	U	ug/kg dry	0.820	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,1-Dichloroethane	ND	U	ug/kg dry	0.759	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,1-Dichloroethene	ND	U	ug/kg dry	1.14	2.45	1	08/12/06 05:47	SW846 8260B	6081646
trans-1,2-Dichloroethene	ND	U	ug/kg dry	0.930	2.45	1	08/12/06 05:47	SW846 8260B	6081646
cis-1,2-Dichloroethene	ND	U	ug/kg dry	0.734	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,4-Dioxane	ND	U	ug/kg dry	133	245 SD	1	08/12/06 05:47	SW846 8260B	6081646
Ethylbenzene	3.24		ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Isopropylbenzene	ND	U	ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Methyl tert-Butyl Ether	ND	U	ug/kg dry	1.08	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Methylene Chloride	ND	U	ug/kg dry	2.99	12.2	1	08/12/06 05:47	SW846 8260B	6081646
Naphthalene	ND	U	ug/kg dry	0.906	6.12	1	08/12/06 05:47	SW846 8260B	6081646
n-Propylbenzene	ND	U	ug/kg dry	0.612	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Tetrachloroethene	ND	U	ug/kg dry	0.918	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Toluene	26.4		ug/kg dry	1.19	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,1,1-Trichloroethane	ND	U	ug/kg dry	0.539	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Trichloroethene	ND	U	ug/kg dry	0.991	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,3,5-Trimethylbenzene	ND	U	ug/kg dry	0.563	2.45	1	08/12/06 05:47	SW846 8260B	6081646
1,2,4-Trimethylbenzene	2.89		ug/kg dry	0.575	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Vinyl chloride	ND	U	ug/kg dry	0.918	2.45	1	08/12/06 05:47	SW846 8260B	6081646
Xylenes, total	18.8		ug/kg dry	1.81	6.12	1	08/12/06 05:47	SW846 8260B	6081646
Surr: 1,2-Dichloroethane-d4 (72-125%)	106 %					1	08/12/06 05:47	SW846 8260B	6081646
Surr: Dibromofluoromethane (73-124%)	108 %					1	08/12/06 05:47	SW846 8260B	6081646
Surr: Toluene-d8 (80-124%)	116 %					1	08/12/06 05:47	SW846 8260B	6081646
Surr: 4-Bromofluorobenzene (25-185%)	118 %					1	08/12/06 05:47	SW846 8260B	6081646
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/kg dry	20.7	406	1	08/16/06 21:07	SW846 8270C	608245
Acenaphthylene	ND	U	ug/kg dry	19.5	406	1	08/16/06 21:07	SW846 8270C	608245
Anthracene	45.9	J	ug/kg dry	15.9	406	1	08/16/06 21:07	SW846 8270C	608245

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH1419
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/10/06 07:50

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1419-07 (DUP-1 - Soil) - cont. Sampled: 08/09/06 00:01									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) anthracene	97.2	J	ug/kg dry	18.3	406	1	08/16/06 21:07	SW846 8270C	6082459
Benzo (a) pyrene	92.7	J	ug/kg dry	13.4	406	1	08/16/06 21:07	SW846 8270C	6082459
Benzo (b) fluoranthene	102	J	ug/kg dry	22.0	406	1	08/16/06 21:07	SW846 8270C	6082459
Benzo (g,h,i) perylene	63.4	J	ug/kg dry	20.7	406	1	08/16/06 21:07	SW846 8270C	6082459
Benzo (k) fluoranthene	75.6	J	ug/kg dry	28.0	406	1	08/16/06 21:07	SW846 8270C	6082459
Chrysene	105	J	ug/kg dry	28.0	406	1	08/16/06 21:07	SW846 8270C	6082459
Dibenz (a,h) anthracene	ND	U	ug/kg dry	18.3	406	1	08/16/06 21:07	SW846 8270C	6082459
Dibenzofuran	ND	U	ug/kg dry	68.3	406	1	08/16/06 21:07	SW846 8270C	6082459
Fluoranthene	191	J	ug/kg dry	18.3	406	1	08/16/06 21:07	SW846 8270C	6082459
Fluorene	ND	U	ug/kg dry	47.6	406	1	08/16/06 21:07	SW846 8270C	6082459
Hexachlorobenzene	ND	U	ug/kg dry	65.9	406	1	08/16/06 21:07	SW846 8270C	6082459
Indeno (1,2,3-cd) pyrene	47.2	J	ug/kg dry	18.3	406	1	08/16/06 21:07	SW846 8270C	6082459
2-Methylphenol	ND	U	ug/kg dry	96.3	406	1	08/16/06 21:07	SW846 8270C	6082459
3/4-Methylphenol	ND	U	ug/kg dry	134	406	1	08/16/06 21:07	SW846 8270C	6082459
Naphthalene	ND	U	ug/kg dry	30.5	406	1	08/16/06 21:07	SW846 8270C	6082459
Pentachlorophenol	ND	U	ug/kg dry	183	1020	1	08/16/06 21:07	SW846 8270C	6082459
Phenanthrene	173	J	ug/kg dry	14.6	406	1	08/16/06 21:07	SW846 8270C	6082459
Phenol	ND	U	ug/kg dry	84.1	406	1	08/16/06 21:07	SW846 8270C	6082459
Pyrene	159	J	ug/kg dry	17.1	406	1	08/16/06 21:07	SW846 8270C	6082459
Surr: Terphenyl-d14 (41-117%)	121 %	ZZ				1	08/16/06 21:07	SW846 8270C	6082459
Surr: 2,4,6-Tribromophenol (21-125%)	114 %					1	08/16/06 21:07	SW846 8270C	6082459
Surr: Phenol-d5 (33-109%)	95 %					1	08/16/06 21:07	SW846 8270C	6082459
Surr: 2-Fluorobiphenyl (35-106%)	95 %					1	08/16/06 21:07	SW846 8270C	6082459
Surr: 2-Fluorophenol (26-105%)	90 %					1	08/16/06 21:07	SW846 8270C	6082459
Surr: Nitrobenzene-d5 (10-153%)	92 %					1	08/16/06 21:07	SW846 8270C	6082459

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-01 (MW-OU1-1 Total - Water) Sampled: 08/15/06 10:30									
General Chemistry Parameters									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/16/06 19:53	SW846 7196A	6083240
Cyanide	ND		mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
Chromium, Trivalent	ND		mg/L		NA	1	08/23/06 11:43	SW846 7196A	[CALC]

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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-01 (MW-OU1-1 Total - Water) - cont. Sampled: 08/15/06 10:30									
Total Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 11:43	SW846 6010B	6083369
Barium	0.0473	J	mg/L	0.00100	0.0100	1	08/23/06 11:43	SW846 6010B	6083369
Beryllium	ND 0.00110	JU	mg/L	0.00100	0.00400	1	08/23/06 11:43	SW846 6010B	6083369
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 11:43	SW846 6010B	6083369
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 11:43	SW846 6010B	6083369
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 11:43	SW846 6010B	6083369
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 11:43	SW846 6010B	6083369
Manganese	0.222		mg/L	0.00100	0.0150	1	08/23/06 11:43	SW846 6010B	6083369
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 11:43	SW846 6010B	6083369
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 11:43	SW846 6010B	6083369
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 11:43	SW846 6010B	6083369
Zinc	ND 0.00750	JU	mg/L	0.00170	0.0500	1	08/23/06 11:43	SW846 6010B	6083369
Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 14:43	SW846 7470A	6083387
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 12:42	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	80 %					1	08/20/06 12:42	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	70 %					1	08/20/06 12:42	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 19:46	SW846 8082	6083564
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 19:46	SW846 8082	6083564
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 19:46	SW846 8082	6083564
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 19:46	SW846 8082	6083564
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 19:46	SW846 8082	6083564
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 19:46	SW846 8082	6083564
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 19:46	SW846 8082	6083564
Surr: Tetrachloro-meta-xylene (44-131%)	68 %					1	08/24/06 19:46	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	92 %					1	08/24/06 19:46	SW846 8082	608356

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-01RE1 (MW-OU1-1 Total - Water) - cont. Sampled: 08/15/06 10:30									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	R	ug/L	0.0205	0.103	1	08/23/06 20:56	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/23/06 20:56	SW846 8151A	6083584
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/26/06 00:46	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/26/06 00:46	SW846 8260B	6083837
2-Butanone	ND		ug/L	5.09	50.0	1	08/26/06 00:46	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/26/06 00:46	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/26/06 00:46	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 00:46	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/26/06 00:46	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,4-Dioxane	ND		ug/L	79.5	200	1	08/26/06 00:46	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/26/06 00:46	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/26/06 00:46	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/26/06 00:46	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/26/06 00:46	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	114 %					1	08/26/06 00:46	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	113 %					1	08/26/06 00:46	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	98 %					1	08/26/06 00:46	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	106 %					1	08/26/06 00:46	SW846 8260B	6083837
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.60	10.0	1	08/18/06 16:53	SW846 8270C	608332
Acenaphthylene	ND		ug/L	1.50	10.0	1	08/18/06 16:53	SW846 8270C	608332
Anthracene	ND		ug/L	0.900	10.0	1	08/18/06 16:53	SW846 8270C	608332
Benzo (a) anthracene	ND		ug/L	1.10	10.0	1	08/18/06 16:53	SW846 8270C	608332

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-01 (MW-OU1-1 Total - Water) - cont. Sampled: 08/15/06 10:30									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) pyrene	ND		ug/L	0.900	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Benzo (b) fluoranthene	ND		ug/L	1.70	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Benzo (g,h,i) perylene	ND		ug/L	0.800	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Benzo (k) fluoranthene	ND		ug/L	1.50	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Chrysene	ND		ug/L	1.00	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Dibenz (a,h) anthracene	ND		ug/L	1.00	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Dibenzofuran	ND		ug/L	2.50	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Fluoranthene	ND		ug/L	1.20	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Fluorene	ND		ug/L	1.20	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Hexachlorobenzene	ND		ug/L	2.40	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.00	10.0	1	08/18/06 16:53	SW846 8270C	6083327
2-Methylphenol	ND		ug/L	2.80	10.0	1	08/18/06 16:53	SW846 8270C	6083327
3/4-Methylphenol	ND		ug/L	3.10	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Naphthalene	ND		ug/L	1.50	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Pentachlorophenol	ND		ug/L	3.00	25.0	1	08/18/06 16:53	SW846 8270C	6083327
Phenanthrene	ND		ug/L	1.20	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Phenol	ND		ug/L	1.80	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Pyrene	ND		ug/L	1.10	10.0	1	08/18/06 16:53	SW846 8270C	6083327
Surr: Terphenyl-d14 (31-111%)	92 %					1	08/18/06 16:53	SW846 8270C	6083327
Surr: 2,4,6-Tribromophenol (32-118%)	94 %					1	08/18/06 16:53	SW846 8270C	6083327
Surr: Phenol-d5 (10-48%)	28 %					1	08/18/06 16:53	SW846 8270C	6083327
Surr: 2-Fluorobiphenyl (33-101%)	80 %					1	08/18/06 16:53	SW846 8270C	6083327
Surr: 2-Fluorophenol (10-64%)	41 %					1	08/18/06 16:53	SW846 8270C	6083327
Surr: Nitrobenzene-d5 (31-112%)	80 %					1	08/18/06 16:53	SW846 8270C	6083327

Sample ID: NPH2199-02 (Trip Blank - Water) Sampled: 08/15/06 00:01

Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/25/06 21:23	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 21:23	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/25/06 21:23	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 21:23	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 21:23	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Chloroform	0.420	J	ug/L	0.380	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 21:23	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 21:23	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 21:23	SW846 8260B	6083837

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-02 (Trip Blank - Water) - cont. Sampled: 08/15/06 00:01									
Volatile Organic Compounds by EPA Method 8260B - cont.									
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/25/06 21:23	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 21:23	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 21:23	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 21:23	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 21:23	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	115 %					1	08/25/06 21:23	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	114 %					1	08/25/06 21:23	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	98 %					1	08/25/06 21:23	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	102 %					1	08/25/06 21:23	SW846 8260B	6083837

Sample ID: NPH2199-03 (Trip Blank - Water) Sampled: 08/15/06

Volatile Organic Compounds by EPA Method 8260B

Acetone	ND		ug/L	5.91	50.0	1	08/25/06 21:49	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 21:49	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/25/06 21:49	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 21:49	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 21:49	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 21:49	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 21:49	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/25/06 21:49	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 21:49	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 21:49	SW846 8260B	6083837

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-03 (Trip Blank - Water) - cont. Sampled: 08/15/06									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 21:49	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 21:49	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 21:49	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	115 %					1	08/25/06 21:49	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	110 %					1	08/25/06 21:49	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	98 %					1	08/25/06 21:49	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	113 %					1	08/25/06 21:49	SW846 8260B	6083837

Sample ID: NPH2199-04 (Trip Blank - Water) Sampled: 08/15/06

Volatile Organic Compounds by EPA Method 8260B

Acetone	ND		ug/L	5.91	50.0	1	08/25/06 22:14	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 22:14	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/25/06 22:14	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 22:14	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 22:14	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 22:14	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 22:14	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/25/06 22:14	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 22:14	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 22:14	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 22:14	SW846 8260B	6083837

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-04 (Trip Blank - Water) - cont. Sampled: 08/15/06									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 22:14	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 22:14	SW846 8260B	6083837
<i>Surr: 1,2-Dichloroethane-d4 (70-130%)</i>	<i>115 %</i>					<i>1</i>	<i>08/25/06 22:14</i>	<i>SW846 8260B</i>	<i>6083837</i>
<i>Surr: Dibromofluoromethane (79-122%)</i>	<i>113 %</i>					<i>1</i>	<i>08/25/06 22:14</i>	<i>SW846 8260B</i>	<i>6083837</i>
<i>Surr: Toluene-d8 (78-121%)</i>	<i>99 %</i>					<i>1</i>	<i>08/25/06 22:14</i>	<i>SW846 8260B</i>	<i>6083837</i>
<i>Surr: 4-Bromofluorobenzene (78-126%)</i>	<i>104 %</i>					<i>1</i>	<i>08/25/06 22:14</i>	<i>SW846 8260B</i>	<i>6083837</i>

Sample ID: NPH2199-05 (MW-OU1-2 Total - Water) Sampled: 08/15/06 10:10

General Chemistry Parameters

Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/16/06 19:53	SW846 7196A	6083240
Cyanide	ND		mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
Chromium, Trivalent	ND		mg/L		NA	1	08/23/06 11:58	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-05 (MW-OU1-2 Total - Water) - cont. Sampled: 08/15/06 10:10									
Total Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 11:58	SW846 6010B	6083369
Barium	0.0913		mg/L	0.00100	0.0100	1	08/23/06 11:58	SW846 6010B	6083369
Beryllium	ND 0.00140	JK	mg/L	0.00100	0.00400	1	08/23/06 11:58	SW846 6010B	6083369
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 11:58	SW846 6010B	6083369
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 11:58	SW846 6010B	6083369
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 11:58	SW846 6010B	6083369
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 11:58	SW846 6010B	6083369
Manganese	0.0894		mg/L	0.00100	0.0150	1	08/23/06 11:58	SW846 6010B	6083369
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 11:58	SW846 6010B	6083369
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 11:58	SW846 6010B	6083369
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 11:58	SW846 6010B	6083369
Zinc	ND 0.00790	JK	mg/L	0.00170	0.0500	1	08/23/06 11:58	SW846 6010B	6083369
Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 14:49	SW846 7470A	6083387
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 14:08	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	94 %					1	08/20/06 14:08	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	79 %					1	08/20/06 14:08	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 20:09	SW846 8082	608356
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 20:09	SW846 8082	608356
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 20:09	SW846 8082	608356
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 20:09	SW846 8082	608356
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 20:09	SW846 8082	608356
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 20:09	SW846 8082	608356
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 20:09	SW846 8082	608356
Surr: Tetrachloro-meta-xylene (44-131%)	76 %					1	08/24/06 20:09	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	96 %					1	08/24/06 20:09	SW846 8082	608356

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-05RE1 (MW-OU1-2 Total - Water) - cont. Sampled: 08/15/06 10:10									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	R	ug/L	0.0286	0.143	1	08/23/06 21:27	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/23/06 21:27	SW846 8151A	6083584
Volatile Organic Compounds by EPA Method 8260B									
Acetone	15.4	J	ug/L	5.91	50.0	1	08/26/06 01:11	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/26/06 01:11	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/26/06 01:11	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/26/06 01:11	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/26/06 01:11	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 01:11	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/26/06 01:11	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/26/06 01:11	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/26/06 01:11	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/26/06 01:11	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/26/06 01:11	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/26/06 01:11	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	114 %					1	08/26/06 01:11	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	110 %					1	08/26/06 01:11	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	98 %					1	08/26/06 01:11	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	104 %					1	08/26/06 01:11	SW846 8260B	6083837
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	2.13	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Acenaphthylene	ND		ug/L	2.00	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Anthracene	ND		ug/L	1.20	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Benzo (a) anthracene	ND		ug/L	1.47	13.3	1	08/18/06 17:15	SW846 8270C	6083327

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-05 (MW-OU1-2 Total - Water) - cont. Sampled: 08/15/06 10:10									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) pyrene	ND		ug/L	1.20	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Benzo (b) fluoranthene	ND		ug/L	2.27	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Benzo (g,h,i) perylene	ND		ug/L	1.07	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Benzo (k) fluoranthene	ND		ug/L	2.00	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Chrysene	ND		ug/L	1.33	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Dibenz (a,h) anthracene	ND		ug/L	1.33	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Dibenzofuran	ND		ug/L	3.33	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Fluoranthene	ND		ug/L	1.60	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Fluorene	ND		ug/L	1.60	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Hexachlorobenzene	ND		ug/L	3.20	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.33	13.3	1	08/18/06 17:15	SW846 8270C	6083327
2-Methylphenol	ND		ug/L	3.73	13.3	1	08/18/06 17:15	SW846 8270C	6083327
3/4-Methylphenol	ND		ug/L	4.13	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Naphthalene	ND		ug/L	2.00	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Pentachlorophenol	ND		ug/L	4.00	33.3	1	08/18/06 17:15	SW846 8270C	6083327
Phenanthrene	ND		ug/L	1.60	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Phenol	ND		ug/L	2.40	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Pyrene	ND		ug/L	1.47	13.3	1	08/18/06 17:15	SW846 8270C	6083327
Surr: Terphenyl-d14 (31-111%)	107 %					1	08/18/06 17:15	SW846 8270C	6083327
Surr: 2,4,6-Tribromophenol (32-118%)	101 %					1	08/18/06 17:15	SW846 8270C	6083327
Surr: Phenol-d5 (10-48%)	36 %					1	08/18/06 17:15	SW846 8270C	6083327
Surr: 2-Fluorobiphenyl (33-101%)	90 %					1	08/18/06 17:15	SW846 8270C	6083327
Surr: 2-Fluorophenol (10-64%)	51 %					1	08/18/06 17:15	SW846 8270C	6083327
Surr: Nitrobenzene-d5 (31-112%)	87 %					1	08/18/06 17:15	SW846 8270C	6083327

Sample ID: NPH2199-06 (Trip Blank - Water) Sampled: 08/15/06

Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/25/06 22:39	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 22:39	SW846 8260B	6083837
2-Butanone	ND		ug/L	5.09	50.0	1	08/25/06 22:39	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 22:39	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 22:39	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 22:39	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 22:39	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 22:39	SW846 8260B	6083837

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-06 (Trip Blank - Water) - cont. Sampled: 08/15/06									
Volatile Organic Compounds by EPA Method 8260B - cont.									
1,4-Dioxane	ND		ug/L	79.5	200	1	08/25/06 22:39	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 22:39	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 22:39	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 22:39	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 22:39	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	116 %					1	08/25/06 22:39	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	111 %					1	08/25/06 22:39	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	98 %					1	08/25/06 22:39	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	102 %					1	08/25/06 22:39	SW846 8260B	6083837

Sample ID: NPH2199-07 (MW-OU1-3 Total - Water) Sampled: 08/15/06 09:10

General Chemistry Parameters

Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/16/06 19:53	SW846 7196A	6083240
Cyanide	ND	JL	mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
Chromium, Trivalent	ND		mg/L		NA	1	08/23/06 12:03	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-07 (MW-OU1-3 Total - Water) - cont. Sampled: 08/15/06 09:10									
Total Metals by EPA Method 6010B									
Arsenic	ND	J	mg/L	0.00460	0.0100	1	08/23/06 12:03	SW846 6010B	6083369
Barium	0.0574		mg/L	0.00100	0.0100	1	08/23/06 12:03	SW846 6010B	6083369
Beryllium	ND 0.00140	J U	mg/L	0.00100	0.00400	1	08/23/06 12:03	SW846 6010B	6083369
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 12:03	SW846 6010B	6083369
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 12:03	SW846 6010B	6083369
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 12:03	SW846 6010B	6083369
Lead	0.00310	J	mg/L	0.00270	0.00500	1	08/23/06 12:03	SW846 6010B	6083369
Manganese	0.0781		mg/L	0.00100	0.0150	1	08/23/06 12:03	SW846 6010B	6083369
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 12:03	SW846 6010B	6083369
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 12:03	SW846 6010B	6083369
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 12:03	SW846 6010B	6083369
Zinc	ND 0.00930	J U	mg/L	0.00170	0.0500	1	08/23/06 12:03	SW846 6010B	6083369
Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 14:51	SW846 7470A	6083387
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 14:37	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	87 %					1	08/20/06 14:37	SW846 8081A	6083563
Surr: Decachlorobiphenyl (22-115%)	77 %					1	08/20/06 14:37	SW846 8081A	6083563
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 20:31	SW846 8082	6083564
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 20:31	SW846 8082	6083564
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 20:31	SW846 8082	6083564
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 20:31	SW846 8082	6083564
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 20:31	SW846 8082	6083564
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 20:31	SW846 8082	6083564
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 20:31	SW846 8082	6083564
Surr: Tetrachloro-meta-xylene (44-131%)	66 %					1	08/24/06 20:31	SW846 8082	6083564
Surr: Decachlorobiphenyl (24-110%)	88 %					1	08/24/06 20:31	SW846 8082	6083564

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-07RE1 (MW-OU1-3 Total - Water) - cont. Sampled: 08/15/06 09:10									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND		ug/L	0.0200	0.100	1	08/23/06 21:58	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	73 %					1	08/23/06 21:58	SW846 8151A	6083584
Volatile Organic Compounds by EPA Method 8260B									
Acetone	6.00	J	ug/L	5.91	50.0	1	08/26/06 01:36	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/26/06 01:36	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/26/06 01:36	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/26/06 01:36	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/26/06 01:36	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 01:36	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/26/06 01:36	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/26/06 01:36	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/26/06 01:36	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/26/06 01:36	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/26/06 01:36	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/26/06 01:36	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	115 %					1	08/26/06 01:36	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	106 %					1	08/26/06 01:36	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	99 %					1	08/26/06 01:36	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	105 %					1	08/26/06 01:36	SW846 8260B	6083837
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	2.13	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Acenaphthylene	ND		ug/L	2.00	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Anthracene	ND		ug/L	1.20	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Benzo (a) anthracene	ND		ug/L	1.47	13.3	1	08/18/06 17:37	SW846 8270C	6083327

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-07 (MW-OU1-3 Total - Water) - cont. Sampled: 08/15/06 09:10									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) pyrene	ND		ug/L	1.20	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Benzo (b) fluoranthene	ND		ug/L	2.27	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Benzo (g,h,i) perylene	ND		ug/L	1.07	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Benzo (k) fluoranthene	ND		ug/L	2.00	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Chrysene	ND		ug/L	1.33	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Dibenz (a,h) anthracene	ND		ug/L	1.33	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Dibenzofuran	ND		ug/L	3.33	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Fluoranthene	ND		ug/L	1.60	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Fluorene	ND		ug/L	1.60	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Hexachlorobenzene	ND		ug/L	3.20	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.33	13.3	1	08/18/06 17:37	SW846 8270C	6083327
2-Methylphenol	ND		ug/L	3.73	13.3	1	08/18/06 17:37	SW846 8270C	6083327
3/4-Methylphenol	ND		ug/L	4.13	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Naphthalene	ND		ug/L	2.00	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Pentachlorophenol	ND		ug/L	4.00	33.3	1	08/18/06 17:37	SW846 8270C	6083327
Phenanthrene	ND		ug/L	1.60	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Phenol	ND		ug/L	2.40	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Pyrene	ND		ug/L	1.47	13.3	1	08/18/06 17:37	SW846 8270C	6083327
Surr: Terphenyl-d14 (31-111%)	105 %					1	08/18/06 17:37	SW846 8270C	6083327
Surr: 2,4,6-Tribromophenol (32-118%)	107 %					1	08/18/06 17:37	SW846 8270C	6083327
Surr: Phenol-d5 (10-48%)	36 %					1	08/18/06 17:37	SW846 8270C	6083327
Surr: 2-Fluorobiphenyl (33-101%)	89 %					1	08/18/06 17:37	SW846 8270C	6083327
Surr: 2-Fluorophenol (10-64%)	50 %					1	08/18/06 17:37	SW846 8270C	6083327
Surr: Nitrobenzene-d5 (31-112%)	86 %					1	08/18/06 17:37	SW846 8270C	6083327

Sample ID: NPH2199-08 (Trip Blank - Water) Sampled: 08/15/06

Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/25/06 23:04	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 23:04	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/25/06 23:04	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 23:04	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 23:04	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 23:04	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 23:04	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 23:04	SW846 8260B	6083837

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-08 (Trip Blank - Water) - cont. Sampled: 08/15/06									
Volatile Organic Compounds by EPA Method 8260B - cont.									
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/25/06 23:04	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 23:04	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 23:04	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 23:04	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 23:04	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	117 %					1	08/25/06 23:04	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	113 %					1	08/25/06 23:04	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	99 %					1	08/25/06 23:04	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	105 %					1	08/25/06 23:04	SW846 8260B	6083837

Sample ID: NPH2199-09 (MW-OU1-1 Filtered - Water) Sampled: 08/15/06 11:10

General Chemistry Parameters									
Cyanide	ND		mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
General Chemistry Parameters - Dissolved									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/17/06 17:30	SW846 7196A	6083509
Chromium, Trivalent Dissolved	ND		mg/L		NA	1	08/23/06 10:12	SW846 7196A [CALC]	

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-09 (MW-OU1-1 Filtered - Water) - cont. Sampled: 08/15/06 11:10									
Dissolved Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 10:12	SW846 6010B	6083371
Barium	0.0542	J	mg/L	0.00100	0.0100	1	08/23/06 10:12	SW846 6010B	6083371
Beryllium	ND		mg/L	0.00100	0.00400	1	08/23/06 10:12	SW846 6010B	6083371
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 10:12	SW846 6010B	6083371
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 10:12	SW846 6010B	6083371
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 10:12	SW846 6010B	6083371
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 10:12	SW846 6010B	6083371
Manganese	0.172		mg/L	0.00100	0.0150	1	08/23/06 10:12	SW846 6010B	6083371
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 10:12	SW846 6010B	6083371
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 10:12	SW846 6010B	6083371
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 10:12	SW846 6010B	6083371
Dissolved Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 15:23	SW846 7470A	6083372
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 15:06	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	69 %					1	08/20/06 15:06	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	71 %					1	08/20/06 15:06	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 20:54	SW846 8082	6083564
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 20:54	SW846 8082	6083564
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 20:54	SW846 8082	6083564
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 20:54	SW846 8082	6083564
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 20:54	SW846 8082	6083564
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 20:54	SW846 8082	6083564
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 20:54	SW846 8082	6083564
Surr: Tetrachloro-meta-xylene (44-131%)	77 %					1	08/24/06 20:54	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	104 %					1	08/24/06 20:54	SW846 8082	608356
Chlorinated Herbicides by EPA Method 8151A									

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-09RE1 (MW-OU1-1 Filtered - Water) - cont. Sampled: 08/15/06 11:10									
Chlorinated Herbicides by EPA Method 8151A - cont.									
2,4,5-TP (Silvex)	ND		ug/L	0.0192	0.0962	1	08/23/06 22:29	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/23/06 22:29	SW846 8151A	6083584
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.60	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Acenaphthylene	ND		ug/L	1.50	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Anthracene	ND		ug/L	0.900	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Benzo (a) anthracene	ND		ug/L	1.10	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Benzo (a) pyrene	ND		ug/L	0.900	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Benzo (b) fluoranthene	ND		ug/L	1.70	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Benzo (g,h,i) perylene	ND		ug/L	0.800	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Benzo (k) fluoranthene	ND		ug/L	1.50	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Chrysene	ND		ug/L	1.00	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Dibenz (a,h) anthracene	ND		ug/L	1.00	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Dibenzofuran	ND		ug/L	2.50	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Fluoranthene	ND		ug/L	1.20	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Fluorene	ND		ug/L	1.20	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Hexachlorobenzene	ND		ug/L	2.40	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.00	10.0	1	08/18/06 17:58	SW846 8270C	6083327
2-Methylphenol	ND		ug/L	2.80	10.0	1	08/18/06 17:58	SW846 8270C	6083327
3/4-Methylphenol	ND		ug/L	3.10	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Naphthalene	ND		ug/L	1.50	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Pentachlorophenol	ND		ug/L	3.00	25.0	1	08/18/06 17:58	SW846 8270C	6083327
Phenanthrene	ND		ug/L	1.20	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Phenol	ND		ug/L	1.80	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Pyrene	ND		ug/L	1.10	10.0	1	08/18/06 17:58	SW846 8270C	6083327
Surr: Terphenyl-d14 (31-111%)	106 %					1	08/18/06 17:58	SW846 8270C	6083327
Surr: 2,4,6-Tribromophenol (32-118%)	96 %					1	08/18/06 17:58	SW846 8270C	6083327
Surr: Phenol-d5 (10-48%)	27 %					1	08/18/06 17:58	SW846 8270C	6083327
Surr: 2-Fluorobiphenyl (33-101%)	80 %					1	08/18/06 17:58	SW846 8270C	6083327
Surr: 2-Fluorophenol (10-64%)	39 %					1	08/18/06 17:58	SW846 8270C	6083327
Surr: Nitrobenzene-d5 (31-112%)	81 %					1	08/18/06 17:58	SW846 8270C	6083327

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-10 (DUP.-1 Filtered - Water) Sampled: 08/15/06 11:20									
General Chemistry Parameters									
Cyanide	ND		mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
General Chemistry Parameters - Dissolved									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/17/06 17:30	SW846 7196A	6083509
Chromium, Trivalent Dissolved	ND		mg/L		NA	1	08/23/06 10:26	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-10 (DUP.-1 Filtered - Water) - cont. Sampled: 08/15/06 11:20									
Dissolved Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 10:26	SW846 6010B	6083371
Barium	0.0561		mg/L	0.00100	0.0100	1	08/23/06 10:26	SW846 6010B	6083371
Beryllium	ND		mg/L	0.00100	0.00400	1	08/23/06 10:26	SW846 6010B	6083371
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 10:26	SW846 6010B	6083371
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 10:26	SW846 6010B	6083371
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 10:26	SW846 6010B	6083371
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 10:26	SW846 6010B	6083371
Manganese	0.274	J	mg/L	0.00100	0.0150	1	08/23/06 10:26	SW846 6010B	6083371
Nickel	0.00370	J	mg/L	0.00170	0.0100	1	08/23/06 10:26	SW846 6010B	6083371
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 10:26	SW846 6010B	6083371
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 10:26	SW846 6010B	6083371
Zinc	ND		mg/L	0.0017	0.0050				
Dissolved Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 15:30	SW846 7470A	6083372
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 15:34	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	82 %					1	08/20/06 15:34	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	85 %					1	08/20/06 15:34	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 22:02	SW846 8082	608356
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 22:02	SW846 8082	608356
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 22:02	SW846 8082	608356
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 22:02	SW846 8082	608356
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 22:02	SW846 8082	608356
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 22:02	SW846 8082	608356
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 22:02	SW846 8082	608356
Surr: Tetrachloro-meta-xylene (44-131%)	67 %					1	08/24/06 22:02	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	101 %					1	08/24/06 22:02	SW846 8082	608356
Chlorinated Herbicides by EPA Method 8151A									

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-10RE1 (DUP.-1 Filtered - Water) - cont. Sampled: 08/15/06 11:20									
Chlorinated Herbicides by EPA Method 8151A - cont.									
2,4,5-TP (Silvex)	ND		ug/L	0.100	0.500	1	08/23/06 23:00	SW846 8151A	60833584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/23/06 23:00	SW846 8151A	60833584
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.60	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Acenaphthylene	ND		ug/L	1.50	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Anthracene	ND		ug/L	0.900	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Benzo (a) anthracene	ND		ug/L	1.10	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Benzo (a) pyrene	ND		ug/L	0.900	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Benzo (b) fluoranthene	ND		ug/L	1.70	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Benzo (g,h,i) perylene	ND		ug/L	0.800	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Benzo (k) fluoranthene	ND		ug/L	1.50	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Chrysene	ND		ug/L	1.00	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Dibenz (a,h) anthracene	ND		ug/L	1.00	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Dibenzofuran	ND		ug/L	2.50	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Fluoranthene	ND		ug/L	1.20	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Fluorene	ND		ug/L	1.20	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Hexachlorobenzene	ND		ug/L	2.40	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.00	10.0	1	08/18/06 18:20	SW846 8270C	60833327
2-Methylphenol	ND		ug/L	2.80	10.0	1	08/18/06 18:20	SW846 8270C	60833327
3/4-Methylphenol	ND		ug/L	3.10	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Naphthalene	ND		ug/L	1.50	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Pentachlorophenol	ND		ug/L	3.00	25.0	1	08/18/06 18:20	SW846 8270C	60833327
Phenanthrene	ND		ug/L	1.20	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Phenol	ND		ug/L	1.80	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Pyrene	ND		ug/L	1.10	10.0	1	08/18/06 18:20	SW846 8270C	60833327
Surr: Terphenyl-d14 (31-111%)	89 %					1	08/18/06 18:20	SW846 8270C	60833327
Surr: 2,4,6-Tribromophenol (32-118%)	89 %					1	08/18/06 18:20	SW846 8270C	60833327
Surr: Phenol-d5 (10-48%)	30 %					1	08/18/06 18:20	SW846 8270C	60833327
Surr: 2-Fluorobiphenyl (33-101%)	78 %					1	08/18/06 18:20	SW846 8270C	60833327
Surr: 2-Fluorophenol (10-64%)	43 %					1	08/18/06 18:20	SW846 8270C	60833327
Surr: Nitrobenzene-d5 (31-112%)	78 %					1	08/18/06 18:20	SW846 8270C	60833327

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-11 (Dup-1 Total - Water) Sampled: 08/15/06									
General Chemistry Parameters									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/16/06 19:53	SW846 7196A	6083240
Cyanide	ND		mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
Chromium, Trivalent	ND		mg/L		NA	1	08/23/06 12:12	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
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Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-11 (Dup-1 Total - Water) - cont. Sampled: 08/15/06									
Total Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 12:12	SW846 6010B	6083369
Barium	0.0555		mg/L	0.00100	0.0100	1	08/23/06 12:12	SW846 6010B	6083369
Beryllium	ND	0.00140	mg/L	0.00100	0.00400	1	08/23/06 12:12	SW846 6010B	6083369
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 12:12	SW846 6010B	6083369
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 12:12	SW846 6010B	6083369
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 12:12	SW846 6010B	6083369
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 12:12	SW846 6010B	6083369
Manganese	0.223		mg/L	0.00100	0.0150	1	08/23/06 12:12	SW846 6010B	6083369
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 12:12	SW846 6010B	6083369
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 12:12	SW846 6010B	6083369
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 12:12	SW846 6010B	6083369
Zinc	ND	0.00810	mg/L	0.00170	0.0500	1	08/23/06 12:12	SW846 6010B	6083369
Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 14:54	SW846 7470A	6083387
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 16:03	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	81 %					1	08/20/06 16:03	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	72 %					1	08/20/06 16:03	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 22:25	SW846 8082	608356
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 22:25	SW846 8082	608356
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 22:25	SW846 8082	608356
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 22:25	SW846 8082	608356
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 22:25	SW846 8082	608356
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 22:25	SW846 8082	608356
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 22:25	SW846 8082	608356
Surr: Tetrachloro-meta-xylene (44-131%)	66 %					1	08/24/06 22:25	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	70 %					1	08/24/06 22:25	SW846 8082	608356

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-11RE1 (Dup-1 Total - Water) - cont. Sampled: 08/15/06									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND		ug/L	0.0192	0.0962	1	08/23/06 23:30	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/23/06 23:30	SW846 8151A	6083584
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/26/06 02:01	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/26/06 02:01	SW846 8260B	6083837
2-Butanone	ND		ug/L	5.09	50.0	1	08/26/06 02:01	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/26/06 02:01	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/26/06 02:01	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 02:01	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/26/06 02:01	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,4-Dioxane	ND		ug/L	79.5	200	1	08/26/06 02:01	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/26/06 02:01	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/26/06 02:01	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/26/06 02:01	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/26/06 02:01	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	117 %					1	08/26/06 02:01	SW846 8260B	608383
Surr: Dibromofluoromethane (79-122%)	113 %					1	08/26/06 02:01	SW846 8260B	608383
Surr: Toluene-d8 (78-121%)	99 %					1	08/26/06 02:01	SW846 8260B	608383
Surr: 4-Bromofluorobenzene (78-126%)	103 %					1	08/26/06 02:01	SW846 8260B	608383
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.60	10.0	1	08/18/06 18:42	SW846 8270C	608332'
Acenaphthylene	ND		ug/L	1.50	10.0	1	08/18/06 18:42	SW846 8270C	608332'
Anthracene	ND		ug/L	0.900	10.0	1	08/18/06 18:42	SW846 8270C	608332'
Benzo (a) anthracene	ND		ug/L	1.10	10.0	1	08/18/06 18:42	SW846 8270C	608332'

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-11 (Dup-1 Total - Water) - cont. Sampled: 08/15/06									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) pyrene	ND		ug/L	0.900	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Benzo (b) fluoranthene	ND		ug/L	1.70	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Benzo (g,h,i) perylene	ND		ug/L	0.800	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Benzo (k) fluoranthene	ND		ug/L	1.50	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Chrysene	ND		ug/L	1.00	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Dibenz (a,h) anthracene	ND		ug/L	1.00	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Dibenzofuran	ND		ug/L	2.50	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Fluoranthene	ND		ug/L	1.20	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Fluorene	ND		ug/L	1.20	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Hexachlorobenzene	ND		ug/L	2.40	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.00	10.0	1	08/18/06 18:42	SW846 8270C	6083327
2-Methylphenol	ND		ug/L	2.80	10.0	1	08/18/06 18:42	SW846 8270C	6083327
3/4-Methylphenol	ND		ug/L	3.10	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Naphthalene	ND		ug/L	1.50	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Pentachlorophenol	ND		ug/L	3.00	25.0	1	08/18/06 18:42	SW846 8270C	6083327
Phenanthrene	ND		ug/L	1.20	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Phenol	ND		ug/L	1.80	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Pyrene	ND		ug/L	1.10	10.0	1	08/18/06 18:42	SW846 8270C	6083327
Surr: Terphenyl-d14 (31-111%)	101 %					1	08/18/06 18:42	SW846 8270C	6083327
Surr: 2,4,6-Tribromophenol (32-118%)	101 %					1	08/18/06 18:42	SW846 8270C	6083327
Surr: Phenol-d5 (10-48%)	32 %					1	08/18/06 18:42	SW846 8270C	6083327
Surr: 2-Fluorobiphenyl (33-101%)	82 %					1	08/18/06 18:42	SW846 8270C	6083327
Surr: 2-Fluorophenol (10-64%)	45 %					1	08/18/06 18:42	SW846 8270C	6083327
Surr: Nitrobenzene-d5 (31-112%)	79 %					1	08/18/06 18:42	SW846 8270C	6083327

Sample ID: NPH2199-12 (Trip Blank - Water) Sampled: 08/15/06

Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/25/06 23:30	SW846 8260B	608383
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 23:30	SW846 8260B	608383
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/25/06 23:30	SW846 8260B	608383
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 23:30	SW846 8260B	608383
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 23:30	SW846 8260B	608383
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 23:30	SW846 8260B	608383
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 23:30	SW846 8260B	608383
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 23:30	SW846 8260B	608383
Chloroform	ND		ug/L	0.380	1.00	1	08/25/06 23:30	SW846 8260B	608383
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 23:30	SW846 8260B	608383
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 23:30	SW846 8260B	608383
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 23:30	SW846 8260B	608383
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 23:30	SW846 8260B	608383
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 23:30	SW846 8260B	608383
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 23:30	SW846 8260B	608383
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 23:30	SW846 8260B	608383
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 23:30	SW846 8260B	608383

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-12 (Trip Blank - Water) - cont. Sampled: 08/15/06									
Volatile Organic Compounds by EPA Method 8260B - cont.									
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/25/06 23:30	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 23:30	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 23:30	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 23:30	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 23:30	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 23:30	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 23:30	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	119 %					1	08/25/06 23:30	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	116 %					1	08/25/06 23:30	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	99 %					1	08/25/06 23:30	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	105 %					1	08/25/06 23:30	SW846 8260B	6083837

Sample ID: NPH2199-13 (MW-OU1-2 Filtered - Water) Sampled: 08/16/06 08:25

General Chemistry Parameters

Cyanide	ND		mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327

General Chemistry Parameters - Dissolved

Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/17/06 17:30	SW846 7196A	6083509
Chromium, Trivalent Dissolved	ND		mg/L		NA	1	08/23/06 10:30	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-13 (MW-OU1-2 Filtered - Water) - cont. Sampled: 08/16/06 08:25									
Dissolved Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 10:30	SW846 6010B	6083371
Barium	0.0944		mg/L	0.00100	0.0100	1	08/23/06 10:30	SW846 6010B	6083371
Beryllium	ND		mg/L	0.00100	0.00400	1	08/23/06 10:30	SW846 6010B	6083371
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 10:30	SW846 6010B	6083371
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 10:30	SW846 6010B	6083371
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 10:30	SW846 6010B	6083371
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 10:30	SW846 6010B	6083371
Manganese	0.0781		mg/L	0.00100	0.0150	1	08/23/06 10:30	SW846 6010B	6083371
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 10:30	SW846 6010B	6083371
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 10:30	SW846 6010B	6083371
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 10:30	SW846 6010B	6083371
Zinc	ND 0.00720	+ U	mg/L	0.00170	0.0500	1	08/23/06 10:30	SW846 6010B	6083371
Dissolved Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 15:32	SW846 7470A	6083372
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 16:32	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	85 %					1	08/20/06 16:32	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	90 %					1	08/20/06 16:32	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 22:48	SW846 8082	608356
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 22:48	SW846 8082	608356
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 22:48	SW846 8082	608356
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 22:48	SW846 8082	608356
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 22:48	SW846 8082	608356
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 22:48	SW846 8082	608356
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 22:48	SW846 8082	608356
Surr: Tetrachloro-meta-xylene (44-131%)	32 %					1	08/24/06 22:48	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	46 %					1	08/24/06 22:48	SW846 8082	608356

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-13 (MW-OU1-2 Filtered - Water) - cont. Sampled: 08/16/06 08:25									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND		ug/L	0.0192	0.0962	1	08/24/06 00:32	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	61 %					1	08/24/06 00:32	SW846 8151A	6083584
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.57	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Acenaphthylene	ND		ug/L	1.47	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Anthracene	ND		ug/L	0.882	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Benzo (a) anthracene	ND		ug/L	1.08	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Benzo (a) pyrene	ND		ug/L	0.882	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Benzo (b) fluoranthene	ND		ug/L	1.67	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Benzo (g,h,i) perylene	ND		ug/L	0.784	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Benzo (k) fluoranthene	ND		ug/L	1.47	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Chrysene	ND		ug/L	0.980	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Dibenz (a,h) anthracene	ND		ug/L	0.980	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Dibenzofuran	ND		ug/L	2.45	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Fluoranthene	ND		ug/L	1.18	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Fluorene	ND		ug/L	1.18	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Hexachlorobenzene	ND		ug/L	2.35	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.980	9.80	1	08/24/06 00:49	SW846 8270C	6083576
2-Methylphenol	ND		ug/L	2.75	9.80	1	08/24/06 00:49	SW846 8270C	6083576
3/4-Methylphenol	ND		ug/L	3.04	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Naphthalene	ND		ug/L	1.47	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Pentachlorophenol	ND		ug/L	2.94	24.5	1	08/24/06 00:49	SW846 8270C	6083576
Phenanthrene	ND		ug/L	1.18	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Phenol	ND		ug/L	1.76	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Pyrene	ND		ug/L	1.08	9.80	1	08/24/06 00:49	SW846 8270C	6083576
Surr: Terphenyl-d14 (31-111%)	85 %					1	08/24/06 00:49	SW846 8270C	6083576
Surr: 2,4,6-Tribromophenol (32-118%)	94 %					1	08/24/06 00:49	SW846 8270C	6083576
Surr: Phenol-d5 (10-48%)	34 %					1	08/24/06 00:49	SW846 8270C	6083576
Surr: 2-Fluorobiphenyl (33-101%)	78 %					1	08/24/06 00:49	SW846 8270C	6083576
Surr: 2-Fluorophenol (10-64%)	51 %					1	08/24/06 00:49	SW846 8270C	6083576
Surr: Nitrobenzene-d5 (31-112%)	87 %					1	08/24/06 00:49	SW846 8270C	6083576

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-14 (MW-OU1-3 Filtered - Water) Sampled: 08/16/06 08:40									
General Chemistry Parameters									
Cyanide	ND 0.00220	J U	mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
General Chemistry Parameters - Dissolved									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/17/06 17:30	SW846 7196A	6083509
Chromium, Trivalent Dissolved	ND		mg/L		NA	1	08/23/06 10:34	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-14 (MW-OU1-3 Filtered - Water) - cont. Sampled: 08/16/06 08:40									
Dissolved Metals by EPA Method 6010B									
Arsenic	0.00540	J J	mg/L	0.00460	0.0100	1	08/23/06 10:34	SW846 6010B	6083371
Barium	0.0515		mg/L	0.00100	0.0100	1	08/23/06 10:34	SW846 6010B	6083371
Beryllium	ND		mg/L	0.00100	0.00400	1	08/23/06 10:34	SW846 6010B	6083371
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 10:34	SW846 6010B	6083371
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 10:34	SW846 6010B	6083371
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 10:34	SW846 6010B	6083371
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 10:34	SW846 6010B	6083371
Manganese	0.0654		mg/L	0.00100	0.0150	1	08/23/06 10:34	SW846 6010B	6083371
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 10:34	SW846 6010B	6083371
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 10:34	SW846 6010B	6083371
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 10:34	SW846 6010B	6083371
Zinc	ND 0.00730	J U	mg/L	0.00170	0.0500	1	08/23/06 10:34	SW846 6010B	6083371
Dissolved Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 15:34	SW846 7470A	6083372
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 17:00	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	90 %					1	08/20/06 17:00	SW846 8081A	6083563
Surr: Decachlorobiphenyl (22-115%)	94 %					1	08/20/06 17:00	SW846 8081A	6083563
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 23:10	SW846 8082	6083564
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 23:10	SW846 8082	6083564
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 23:10	SW846 8082	6083564
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 23:10	SW846 8082	6083564
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 23:10	SW846 8082	6083564
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 23:10	SW846 8082	6083564
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 23:10	SW846 8082	6083564
Surr: Tetrachloro-meta-xylene (44-131%)	76 %					1	08/24/06 23:10	SW846 8082	6083564
Surr: Decachlorobiphenyl (24-110%)	66 %					1	08/24/06 23:10	SW846 8082	6083564

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-14 (MW-OU1-3 Filtered - Water) - cont. Sampled: 08/16/06 08:40									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND		ug/L	0.0192	0.0962	1	08/24/06 01:03	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/24/06 01:03	SW846 8151A	6083584
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.58	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Acenaphthylene	ND		ug/L	1.49	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Anthracene	ND		ug/L	0.891	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Benzo (a) anthracene	ND		ug/L	1.09	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Benzo (a) pyrene	ND		ug/L	0.891	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Benzo (b) fluoranthene	ND		ug/L	1.68	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Benzo (g,h,i) perylene	ND		ug/L	0.792	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Benzo (k) fluoranthene	ND		ug/L	1.49	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Chrysene	ND		ug/L	0.990	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Dibenz (a,h) anthracene	ND		ug/L	0.990	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Dibenzofuran	ND		ug/L	2.48	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Fluoranthene	ND		ug/L	1.19	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Fluorene	ND		ug/L	1.19	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Hexachlorobenzene	ND		ug/L	2.38	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.990	9.90	1	08/24/06 01:16	SW846 8270C	6083576
2-Methylphenol	ND		ug/L	2.77	9.90	1	08/24/06 01:16	SW846 8270C	6083576
3/4-Methylphenol	ND		ug/L	3.07	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Naphthalene	ND		ug/L	1.49	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Pentachlorophenol	ND		ug/L	2.97	24.8	1	08/24/06 01:16	SW846 8270C	6083576
Phenanthrene	ND		ug/L	1.19	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Phenol	ND		ug/L	1.78	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Pyrene	ND		ug/L	1.09	9.90	1	08/24/06 01:16	SW846 8270C	6083576
Surr: Terphenyl-d14 (31-111%)	96 %					1	08/24/06 01:16	SW846 8270C	6083576
Surr: 2,4,6-Tribromophenol (32-118%)	102 %					1	08/24/06 01:16	SW846 8270C	6083576
Surr: Phenol-d5 (10-48%)	31 %					1	08/24/06 01:16	SW846 8270C	6083576
Surr: 2-Fluorobiphenyl (33-101%)	85 %					1	08/24/06 01:16	SW846 8270C	6083576
Surr: 2-Fluorophenol (10-64%)	45 %					1	08/24/06 01:16	SW846 8270C	6083576
Surr: Nitrobenzene-d5 (31-112%)	88 %					1	08/24/06 01:16	SW846 8270C	6083576

Client Roux & Associates (3955) EM J. Abel
 209 Shafter Street
 Islandia, NY 11749
 Attn Noelle Clarke

Work Order: NPH2199
 Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
 Project Number: Exxon 3-1010
 Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-15 (FB-1 - Water) Sampled: 08/15/06 20:35									
General Chemistry Parameters									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/17/06 16:46	SW846 7196A	6083510
Cyanide	ND	J	mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
Chromium, Trivalent	ND		mg/L		NA	1	08/23/06 12:15	SW846 7196A	[CALC]

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-15 (FB-1 - Water) - cont. Sampled: 08/15/06 20:35									
Total Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 12:15	SW846 6010B	6083369
Barium	ND		mg/L	0.00100	0.0100	1	08/23/06 12:15	SW846 6010B	6083369
Beryllium	0.00130	J	mg/L	0.00100	0.00400	1	08/23/06 12:15	SW846 6010B	6083369
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 12:15	SW846 6010B	6083369
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 12:15	SW846 6010B	6083369
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 12:15	SW846 6010B	6083369
Lead	0.00280	J	mg/L	0.00270	0.00500	1	08/23/06 12:15	SW846 6010B	6083369
Manganese	ND		mg/L	0.00100	0.0150	1	08/23/06 12:15	SW846 6010B	6083369
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 12:15	SW846 6010B	6083369
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 12:15	SW846 6010B	6083369
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 12:15	SW846 6010B	6083369
Zinc	0.00570	J	mg/L	0.00170	0.0500	1	08/23/06 12:15	SW846 6010B	6083369
Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 14:55	SW846 7470A	6083387
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 17:29	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	84 %					1	08/20/06 17:29	SW846 8081A	608356
Surr: Decachlorobiphenyl (22-115%)	60 %					1	08/20/06 17:29	SW846 8081A	608356
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 23:33	SW846 8082	608356
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 23:33	SW846 8082	608356
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 23:33	SW846 8082	608356
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 23:33	SW846 8082	608356
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 23:33	SW846 8082	608356
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 23:33	SW846 8082	608356
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 23:33	SW846 8082	608356
Surr: Tetrachloro-meta-xylene (44-131%)	77 %					1	08/24/06 23:33	SW846 8082	608356
Surr: Decachlorobiphenyl (24-110%)	38 %					1	08/24/06 23:33	SW846 8082	608356

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-15 (FB-1 - Water) - cont. Sampled: 08/15/06 20:35									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND		ug/L	0.0192	0.0962	1	08/24/06 01:34	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	70 %					1	08/24/06 01:34	SW846 8151A	6083584
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND		ug/L	5.91	50.0	1	08/25/06 23:55	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/25/06 23:55	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/25/06 23:55	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/25/06 23:55	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/25/06 23:55	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 23:55	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/25/06 23:55	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/25/06 23:55	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/25/06 23:55	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/25/06 23:55	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/25/06 23:55	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/25/06 23:55	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	118 %					1	08/25/06 23:55	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	113 %					1	08/25/06 23:55	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	98 %					1	08/25/06 23:55	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	107 %					1	08/25/06 23:55	SW846 8260B	6083837
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.57	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Acenaphthylene	ND		ug/L	1.47	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Anthracene	ND		ug/L	0.882	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Benzo (a) anthracene	ND		ug/L	1.08	9.80	1	08/24/06 01:44	SW846 8270C	6083576

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-15 (FB-1 - Water) - cont. Sampled: 08/15/06 20:35									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Benzo (a) pyrene	ND		ug/L	0.882	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Benzo (b) fluoranthene	ND		ug/L	1.67	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Benzo (g,h,i) perylene	ND		ug/L	0.784	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Benzo (k) fluoranthene	ND		ug/L	1.47	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Chrysene	ND		ug/L	0.980	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Dibenz (a,h) anthracene	ND		ug/L	0.980	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Dibenzofuran	ND		ug/L	2.45	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Fluoranthene	ND		ug/L	1.18	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Fluorene	ND		ug/L	1.18	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Hexachlorobenzene	ND		ug/L	2.35	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.980	9.80	1	08/24/06 01:44	SW846 8270C	6083576
2-Methylphenol	ND		ug/L	2.75	9.80	1	08/24/06 01:44	SW846 8270C	6083576
3/4-Methylphenol	ND		ug/L	3.04	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Naphthalene	ND		ug/L	1.47	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Pentachlorophenol	ND		ug/L	2.94	24.5	1	08/24/06 01:44	SW846 8270C	6083576
Phenanthrene	ND		ug/L	1.18	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Phenol	ND		ug/L	1.76	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Pyrene	ND		ug/L	1.08	9.80	1	08/24/06 01:44	SW846 8270C	6083576
Surr: Terphenyl-d14 (31-111%)	105 %					1	08/24/06 01:44	SW846 8270C	6083576
Surr: 2,4,6-Tribromophenol (32-118%)	109 %					1	08/24/06 01:44	SW846 8270C	6083576
Surr: Phenol-d5 (10-48%)	34 %					1	08/24/06 01:44	SW846 8270C	6083576
Surr: 2-Fluorobiphenyl (33-101%)	90 %					1	08/24/06 01:44	SW846 8270C	6083576
Surr: 2-Fluorophenol (10-64%)	51 %					1	08/24/06 01:44	SW846 8270C	6083576
Surr: Nitrobenzene-d5 (31-112%)	97 %					1	08/24/06 01:44	SW846 8270C	6083576

Sample ID: NPH2199-16 (FB-1 Filtered - Water) Sampled: 08/15/06 20:40

General Chemistry Parameters

Cyanide	0.00300	J	J	mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327

General Chemistry Parameters - Dissolved

Chromium (VI)	ND	H		mg/L	0.00500	0.0100	1	08/17/06 17:30	SW846 7196A	6083509
Chromium, Trivalent Dissolved	ND			mg/L		NA	1	08/23/06 10:38	SW846 7196A [CALC]	

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-16 (FB-1 Filtered - Water) - cont. Sampled: 08/15/06 20:40									
Dissolved Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 10:38	SW846 6010B	6083371
Barium	ND		mg/L	0.00100	0.0100	1	08/23/06 10:38	SW846 6010B	6083371
Beryllium	ND		mg/L	0.00100	0.00400	1	08/23/06 10:38	SW846 6010B	6083371
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 10:38	SW846 6010B	6083371
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 10:38	SW846 6010B	6083371
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 10:38	SW846 6010B	6083371
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 10:38	SW846 6010B	6083371
Manganese	ND		mg/L	0.00100	0.0150	1	08/23/06 10:38	SW846 6010B	6083371
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 10:38	SW846 6010B	6083371
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 10:38	SW846 6010B	6083371
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 10:38	SW846 6010B	6083371
Dissolved Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 15:38	SW846 7470A	6083372
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 17:58	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	85 %					1	08/20/06 17:58	SW846 8081A	6083563
Surr: Decachlorobiphenyl (22-115%)	78 %					1	08/20/06 17:58	SW846 8081A	6083563
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/24/06 23:56	SW846 8082	6083564
PCB-1221	ND		ug/L	0.108	0.200	1	08/24/06 23:56	SW846 8082	6083564
PCB-1232	ND		ug/L	0.0440	0.200	1	08/24/06 23:56	SW846 8082	6083564
PCB-1242	ND		ug/L	0.0720	0.200	1	08/24/06 23:56	SW846 8082	6083564
PCB-1248	ND		ug/L	0.0360	0.200	1	08/24/06 23:56	SW846 8082	6083564
PCB-1254	ND		ug/L	0.0400	0.200	1	08/24/06 23:56	SW846 8082	6083564
PCB-1260	ND		ug/L	0.0360	0.200	1	08/24/06 23:56	SW846 8082	6083564
Surr: Tetrachloro-meta-xylene (44-131%)	68 %					1	08/24/06 23:56	SW846 8082	6083564
Surr: Decachlorobiphenyl (24-110%)	91 %					1	08/24/06 23:56	SW846 8082	6083564
Chlorinated Herbicides by EPA Method 8151A									

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-16 (FB-1 Filtered - Water) - cont. Sampled: 08/15/06 20:40									
Chlorinated Herbicides by EPA Method 8151A - cont.									
2,4,5-TP (Silvex)	ND		ug/L	0.0188	0.0939	1	08/24/06 02:05	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/24/06 02:05	SW846 8151A	6083584
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.78	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Acenaphthylene	ND		ug/L	1.67	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Anthracene	ND		ug/L	1.00	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Benzo (a) anthracene	ND		ug/L	1.22	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Benzo (a) pyrene	ND		ug/L	1.00	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Benzo (b) fluoranthene	ND		ug/L	1.89	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Benzo (g,h,i) perylene	ND		ug/L	0.889	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Benzo (k) fluoranthene	ND		ug/L	1.67	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Chrysene	ND		ug/L	1.11	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Dibenz (a,h) anthracene	ND		ug/L	1.11	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Dibenzofuran	ND		ug/L	2.78	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Fluoranthene	ND		ug/L	1.33	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Fluorene	ND		ug/L	1.33	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Hexachlorobenzene	ND		ug/L	2.67	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.11	11.1	1	08/24/06 02:11	SW846 8270C	6083576
2-Methylphenol	ND		ug/L	3.11	11.1	1	08/24/06 02:11	SW846 8270C	6083576
3/4-Methylphenol	ND		ug/L	3.44	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Naphthalene	ND		ug/L	1.67	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Pentachlorophenol	ND		ug/L	3.33	27.8	1	08/24/06 02:11	SW846 8270C	6083576
Phenanthrene	ND		ug/L	1.33	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Phenol	ND		ug/L	2.00	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Pyrene	ND		ug/L	1.22	11.1	1	08/24/06 02:11	SW846 8270C	6083576
Surr: Terphenyl-d14 (31-111%)	82 %					1	08/24/06 02:11	SW846 8270C	6083576
Surr: 2,4,6-Tribromophenol (32-118%)	89 %					1	08/24/06 02:11	SW846 8270C	6083576
Surr: Phenol-d5 (10-48%)	28 %					1	08/24/06 02:11	SW846 8270C	6083576
Surr: 2-Fluorobiphenyl (33-101%)	72 %					1	08/24/06 02:11	SW846 8270C	6083576
Surr: 2-Fluorophenol (10-64%)	40 %					1	08/24/06 02:11	SW846 8270C	6083576
Surr: Nitrobenzene-d5 (31-112%)	76 %					1	08/24/06 02:11	SW846 8270C	6083576

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-17 (Trip Blank - Water) Sampled: 08/15/06 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Acetone	7.80	J	ug/L	5.91	50.0	1	08/26/06 00:20	SW846 8260B	6083837
Benzene	ND		ug/L	0.290	1.00	1	08/26/06 00:20	SW846 8260B	6083837
2-Butanone	ND	J	ug/L	5.09	50.0	1	08/26/06 00:20	SW846 8260B	6083837
tert-Butylbenzene	ND		ug/L	0.390	1.00	1	08/26/06 00:20	SW846 8260B	6083837
n-Butylbenzene	ND		ug/L	0.460	1.00	1	08/26/06 00:20	SW846 8260B	6083837
sec-Butylbenzene	ND		ug/L	0.380	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Carbon Tetrachloride	ND		ug/L	0.480	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Chlorobenzene	ND		ug/L	0.320	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Chloroform	ND		ug/L	0.380	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,2-Dichlorobenzene	ND		ug/L	0.370	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,3-Dichlorobenzene	ND		ug/L	0.360	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,4-Dichlorobenzene	ND		ug/L	0.460	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,2-Dichloroethane	ND		ug/L	0.280	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,1-Dichloroethane	ND		ug/L	0.320	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,1-Dichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 00:20	SW846 8260B	6083837
trans-1,2-Dichloroethene	ND		ug/L	0.340	1.00	1	08/26/06 00:20	SW846 8260B	6083837
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,4-Dioxane	ND	J	ug/L	79.5	200	1	08/26/06 00:20	SW846 8260B	6083837
Ethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Isopropylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Methylene Chloride	ND		ug/L	1.26	5.00	1	08/26/06 00:20	SW846 8260B	6083837
n-Propylbenzene	ND		ug/L	0.370	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Tetrachloroethene	ND		ug/L	0.390	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Toluene	ND		ug/L	0.280	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Trichloroethene	ND		ug/L	0.450	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,3,5-Trimethylbenzene	ND		ug/L	0.280	1.00	1	08/26/06 00:20	SW846 8260B	6083837
1,2,4-Trimethylbenzene	ND		ug/L	0.340	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Vinyl chloride	ND		ug/L	0.430	1.00	1	08/26/06 00:20	SW846 8260B	6083837
Xylenes, total	ND		ug/L	0.820	3.00	1	08/26/06 00:20	SW846 8260B	6083837
Surr: 1,2-Dichloroethane-d4 (70-130%)	117 %					1	08/26/06 00:20	SW846 8260B	6083837
Surr: Dibromofluoromethane (79-122%)	113 %					1	08/26/06 00:20	SW846 8260B	6083837
Surr: Toluene-d8 (78-121%)	97 %					1	08/26/06 00:20	SW846 8260B	6083837
Surr: 4-Bromofluorobenzene (78-126%)	102 %					1	08/26/06 00:20	SW846 8260B	6083837

Client Roux & Associates (3955) EM J. Abel
209 Shafter Street
Islandia, NY 11749
Attn Noelle Clarke

Work Order: NPH2199
Project Name: Exxon(06) 3-1010 PO:4507032947 Buffalo
Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-18 (FB-2 Filtered - Water) Sampled: 08/16/06 10:30									
General Chemistry Parameters									
Cyanide	0.00210	J	mg/L	0.00200	0.00500	1	08/27/06 16:16	SW846 9012A	6085327
General Chemistry Parameters - Dissolved									
Chromium (VI)	ND	H	mg/L	0.00500	0.0100	1	08/17/06 17:30	SW846 7196A	6083509
Chromium, Trivalent Dissolved	ND		mg/L		NA	1	08/23/06 10:43	SW846 7196A [CALC]	

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Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-18 (FB-2 Filtered - Water) - cont. Sampled: 08/16/06 10:30									
Dissolved Metals by EPA Method 6010B									
Arsenic	ND		mg/L	0.00460	0.0100	1	08/23/06 10:43	SW846 6010B	6083371
Barium	ND		mg/L	0.00100	0.0100	1	08/23/06 10:43	SW846 6010B	6083371
Beryllium	ND		mg/L	0.00100	0.00400	1	08/23/06 10:43	SW846 6010B	6083371
Cadmium	ND		mg/L	0.000400	0.00100	1	08/23/06 10:43	SW846 6010B	6083371
Chromium	ND		mg/L	0.00150	0.00500	1	08/23/06 10:43	SW846 6010B	6083371
Copper	ND		mg/L	0.00530	0.0100	1	08/23/06 10:43	SW846 6010B	6083371
Lead	ND		mg/L	0.00270	0.00500	1	08/23/06 10:43	SW846 6010B	6083371
Manganese	ND		mg/L	0.00100	0.0150	1	08/23/06 10:43	SW846 6010B	6083371
Nickel	ND		mg/L	0.00170	0.0100	1	08/23/06 10:43	SW846 6010B	6083371
Selenium	ND		mg/L	0.00820	0.0100	1	08/23/06 10:43	SW846 6010B	6083371
Silver	ND		mg/L	0.00190	0.00500	1	08/23/06 10:43	SW846 6010B	6083371
Zinc	0.00600	J	mg/L	0.00170	0.0500	1	08/23/06 10:43	SW846 6010B	6083371
Dissolved Mercury by EPA Methods 7470A/7471A									
Mercury	ND		mg/L	0.000100	0.000200	1	08/23/06 15:40	SW846 7470A	6083372
Organochlorine Pesticides by EPA Method 8081A									
Aldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
delta-BHC	ND		ug/L	0.0200	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
alpha-BHC	ND		ug/L	0.0100	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
beta-BHC	ND		ug/L	0.0300	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
gamma-BHC (Lindane)	ND		ug/L	0.0100	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
alpha-Chlordane	ND		ug/L	0.0300	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
4,4'-DDD	ND		ug/L	0.0400	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
4,4'-DDE	ND		ug/L	0.0300	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
4,4'-DDT	ND		ug/L	0.0300	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Dieldrin	ND		ug/L	0.0100	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Endosulfan I	ND		ug/L	0.0200	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Endosulfan II	ND		ug/L	0.0300	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Endosulfan sulfate	ND		ug/L	0.0200	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Endrin	ND		ug/L	0.0200	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Heptachlor	ND		ug/L	0.0200	0.0500	1	08/20/06 18:26	SW846 8081A	6083563
Surr: Tetrachloro-meta-xylene (58-117%)	80 %					1	08/20/06 18:26	SW846 8081A	6083563
Surr: Decachlorobiphenyl (22-115%)	70 %					1	08/20/06 18:26	SW846 8081A	6083563
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	ND		ug/L	0.0760	0.200	1	08/25/06 00:19	SW846 8082	6083564
PCB-1221	ND		ug/L	0.108	0.200	1	08/25/06 00:19	SW846 8082	6083564
PCB-1232	ND		ug/L	0.0440	0.200	1	08/25/06 00:19	SW846 8082	6083564
PCB-1242	ND		ug/L	0.0720	0.200	1	08/25/06 00:19	SW846 8082	6083564
PCB-1248	ND		ug/L	0.0360	0.200	1	08/25/06 00:19	SW846 8082	6083564
PCB-1254	ND		ug/L	0.0400	0.200	1	08/25/06 00:19	SW846 8082	6083564
PCB-1260	ND		ug/L	0.0360	0.200	1	08/25/06 00:19	SW846 8082	6083564
Surr: Tetrachloro-meta-xylene (44-131%)	64 %					1	08/25/06 00:19	SW846 8082	6083564
Surr: Decachlorobiphenyl (24-110%)	65 %					1	08/25/06 00:19	SW846 8082	6083564

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Project Number: Exxon 3-1010
Received: 08/16/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2199-18 (FB-2 Filtered - Water) - cont. Sampled: 08/16/06 10:30									
Chlorinated Herbicides by EPA Method 8151A									
2,4,5-TP (Silvex)	ND	R	ug/L	0.0333	0.167	1	08/24/06 02:36	SW846 8151A	6083584
Surr: Dichloroacetic Acid (51-136%)	*	ZX				1	08/24/06 02:36	SW846 8151A	6083584
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND		ug/L	1.88	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Acenaphthylene	ND		ug/L	1.76	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Anthracene	ND		ug/L	1.06	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Benzo (a) anthracene	ND		ug/L	1.29	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Benzo (a) pyrene	ND		ug/L	1.06	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Benzo (b) fluoranthene	ND		ug/L	2.00	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Benzo (g,h,i) perylene	ND		ug/L	0.941	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Benzo (k) fluoranthene	ND		ug/L	1.76	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Chrysene	ND		ug/L	1.18	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Dibenz (a,h) anthracene	ND		ug/L	1.18	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Dibenzofuran	ND		ug/L	2.94	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Fluoranthene	ND		ug/L	1.41	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Fluorene	ND		ug/L	1.41	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Hexachlorobenzene	ND		ug/L	2.82	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Indeno (1,2,3-cd) pyrene	ND		ug/L	1.18	11.8	1	08/24/06 02:39	SW846 8270C	6083576
2-Methylphenol	ND		ug/L	3.29	11.8	1	08/24/06 02:39	SW846 8270C	6083576
3/4-Methylphenol	ND		ug/L	3.65	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Naphthalene	ND		ug/L	1.76	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Pentachlorophenol	ND		ug/L	3.53	29.4	1	08/24/06 02:39	SW846 8270C	6083576
Phenanthrene	ND		ug/L	1.41	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Phenol	ND		ug/L	2.12	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Pyrene	ND		ug/L	1.29	11.8	1	08/24/06 02:39	SW846 8270C	6083576
Surr: Terphenyl-d14 (31-111%)	94 %					1	08/24/06 02:39	SW846 8270C	6083576
Surr: 2,4,6-Tribromophenol (32-118%)	105 %					1	08/24/06 02:39	SW846 8270C	6083576
Surr: Phenol-d5 (10-48%)	39 %					1	08/24/06 02:39	SW846 8270C	6083576
Surr: 2-Fluorobiphenyl (33-101%)	83 %					1	08/24/06 02:39	SW846 8270C	6083576
Surr: 2-Fluorophenol (10-64%)	55 %					1	08/24/06 02:39	SW846 8270C	6083576
Surr: Nitrobenzene-d5 (31-112%)	91 %					1	08/24/06 02:39	SW846 8270C	6083576

APPENDIX C

Community Air Monitoring Plan for Operable Unit 1 AAR/RAWP

January 9, 2007

COMMUNITY AIR MONITORING PLAN FOR OPERABLE UNIT 1 AAR/RAWP

**ExxonMobil Former Buffalo Terminal
Buffalo, New York**

Prepared for:

**EXXONMOBIL OIL CORPORATION
1001 Wampanoag Trail
Riverside, Rhode Island 02915**

Remedial Engineering, P.C.
Environmental Engineers

and ROUX ASSOCIATES, INC.

209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600

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ATTACHMENT

1. Action Limit Report

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared by Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering) as part of the Alternatives Analysis Report (AAR)/Remedial Action Work Plan (RAWP) for Operable Unit 1 (OU-1) to ensure that excavation activities conducted during completion of the remedial action do not adversely affect passersby or workers in the area immediately surrounding the excavation area, and to preclude or minimize airborne migration of construction-related contaminants to offsite areas. The AAR/RAWP for OU-1 describes the proposed remediation to address an area of impacted soil from a historic petroleum release at the Former ExxonMobil Buffalo Terminal, as well as impacts from background influences (i.e., residential uses, previous and current property owner usage, regional industrial influences, nearby highways, and urban fill) on portions of these properties. The former ExxonMobil Buffalo Terminal and offsite areas currently and formerly owned by ExxonMobil, located at 625 Elk Street, Buffalo, New York, are shown on Figure 1 of the AAR/RAWP. ExxonMobil has entered the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) to complete subsequent remediation activities under a Brownfield Site Cleanup Agreement with the NYSDEC, dated April 3, 2006. The “Site” is defined, for the purposes of the BCP, as the area within the limits of the five Operable Units as shown in Figure 2 of the AAR/RAWP. In addition, the Site and offsite areas formerly owned by ExxonMobil were divided into nine geographic areas for the purpose of assessing environmental conditions and reporting the results of area-specific activities (Figure 3 of the AAR/RAWP). The areas of impacted soil that are the subject of this CAMP are located within OU-1 within the area previously designated as the Elk Street Properties Area (ESPA). The impacted areas from the historic are shown on Figure 4 of the AAR/RAWP.

The selected remedy is excavation and offsite disposal of the top one foot of soil exceeding the proposed restricted commercial criteria, followed by backfilling with one foot of soil meeting the proposed restricted commercial criteria. The CAMP is consistent with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan. Compliance with this CAMP is required during all activities associated with excavation of soils, both impacted and clean, including soil excavation, stockpiling, loading, and disposal (collectively, “excavation activities”).

Previous sampling activities in OU-1 have demonstrated that soils in portions of Parcels No 4 and No. 5 of OU-1 have residual impacts from the release of product from former Tank No. 60 in 1976, as well as impacts from background influences (i.e., residential uses, previous and current property owner usage, regional industrial influences, nearby highways, and urban fill) on portions of these properties. These portions of OU-1 contain levels of semivolatile organic compounds (SVOCs) and metals that exceed the proposed restricted commercial soil criteria. Based upon sampling results, volatile organic compounds (VOCs) are not constituents of concern in OU-1.

2.0 SOIL EXCAVATION SCOPE OF WORK

The proposed area for excavation in Parcels No. 4 and No. 5 of OU-1 are approximately 7, 150 square feet and 26,300 square feet in area, respectively, and are shown on Figure 4. One foot of soil will be excavated from these areas. The approximate volume of material to be excavated is 1,250 cubic yards.

Once characterized, soil will be loaded into trucks for appropriate offsite disposal. Offsite disposal of the excavated fill material includes transportation in accordance with the New York State Department of Transportation (NYSDOT) regulations. Based on investigation results, it is not anticipated that groundwater will be encountered in the Site excavation. Therefore, there will likely be no need for stabilization materials (e.g., kiln dust), which readily become airborne.

3.0 AIR MONITORING PROCEDURES FOR SOIL EXCAVATION

SVOCs and metals are the constituents of concern at the Site. The appropriate method to monitor air for these constituents during excavation is through real-time air particulate (dust) monitoring.

3.1 Meteorological Data

At a minimum, wind direction will be evaluated at the start of each workday, noon of each workday, and the end of each workday. These readings will be utilized to position the monitoring equipment in appropriate upwind and downwind locations. In addition, a Davis Corporation instrument station or equal will be used periodically to collect meteorological monitoring data (i.e., wind speed, wind direction, temperature, rainfall and barometric pressure). An appropriate site figure will be included on the contractor's daily sheet to record the wind direction and monitoring equipment locations.

3.2 Particulate Monitoring

Air monitoring for particulates (i.e., dust) will be performed continuously during excavation activities using both air monitoring equipment and visual observation at upwind and downwind locations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM_{10}) and capable of integrating (averaging) over periods of 15 minutes or less will be set up at upwind (i.e., background) and downwind locations, at heights approximately four to five feet above land surface (i.e., the breathing zone). Monitoring equipment will be MIE Data Ram monitors or equivalent. The audible alarm on the particulate monitoring device will be set at 90 micrograms per cubic meter ($\mu g/m^3$). This setting will allow proactive evaluation of worksite conditions prior to reaching the action level of $100 \mu g/m^3$ above background. The monitors will be calibrated at least once per day prior to work activities and recalibrated as needed thereafter. In addition, fugitive dust migration will be visually assessed during all excavation activities.

The following summarizes particulate action levels and the appropriate responses:

- If the downwind PM-10 particulate level is $100 \mu g/m^3$ greater than background (upwind perimeter) for the 15-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed

150 $\mu\text{g}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu\text{g}/\text{m}^3$ above the upwind level, work must be stopped and an evaluation of activities initiated. Work can resume provided that dust suppression measures (as described in Section 3.2.1 below) and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu\text{g}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review. If an exceedance of the Action Limits occurs, an Action Limit Report as shown in Attachment APB-AT1 will be completed.

3.2.1 Potential Particulate Suppression Techniques

If the integrated particulate level at the downwind location exceeds the upwind level by more than 100 $\mu\text{g}/\text{m}^3$ at any time during excavation activities, then dust suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive dusts:

- Limiting the excavation size;
- Spraying water onto the excavation faces and equipment;
- Covering soil stockpiles with 6-mil plastic sheeting;
- Hauling waste materials in properly tarped containers; and/or
- Limiting vehicle speeds onsite.

Work may continue with dust suppression techniques provided that downwind PM_{10} levels are not more than 150 $\mu\text{g}/\text{m}^3$ greater than the upwind levels.

There may also be situations where the dust is generated by excavation activities and migrates to downwind locations, but is not detected by the monitoring equipment at or above the action level. Therefore, if dust is observed leaving the working area, dust suppression techniques such as those listed above will be employed.

If dust suppression techniques do not lower particulates to below $150 \mu\text{g}/\text{m}^3$ or visible dust persists, work will be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

All air monitoring readings will be recorded in the field logbook and will be available for the NYSDEC and NYSDOH personnel to review.

4.0 REFERENCES

NYSDOH, 2000. New York State Department of Health Generic Community Air Monitoring Protocol, June 20, 2000 (also included as Appendix A to the Draft Technical Guidance for Site Investigation and Remediation, NYSDEC, December

ATTACHMENT 1

Action Limit Report

[illegible]

APPENDIX D

Technical Specifications and Details

SECTION 01005
DEFINITIONS AND REFERENCES

PART 1-GENERAL

1.01 DESCRIPTION

The following terms and references, which are defined below, are used throughout the Contract Documents.

1.02 DEFINITIONS

AASHTO – The American Association of State Highway And Transportation Officials

ABIH – American Board of Industrial Hygiene

ACI – American Concrete Institute

AGA – American Gas Association

AIHA – American Industrial Hygiene Association

AISC – American Iron And Steel Institute

ANSI – American National Standards Institute

ANSI/ASTM A123 – Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ANSI/ASTM F567 – Installation of Chain Link Fence

As-built drawings – Copies of the Drawings which have been marked to show all features of the Work as they have been actually constructed. As-built drawings show all changes from the original Drawings, including all change orders, vertical and horizontal changes, and all other items that are not the same as they were originally drawn.

ASCE – American Society of Civil Engineers

ASME – American Society of Mechanical Engineers

ASTM – American Society of Testing Materials

ASTM A116 – Zinc-Coated (Galvanized) Steel Woven Wire Fence Fabric

ASTM A120 – Pipe, Steel, Black, and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless, for Ordinary Uses

ASTM A153 – Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A392 – Zinc-Coated Steel Chain Link Fence Fabric

ASTM C94 – Ready-Mixed Concrete

BCP – Brownfield Cleanup Program of the NYSDEC

BCA – Brownfield Site Cleanup Agreement

CAMP – Community Air Monitoring Plan

Contract Documents – The Remedial Action Work Plan, Specifications, and associated project plans

Contractor – Clean Harbors Environmental Services, 1501 Washington Street, Braintree, who is contracted to Roux Associates, Inc. to complete the Work.

Contractor's HASP – The Health and Safety Plan to be submitted to Owner's Representative by Contractor

Day – A calendar day, unless expressly stated to be a working day

Defective – Unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged by Contractor.

Drawings – Illustrated items which show the character and scope of the Work to be performed

Engineer – Roux Associates, Inc. and Remedial Engineering, P.C. or designated representative

Engineer's-Approved Equal – Materials or equipment which the Engineer deems to be of equal or greater value than that material or equipment specified in the Contract Documents.

ESPA – Elk Street Properties Area

Field Manager – Groundwater & Environmental Services, Inc. (GES)

HASP – Health and Safety Plan

HAZWOPER – Hazardous Waste Operations and Emergency Response

HDPE – High density polyethylene

IEEE – Institute of Electrical and Electronic Engineers

LDPE – Low density polyethylene

NIOSH – National Institute for Occupational Safety and Health

NYCRR – Official Compilation of New York State Codes, Rules, and Regulations

NYSDEC – New York State Department of Environmental Conservation

NYSDOH – New York State Department of Health

OSHA – United States Department of Labor Occupational Safety and Health Administration

Owner – ExxonMobil Oil Corporation (ExxonMobil)

OU – Operable Unit

Project – The total construction which constitutes the Work to be provided under the Contract Documents

Project Site – Parcel No. 5 of OU-1 within the ESPA of the Former Buffalo Terminal

RCRA – Resource Conservation and Recovery Act

Site – ExxonMobil Former Buffalo Terminal, located at 625 Elk Street in Buffalo, New York. BCP Site No. C915201

Site Water – All construction generated water, including but not limited to, water generated during dust suppression, decontamination activities, and material stockpiling.

Specifications – Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, execution, and standards.

Target Area for Remediation – Northeast portion of Parcel No. 5 of the ESPA

TAGM – NYSDEC issued Technical and Administrative Guidance Memorandum

TSCA – Toxic Substances Control Act

USEPA – United States Environmental Protection Agency

Work – The obligations of performance of Contractor including, but not limited to, providing all materials, supplies, equipment, tools, supervision, labor, and services as set forth by the Contract Documents.

1.03 REFERENCES

- A. The Contractor shall perform all Work in accordance with all applicable regulations promulgated under the following;
 - 1. USEPA Resource Conservation and Recovery Act (RCRA)
 - 2. USEPA Land Disposal Restrictions
 - 3. USEPA Toxic Substances Control Act (TSCA)
 - 4. “Clean Water Act” (CWA)

5. U.S. Department of Labor Occupational Safety and Health Administration (OSHA) regulations
6. U.S. Department of Transportation's Hazardous Materials Transportation Act
7. Regulations promulgated under the authority of the New York State Department of Environmental Conservation (NYSDEC), as well as all other applicable federal, state, and local statutes and regulations

B. Industry Standards.

1. Applicable standards of the construction industry have the same force and effect (and are made a part of Contract Documents, or as if published copies were bound herewith).
 - a. Referenced standards (referenced directly in Contract Documents or by governing regulations) have precedence over non-referenced standards which are recognized in industry for applicability to the Work.
 - b. Non-referenced standards are hereby defined to have no particular applicability to the Work, except as a general measurement of whether Work complies with the standards recognized in the construction industry.
2. Contractor shall perform all Work in accordance with the latest revision of referenced industry standards.

PART 2-PRODUCTS

(Not Used)

PART 3-EXECUTION

(Not Used)

(END OF SECTION)

SECTION 01080

FENCING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Following completion of construction activities, Contractor shall repair or replace existing fencing and gates as specified herein and as required by the Owner.
- B. Contractor shall install all temporary fencing, barricades, and necessary controls as required or as directed by the Engineer to control the access to work areas within the construction area and work zone. Contractor shall also install all temporary fencing required to comply with OSHA and any other applicable regulations.

1.02 SYSTEM DESCRIPTION

- A. Fence Height: 8 feet nominal.
- B. Line Post Spacing: At intervals not exceeding 10 feet.
- C. Barbed Wire: 3 strands of barbed wire facing out.

1.03 QUALITY ASSURANCE

- A. Perform work in accordance with ANSI/ASTM F567.

1.04 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this Section with a minimum of three years documented experience.

1.05 FIELD MEASUREMENTS

- A. Verify that field measurements are as instructed by the manufacturer.

PART 2 – PRODUCTS

2.01 PERMANENT FENCE MATERIALS

- A. Framing (Steel): ASTM A120: Schedule 40 hot-dipped galvanized steel pipe, standard weight, one piece without joints.
- B. Fabric Wire (Steel): ASTM A392 zinc-coated wire fabric.
- C. Barbed Wire: ASTM A121 galvanized steel; 12 gauge thick wire, 3 strands, 4 points at 3 inch on center (o.c.).

D. Concrete: Compressive strength of 3,000 p.s.i. at the end of 28 days.

2.02 PERMANENT FENCE COMPONENTS

A. Line Posts: 2.375 inch outside diameter (o.d.).

B. Corner and Terminal Posts: 2.875 inch o.d.

C. Gate Posts: 4 inch o.d.

D. Top and Brace Rail: 1.625 inch o.d., plain end, sleeve coupled.

E. Gate Frame: 1.90 inch o.d. for welded fittings and truss rod fabrication.

F. Fabric: 2 inch diamond mesh interwoven wire, 9 gauge thick, top selvage twisted tight, bottom selvage knuckle end closed.

G. Tension Wire: 6 gauge thick steel, single strand.

H. Stretcher Bar: $\frac{1}{4}$ -inch thick x $\frac{3}{4}$ -inch steel.

I. Stretcher Bands: $\frac{1}{4}$ -inch thick x $\frac{3}{4}$ inch steel.

J. Tire Wire: Aluminum alloy steel wire.

K. Tie Rods with Turnbuckle: $\frac{3}{8}$ inch o.d.

2.03 PERMANENT FENCE ACCESSORIES

A. Caps: Cast steel galvanized; sized to post diameter, set screw retainer.

B. Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners, and fittings; steel hot-dipped galvanized.

C. Extension Arms: Cast steel galvanized to accommodate 3 strands of barbed wire, single arm, sloped to 45°.

D. Gate Hardware: Center gate stop and drop rod; two 180° gate hinges per leaf and hardware for padlock.

2.04 PERMANENT FENCE FINISHES

A. Hardware: Galvanized to ASTM A153, 2.0 oz/sq ft coating.

B. Accessories: Same finish as framing.

2.05 TEMPORARY FENCING

- A. Orange colored plastic (polyethylene or polyethylene-propylene) barrier fences shall be a minimum of four feet tall, attached to chicken wire on one side, and installed with steel support posts spaced at no more than eight feet.
- B. Galvanized steel temporary fencing shall meet the requirements for permanent fence except that temporary fencing does not need to be new.

2.06 GATES

- A. Swing gate frames, where required, shall be hot-dipped galvanized Schedule 40 steel pipe, 1½ inches nominal diameter or 2 inches square tubing weighing 2.72 pounds per foot. The gate frame joints shall be welded or be connected by use of special rigid connections. The gate fabric shall be the same as the fence fabric and shall be securely fastened to the frame on all sides.
- B. Gates shall be installed plumb, level, and shall secure the full opening without interference. All hardware is to be adjusted for smooth operation and lubricated where necessary.
- C. Gate posts shall be set plumb and true to line. Posts shall be set a minimum depth of 36 inches in concrete in undisturbed or compacted soils. Postholes shall be a dug or drilled cylindrical hole 15 inches minimum diameter or 15 inches diameter at top tapered outwardly at the bottom to a 17-inch diameter. Concrete shall have a 28-day strength of 3000 psi.

2.07 CHAINS AND LOCKS

- A. A chain and lock or locking mechanism shall be installed on each gate. Chains shall be heavy duty and galvanized. Padlock shall also be heavy duty and key locking. These must be approved by Engineer prior to purchase. All locks shall be keyed to one master key. Four (4) copies of the master key shall be given to the Owner upon completion of the Work.

PART 3 - EXECUTION

3.01. PERMANENT FENCING

- A. Installation
 - 1. Install permanent fencing in any location where existing fencing is to remain, was damaged by the construction activities, and/or as directed by the Engineer.
 - 2. Install framework, fabric, anchor, accessories, and gates in accordance with ANSI/ASTM F567 or specific manufacturer's instructions.
 - 3. Anchor intermediate terminal gate and posts plumb.

4. Brace each gate and corner post to adjacent line post with horizontal center brace rail. Install brace rail one bay from end and gate posts.
5. Provide top rail through line post tops and splice with 6-inch long rail sleeves.
6. Install center brace rail on corner gate leaves.
7. Stretch fabric between terminal posts or at intervals of 100 feet maximum, whichever is less.
8. Position bottom of fabric 2 inches above finished grade.
9. Fasten fabric to top rail, line posts, braces, and bottom tension wire with tie wire at maximum 15 inches on centers.
10. Attach fabric to end, corner, and gate posts with tension bars and tension bar clips.
11. Install bottom tension wire strap stretched taut between terminal posts.
12. Install support arms sloped inward and attach barbed wire; tension and secure.
13. Install gate with fabric and barbed wire overhang to match fence. Install three hinges per leaf, latch, catches, drop bolt, foot bolts and sockets, retainer and locking clamp.
14. Provide concrete center drop to footing depth and drop rod retainers at center of double gate openings.

B. Erection Tolerances

1. Maximum Variation from Plumb: $\frac{1}{4}$ inch.
2. Maximum Offset from True Position: 1 inch.
3. Components shall not infringe on adjacent property lines.

3.02 TEMPORARY FENCING

- A. The Contractor shall install an orange plastic fence around the limits of Work as necessary to control access to onsite personnel during construction activities and as directed by the Engineer.
- B. Galvanized steel temporary fencing shall meet the installation requirements for permanent fencing, except that temporary fencing shall not be anchored below grade. Temporary fencing, however, shall be properly supported in accordance with the fencing manufacturer.

(END OF SECTION)

SECTION 01090

SIGNS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Contractor shall install warning signs specified below during construction and remove these signs at the completion of the Work.
- B. Contractor shall install a remedial construction sign per the requirements of the NYSDEC, specified below.

PART 2 – PRODUCTS

2.01 WARNING SIGNS

- A. As per OSHA regulations, appropriate warning signs shall be posted to warn of the potential danger. Signs shall be a minimum of seven inches by ten inches.

2.02 REMEDIAL CONSTRUCTION SIGN

- A. Sign requirements per NYSDEC:
 1. Size: Horizontal format – 96” wide by 48” high.
 2. Construction Materials: Aluminum or wood blank sign boards with vinyl sheeting.
 3. Color Scheme:
 - Copy surrounding NYSDEC logo - “NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION” - PMS 355
 - NYSDEC logo: PMS 301 Blue and PMS 355 Green
 - Brownfield Cleanup Program - PMS 301
 - Site Name, Site Number, Party Performing Remedial Activities - PMS 355
 - Names of Governor, Commissioner, Municipal Executive - PMS 301
 - Transform the Past.....Build for the Future - PMS 355
 4. Type Specifications: All type is Caslon 540, with the exception of the logotype. Format is center each line of copy with small caps and initial caps.
 5. Production Notes: 96” wide x 48” high aluminum blanks will be covered with vinyl sheeting to achieve background color. Copy and logo will be silk screened on this surface.

6. A draft of the remedial construction sign for this project is attached.

PART 3 - EXECUTION

3.01. WARNING SIGNS

- A. Warning signs shall be securely attached to the permanent fence approximately 5 feet from ground surface elevation.

3.02. REMEDIAL CONSTRUCTION SIGN

- A. Remedial Construction sign will be prominently displayed on Operable Unit 2 along the fenceline, adjacent to Elk Street.
- B. Contractor shall be responsible for providing a free standing support structure for the sign.



BROWNFIELD CLEANUP PROGRAM

EXXONMOBIL FORMER BUFFALO TERMINAL
SITE NUMBER C915201
EXXONMOBIL OIL CORPORATION, INC.

Governor: George E. Pataki
NYSDEC Commissioner: Denise M. Sheehan
City of Buffalo Mayor: Byron W. Brown

Transform the Past.....Build for the Future

(END OF SECTION)

SECTION 01510
TEMPORARY FACILITIES, SITE PREPARATION
AND SITE RESTORATION

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall furnish all labor, materials, equipment, temporary facilities, and incidentals to perform all Site Preparation and Site Restoration activities specified herein and as directed by the Engineer. The Work includes the mobilization, set-up, operation, and demobilization of all equipment, materials, and labor necessary to begin the Work. The Work includes, but is not limited to:
1. Mobilization
 2. Permitting
 3. Erosion Control
 4. Traffic Control
 5. Health and safety monitoring, supplies, and equipment
 6. Temporary facilities
 7. Temporary utilities
 8. Dust suppression
 9. Trash removal
 10. Site restoration
 11. Demobilization
- B. The Work shall not include specific items of work for which payment is provided elsewhere in the contract documents.

PART 2 - PRODUCTS

2.01 TEMPORARY CONSTRUCTION FACILITIES

- A. Contractor shall establish and initiate use of each temporary facility when it is reasonably required for proper performance of the Work and shall terminate the use of, and remove from the Site, the facilities when no longer needed.

- B. Contractor shall install, operate, maintain, and protect temporary facilities in a manner which will be safe, non-hazardous, sanitary, and protective of persons and property. Facilities shall be located where shown on the Drawings as directed by the Engineer during Contractor mobilization.
- C. The Engineer, with the authorization of the Owner, will designate to Contractor an onsite location for storage of equipment and supplies.
- D. Temporary Water:
 - 1. Potable water is available at the site from two public hydrants located as shown on Figure 4 of the RAWP. One hydrant is located north of Parcel No. 5 of OU-1 on Bradford Street and the other is located on the south side of Elk Street across from Bradford Street. Water is also available from the main portion of the former Buffalo Terminal located south of Elk Street. Contractor shall determine the needs for potable water supply and provide connections to the water source as necessary to accommodate construction operations. Installation and use shall comply with all applicable laws, regulations, and codes. Contractor may provide, as required, a tank truck, and/or other equipment necessary for the conveyance of water to specific areas, as necessary.

2.02 SECURITY/PROTECTION PROVISIONS

- A. Contractor is responsible to provide all security/protection services for the Site.
- B. Contractor shall provide services to limit access onto the Site by all non-authorized personnel in the construction area, and as directed by the Engineer.

2.03 EMERGENCY EQUIPMENT AND MATERIALS

- A. The Contractor shall supply equipment and materials for use at the Site in the event of an emergency. They shall be stored in a secure, readily accessible location, and consist of the following, at a minimum:
 - 1. Sand stockpile and unfilled sandbags in a quantity sufficient to place over all solid material stockpiles, where any plastic liners used are subject to movement by wind.
 - 2. Oil absorbing pads, oil absorbing boom, speedi-dri, etc., in the event of a petroleum spill.

PART 3 - EXECUTION

3.01 SITE PREPARATION

- A. As part of Site Preparation activities, Contractor shall install, operate, maintain, and protect temporary facilities in a manner which will be safe, non-hazardous, sanitary, and protective of persons and property.

- B. Contractor shall utilize the area of work shown for storage of equipment and supplies. Should an additional area be required beyond the limits of Work, Contractor shall obtain this space at no additional cost to Owner.
- C. Soil erosion and Sediment control features such as silt fencing, hay bales, and protecting stormwater catchbasins shall be undertaken by the Contractor prior to the start of any work, as described in the contract documents or as otherwise required.

3.02 SITE RESTORATION

- A. As part of Site Restoration activities, Contractor shall remove all signs of construction, excess materials, or any other vestiges of construction as directed by the Engineer. After removal of all temporary fencing, temporary facilities, equipment, temporary utilities, materials, and any other signs of construction, the Contractor shall return disturbed areas to the conditions which existed before the Contractor initiated the Work and those areas disturbed by remedial activities, as directed by the Engineer.

(END OF SECTION)

SECTION 01520

TEMPORARY STAGING AND STORAGE REQUIREMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This section describes the requirements for the staging and segregation of all solid and liquid wastes generated during performance of the Work. All solid materials generated onsite shall be staged in a combination stockpile/decontamination area and any containerized liquid shall be staged in tanks. The Contractor shall size stockpile/decontamination area and storage tanks and provide as many units as necessary to perform the Work.
- B. Specific requirements regarding decontamination are included in Specification Section 01565.
- C. All temporary stockpile/decontamination areas for Site media shall be sized by the Contractor as necessary to perform its Work and located as approved by the Owner and Engineer. Stockpile/decontamination area shall be constructed as shown on Drawing C-4.
- D. Though not anticipated to be required for the Work, any staged materials that require dewatering must be staged in such a way that the liquids released by those materials are collected and managed as described below. Dewatering for materials requiring onsite placement and/or offsite disposal shall continue until materials pass the USEPA paint filter test (SW 846 Method 9095).
- E. Rolloffs, lined as appropriate, are an acceptable substitute for the stockpile requirements described herein for all solid wastes. Contractor is responsible for unloading, reloading, corrective actions, and other remedial Work resulting from any leakage of rollofs.
- F. Any water generated from the temporary stockpiling/decontamination area shall be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street or disposed of offsite at an ExxonMobil-approved disposal facility.
- G. Stockpile/decontamination area shall be surrounded by a perimeter berm of native soil for runoff/runoff control.
- H. Contractor shall inspect all stockpile/decontamination area daily and following storms, to detect any deterioration, malfunction, leaks, or presence of liquids and shall immediately correct any problems encountered.
- I. Any rolloff or lined stockpile/decontamination area that is leaking shall be immediately taken out of service, the material removed if necessary to repair the leak, and any visible releases to the environment contained and remediated.

PART 2 - PRODUCTS

2.01 POLYETHYLENE LINER AND SHEETING

- A. All polyethylene liners used to line and cover stockpile/decontamination areas for staging purposes shall be 6 mils thick.

PART 3 - EXECUTION

3.01 SEGREGATION OF MATERIALS

- A. Contractor shall establish separate staging areas for the following:
 - 1. soil from the excavation;
 - 2. asphalt and concrete;
 - 3. used personal protective equipment; and
 - 4. construction waters, including decontamination water.
- B. Any other material determined by the Engineer to require offsite disposal shall be staged separately.

3.02 STAGING OF SOLID MATERIALS

- A. Solid materials that are staged in areas of the Site that have not yet been remediated may be staged in stockpiles placed directly on the ground surface as long as they have been sufficiently dewatered such that they do not provide any free liquid run-off.
- B. All solid materials that are staged in temporary stockpile/decontamination area of the site that do not require remediation or have already been remediated shall be staged in stockpiles meeting the following requirements:
 - 1. The stockpile shall be lined with a single layer of 6-mil polyethylene liner, which is chemically resistant to the materials being stored to prevent any migration of solid materials or liquids from the stockpile. The liner shall be as specified in Section 2.01. The liner shall extend over and at least one foot beyond the perimeter berm constructed of native soil.
 - 2. Stockpiles shall be covered with polyethylene sheeting specified in Section 2.01 at all times unless materials are being added to or removed from the pile or decontamination is occurring. The cover shall extend over and at least one foot beyond the perimeter berm constructed of native soil.
 - 3. The liner and cover shall be anchored with sand bags or other appropriate weights every 10 feet, or as required to prevent damage to the cover.
- C. A stockpile/decontamination area that has been removed from service due to deterioration leakage may not be restored to service until the liner system is repaired or replaced to the satisfaction of the Engineer. After the removal of a contaminated stockpile/decontamination area, the ground surface, if it has been contacted by contaminated soil or liquid, will be scraped to removal all visually contaminated soils.

3.03 STAGING OF OFFSITE FILL MATERIALS

- A. Fill materials from offsite sources shall covered with a polyethylene liner as specified in Section 2.01. Contractor shall replace the liner as necessary.

(END OF SECTION)

SECTION 01560
TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes temporary controls that shall be implemented during the Work, which includes control of dust, traffic, erosion, noise, and pollution.
- B. Contractor shall provide environmental protection to maintain the environment in its natural state to the greatest possible extent during the Work. Environmental protection shall include consideration of air, land and water protection, noise and dust minimization, and management of trash and other pollutants. Contractor shall comply with all applicable federal, state, and local laws and the requirements specified herein.
- C. The Engineer will notify the Contractor of any non-compliance with the provisions of this section and the corrective actions to be taken. The Contractor shall, after receipt of such notice, immediately inform the Engineer of proposed corrective actions and take such action as may be approved.

1.02 SPILLS

- A. Any spills shall be cleaned up by Contractor at no cost to Owner. Contractor shall immediately notify the Engineer and Owner of any spill.

1.03 PROTECTION OF VEGETATION

- A. Except in areas of the Site to be cleared, Contractor shall not deface, injure, or destroy trees, shrubs, or other vegetation, nor remove or cut them without the approval of Engineer. Where the possibility exists that vegetation may be defaced or damaged, Contractor shall adequately protect such areas.
- B. All materials and equipment shall be stored in cleared spaces away from all trees, shrubs, and other vegetation.
- C. Any vegetation outside of the allowable limits of clearing and grubbing damaged by Contractor's operations shall be restored or replaced as directed by Engineer at Contractor's expense.

1.04 DUST CONTROL

- A. Contractor is responsible for dust (particulate matter) control at the Site, in accordance with the NYSDOH Community Air Monitoring Protocol (CAMP), the NYSDEC Technical and Administrative Guidance Memorandum #4031 – Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (TAGM 4031), and all federal, state, and local requirements. All dust monitoring and control, both at the work locations and at the perimeter of the Site, shall be performed

by Contractor at no additional cost to Owner. Contractor shall maintain all excavations, stockpiles, access roads, and all other Work areas to minimize dust which would cause a hazard or nuisance to others. Contractor shall monitor dust in accordance with the requirements of Contractor's HASP, the NYSDOH CAMP, the NYSDEC TAGM 4031, and the Contractor's Construction Quality Control Plan and shall notify Engineer of the results. Based on the results of the monitoring, Contractor will implement necessary measures to control dust to levels indicated in Contractor's HASP, including but not limited to, one or more of the following measures:

1. misting equipment and excavation faces;
2. spraying water (using atomizer) on buckets during excavation and dumping;
3. hauling materials in tarped or watertight containers;
4. reducing speed of vehicles moving through areas of the Site;
5. covering material stockpiles after excavation activity ceases; and
6. stopping work.

1.05 EROSION CONTROL

- A. Contractor shall take all necessary measures to temporarily control erosion in accordance with "NYS Guidelines for Urban and Sediment Control" dated April 1997.
- B. Hay bales and/or silt fences shall be placed by the Contractor to control sediment around the disturbed area/ excavations or other Work areas, as required. Typical hay bale and silt fence details are provided in Appendix C to the AAR/RAWP for OU-1. Contractor shall install these silt fence and haybales as soon as practicable and prior to initiating intrusive activities. Any additional erosion control measures necessary shall be provided at no additional cost to Owner.
- C. In addition to silt fence and haybales, temporary diversion swales and berms shall also be created as necessary to control storm runoff and surface water from entering or exiting excavations, with locations and methods subject to the approval of Engineer. These additional measures shall be provided at no additional cost to Owner.
- D. The need for any additional erosion control measures as a result of Contractor operations shall be determined by Engineer during construction on an as-needed basis and shall be implemented and maintained by Contractor at no additional cost to Owner. Inspection of temporary erosion control measures by Contractor shall be frequent and repair or replacement shall be made promptly, as needed or as directed by Engineer.
- E. Disturbed Work areas shall be graded to control erosion and the exposed areas of bare soil shall be minimized.
- F. Contractor shall be aware that, if construction activity is temporarily suspended for an extensive period as determined by the Engineer on a portion of the site that has already

been cleared, temporary stabilization measures shall be implemented. If the delay is determined to be the fault of the Contractor, temporary stabilization measures shall be provided at no additional cost to the Owner. Temporary stabilization measures may include providing either vegetative cover (i.e., grass, trees, seed, and mulch, etc.) or non-vegetative cover (i.e., geotextiles).

- G. Contractor shall remove erosion control devices once vegetation has been suitably established.

1.06 NOISE CONTROL

- A. Contractor shall conduct all operations for the execution of the Work in compliance with applicable local regulations controlling maximum noise levels and shall take appropriate noise abatement measures necessary to comply with local regulations. All outside Work involving heavy machinery shall be performed during daylight hours.

1.07 TRAFFIC CONTROL

- A. Contractor shall be responsible for the provision of personnel and materials (i.e., traffic lanes, safety cones) as necessary to control traffic entering and exiting the Site.
- B. Traffic control requirements shall be coordinated with the local police department, if necessary, and documentation of such coordination shall be provided to Engineer before the start of the Work.
- C. The truck routes shall be selected to minimize the potential impacts to the surrounding community due to construction vehicles.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

(Not Used)

(END OF SECTION)

SECTION 01565
EQUIPMENT DECONTAMINATION REQUIREMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Work covered by this Section consists of the decontamination of equipment. Personnel decontamination shall be addressed in the Contractor's HASP.
- B. Contractor shall minimize use of water for decontamination purposes to the extent practicable.
- C. A combination temporary stockpile/decontamination area shall be established at the Site in a location selected by the Owner and Engineer per specification section 01520 and Drawing C-4. Decontamination pad will be part of the soil stockpile area and will be sized by the Contractor as necessary to perform the Work.
- D. Decontamination water (if any) will be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street or disposed of offsite at an ExxonMobil-approved disposal facility.

1.02 LEAKAGE, SPILLAGE, CONTAMINATION

- A. Any leakage, spillage, or contamination of soil or equipment caused by the decontamination activities of the Contractor shall be cleaned up at the Contractor's expense.
- B. All non-impacted soil contaminated by the Contractor by decontamination activities shall be excavated and disposed of in a manner acceptable to the Engineer and all governing regulatory agencies at the Contractor's expense.
- C. All existing materials or facilities (e.g., asphalt) other than soils contaminated by a spill event shall be decontaminated by the contractor in a manner approved by the engineer at no additional cost to the Owner.

PART 2 - PRODUCTS

2.01 EQUIPMENT/MATERIALS

- A. All decontamination equipment and materials necessary for the performance of the Work shall be supplied by Contractor.

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. Contractor shall minimize use of wash waters used for decontamination purposes.

- B. Decontamination water (if any) will be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street or disposed of offsite at an ExxonMobil-approved disposal facility.
- C. All safety equipment and other equipment used during decontamination procedures shall be either decontaminated and salvaged or contained and disposed of in accordance with applicable regulatory requirements.
- D. Contamination reduction zones (CRZs) for equipment decontamination shall be established at the Site in locations selected by Contractor and approved by Engineer. CRZs shall be used to completely decontaminate all machinery and equipment used by Contractor.
- E. Each CRZ shall include shovels, brushes, power washers, a steam generator, detergent solutions, if necessary, and provisions to collect decontamination wash waters.

3.02 DECONTAMINATION OF EQUIPMENT, TOOLS, AND FACILITIES

- A. All equipment used for excavation and other earthwork activities which comes in contact with potentially contaminated materials shall be decontaminated prior to:
 - 1. crossing areas of the Site which do not require remediation or have already been remediated;
 - 2. handling clean fill materials; and
 - 3. leaving the Site.
- B. Contractor shall not allow equipment to leave the Site with water leaking or mud dripping or caked to the equipment. All equipment leaving the Site shall be dry except during rainy or snowy weather, or with Engineer's written consent for other exceptions.
- C. Dry brushes shall be used to decontaminate excavators, paving equipment, trucks, trailers, and drill rigs, to the extent practicable. Any dry decontamination must be performed in accordance with the activity cessation thresholds for dust, as specified in the Contractor's HASP.
- D. Prior to equipment leaving the Site, the final decontamination of excavation equipment shall consist of using a pressure washer capable of effectively removing all soil, residues, and other debris adhering to equipment, if required. Additives to the wash water shall be used when necessary and approved by Engineer to enhance decontamination to levels acceptable to Engineer.
- E. After completion of the Work, the Contractor shall remove and dispose of any decontamination materials and supplies in accordance with applicable local, state, and federal laws and regulations. Approval from the Engineer shall be required prior to removal of the decontamination pad from the Site. The Contractor shall remove and dispose offsite any material from beneath the decontamination pad which has become

contaminated as a result of the Contractor's operations, as directed by the Engineer and approved by ExxonMobil.

3.03 PERSONNEL DECONTAMINATION

- A. Personnel shall be decontaminated in accordance with the Contractors' Health and Safety Plan.

(END OF SECTION)

SECTION 02200

EXCAVATION AND STOCKPILING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall furnish all labor, materials, equipment, and incidentals necessary to perform all excavation and stockpiling as needed to complete the Work, as shown on the Drawings, as specified herein, and as directed by the Engineer. The Work shall include, but not necessarily be limited to: excavation, hauling, and stockpiling of soils and other materials as required.
- B. Related work includes: drainage, sedimentation and erosion control, slope protection and control of vapors, odors, and dust.
- C. The Work shall include excavation of all materials regardless of type, character, composition, moisture, weight, size, or condition.
- D. Decontamination water (if any) will be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street or disposed of offsite at an ExxonMobil-approved disposal facility.
- E. Temporary stockpiling and staging shall be performed in accordance with the requirements of Section 01520.
- F. All soils shall be removed to the limits and depths required by the Specifications, Drawings, and as directed by the Engineer.

1.02 PERMITS AND REGULATIONS

- A. The Contractor shall obtain all necessary permits and approvals for the Work. The Contractor shall also obtain permits and approvals as required by local, state, and federal agencies for earthwork, hauling, etc.
- B. The Contractor shall perform all excavation and earthwork in strict compliance with all applicable requirements of governing authorities having jurisdiction.
- C. The Contractor is advised that all excavation work performed for this project shall be in accordance with Occupational Safety and Health Administration (OSHA), Title 29, Code of Federal Regulations 1926.

1.03 QUALITY ASSURANCE

- A. If water is to be used for dust control, it shall be potable water and shall be clean, free from oil, acids, alkalis, and other deleterious water soluble or insoluble substances.

1.04 SUBMITTALS

- A. Contractor shall submit the following:
 - 1. Proposed methods and materials (including manufacturer's information) for the sheeting, shoring, and bracing installation, if required, for the work.
 - 2. Calculations, sealed by a New York State licensed Professional Engineer, documenting the selection and design of the intended sheeting, shoring, and bracing for excavations, if required for the work.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 GENERAL EXCAVATION

- A. Excavation shall be made to the horizontal and vertical limits shown on the Drawings, as directed by the Engineer.
- B. Excavation equipment shall be selected by the Contractor and shall be satisfactory for carrying out the work in accordance with the specifications.
- C. When the excavation has progressed to the limits shown on the Drawings, the Contractor shall notify the Engineer and allow the Engineer to examine the existing conditions. If the existing, undisturbed materials and conditions are not satisfactory to the Engineer, the Engineer will direct the Contractor to continue the excavation until satisfactory conditions are obtained.
- D. If the excavation is unacceptable due to improper excavation methods or practices, improper protection from water and erosion, or due to the Contractor's delay or other Contractor negligence, the soil shall be removed to the limits of affected soil as directed by the Engineer and replaced with compacted common fill as specified in Section 02250 by the Contractor at no additional cost to the Owner.
- E. If the excavation at the limits shown on the Drawings is unacceptable due to natural circumstances and not due to acts attributable to the Contractor, the Engineer shall direct the Contractor to excavate the unacceptable material and replace it with compacted common fill as specified in Section 02250.

- F. All excavation outside the lines shown and which is not approved by the Engineer, and the removal and disposal of the associated material, shall be at the Contractor's expense. The unauthorized excavation shall be filled and compacted with common fill as specified in Section 02250 by the Contractor at no additional cost to the Owner.
- G. Excavations shall be open excavations, shored and braced, where necessary, to prevent possible injury to personnel. The Contractor shall shore and brace the excavation where sloping to meet OSHA Standards is not possible, either because of adjacent structures, space restrictions, or stability of material excavated.
- H. The Contractor shall barricade open excavations that occur as part of the work as required to protect persons and property.
- I. The Contractor shall limit the daily working area of excavation, as approved by the Engineer, to maintain a manageable and safe condition, to minimize the potential for drainage water contact with exposed waste, and to prevent the occurrence and release dust.
- J. During any excavation, the Contractor shall provide and implement positive means to control dust in accordance with the CAMP and at the direction of the Engineer.
- K. Grade top perimeter of excavation, as necessary, to prevent surface water from draining into excavation.

3.02 STOCKPILING

- A. Excavated Soil shall be stockpiled in accordance with Section 01520.

3.03 MATERIAL EXCAVATION NEAR EXISTING STRUCTURES

- A. The Contractor shall perform the Work and excavation in such a manner as to eliminate the possibility of undermining or disturbing existing foundations or structures that are to be left in place. Structures, utilities, or other items to be left in place must be field verified by the Contractor in coordination with the Owner and Engineer. Structures, utilities, or other items to be left in place shall be carefully supported and protected from damage by the Contractor. Facilities which must be protected include, but are not limited to, buildings, catch basins, manholes, fire hydrants, water lines, natural gas lines, valve boxes, pipes and fencing and gates. Any items damaged by the Contractor shall be restored to the original condition or replaced as approved by the Engineer at no additional cost to the Owner.
- B. Excavation by machinery shall be discontinued when excavation approaches pipes, conduits, or other above or below ground structures or utilities. The

Contractor shall perform all excavation near such structures and utilities by the use of hand tools.

- C. The Contractor shall excavate test pits by machine and continue by hand, if necessary, when the determination of the exact location of pipes or other underground utilities, structures, or items is necessary for performing Work properly at no additional cost to Owner.

3.04 SHEETING, SHORING AND BRACING

- A. All municipal, county, state, and federal ordinances, codes, regulations, and laws shall be observed.
- B. Contractor shall be solely responsible for the selection and design of all sheeting, shoring, and bracing the Contractor deems necessary for completion of the work. The design shall be sealed by a Professional Engineer licensed in the State of New York.
- C. Material used shall be in good condition and not damaged or excessively pitted. All steel or wood sheeting designated to remain in place shall be new. New or used sheeting may be used for temporary work.
- D. Shoring and bracing shall be maintained in open excavations regardless of the time period. Shoring and bracing shall be carried down as the excavation progresses.
- E. Unless otherwise shown, specified, or ordered, all materials used for temporary construction shall be removed and decontaminated or disposed when work is completed. Such removal shall be made in a manner not injurious to the structure or its appearance or to adjacent work.
- F. Sheeting and bracing shall be removed from excavation unless otherwise ordered in writing by the Engineer. Removal shall be performed so as to not cause damage to the work. Removal shall be equal on both sides of excavation to ensure no unequal loads.

(END OF SECTION)

SECTION 02220

WASTE TRANSPORTATION AND DISPOSAL

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall furnish all labor, materials, equipment, and incidentals necessary to label, transport, and dispose of all waste and materials generated by the Work and designated for removal from the site by the Engineer and any other materials, as shown on the Drawings and as directed by the Engineer.
- B. Transportation and disposal shall be performed in accordance with all applicable federal, state, and local laws and regulations and the requirements of the disposal facility(s).
- C. The Contractor shall apply for and obtain all permits and approvals required to complete the Work. All fees for licenses, permits, tolls, approvals, taxes, etc. shall be the responsibility of the Contractor.
- D. The work shall be performed in accordance with all approved plans.
- E. Materials removed from the site shall only be transported to facilities which have received prior approval of the Owner.
- F. The Contractor shall be responsible for all scheduling and coordination of transportation subcontractors and Transport, Storage and Disposal Facility (TSDF). All costs incurred by Contractor due to delays, downtime, and changes by other subcontractors resulting from the failure to properly schedule, coordinate, or perform the work shall be the responsibility of the Contractor.

1.02 SUBMITTALS

- A. The Contractor shall submit the following to the Owner or Engineer:
 - 1. Copies of all manifest forms or other bills of lading required under federal and state regulations at the time of transport from the Site.
 - 2. Copies of all manifest forms or other bills of lading following completion of the forms at the TSDFs to document that the wastes arrived at the TSDF.
 - 3. Tare and loaded weight tickets from TSDFs for all transport vehicles.

1.03 LICENSING AND PERMIT REQUIREMENTS

- A. Contractor or its transportation subcontractors, if used, shall be permitted and licensed to transport waste materials in the state of New York and all localities and states through which they will transport the waste materials. All transporters shall be permitted in accordance with RCRA, USDOT, state, and local requirements.
- B. Vehicles used for transportation of waste materials shall be permitted pursuant to all USDOT and USEPA requirements, and the requirements of all states and localities through which the waste materials will be transported, and shall possess all required licenses and registration numbers.
- C. Contractor shall comply with all federal requirements and the requirements of states and localities through which the waste materials will be transported.
- A. All TSDFs shall be permitted, as applicable, for the waste stream by the State in which the TSDF is located.

1.04 MANIFESTING, PLACARDING AND TRANSPORTATION REQUIREMENTS

- A. The Contractor shall ensure that all transport vehicles do not exceed regulatory weight limits and shall be responsible for all measures necessary to correct overweight vehicles.
- B. All waste materials shall be described for transportation purposes and transported in accordance with USDOT HM-181 regulations.
- C. Contractor shall ensure that all vehicles are not leaking when the vehicles leave the Site, as described in Paragraph 3.03.
- D. Non-hazardous waste materials shall be manifested on “Non-Hazardous Waste Manifest Forms” provided by the disposal facility. Engineer/Owner shall approve forms prior to the shipment of waste materials. The Owner or designated representative shall sign all manifests. The Contractor shall provide and complete these forms for all waste Material shipments, as necessary to comply with federal, state, and local regulations and requirements.
- E. The Contractor shall provide and affix to each vehicle placards required under USDOT regulations. All manifesting and placarding shall comply with USDOT HM-181 regulations.
- F. Contractor shall obtain tare and loaded weight tickets from the TSDF(s) for all waste materials transported off the Site. Weight tickets from the TSDF will be the only basis for payment. Payment will not be made for vehicles for which Contractor has not obtained weight tickets.

PART 2 – PRODUCTS

2.01 TRANSPORT VEHICLES

- A. All vehicles used to transport waste materials off the Site shall be designed, equipped, operated, and maintained to prevent leakage, spillage, or airborne emissions during transport. Contractor may install additional liners, absorbents, or other contingency measures.

PART 3 – EXECUTION

3.01 REQUIREMENTS FOR HANDLING OF WASTE

- A. The Contractor shall provide all required notifications to federal, state, and local agencies prior to transporting material offsite. Copies of all notifications issued by the Contractor shall be transmitted to the Engineer at the time of issuance.
- B. Contaminated materials removed from the site shall not be combined with noncontaminated material.
- C. The Contractor shall complete all required manifest forms and bills of lading as required by applicable laws and regulations for transportation and disposal of materials offsite. The Contractor shall provide all required manifests and bills of lading to the Engineer, along with all requested backup documentation. The Owner shall sign manifests and bills of lading. However, the Contractor shall be responsible for assuring that all notifications, labeling, documentation, sampling, analysis, transportation, and disposal requirements of the Treatment, Storage and Disposal Facility (TSDF), Solid Waste Management Facility (SWMF), and federal, state, and local governments are complied with and properly documented.
- D. Prior to departure, each vehicle transporting waste from the site will be inspected and a decontamination checklist will be completed by the Engineer and driver. The checklist shall include:
 - 1. The date and time of departure and the vehicle license number;
 - 2. A check box indicating that no contaminated soil or other contaminated material is adhering to the vehicle body, tires, or undercarriage;
 - 3. A check box indicating that the vehicle container is lined with plastic sheeting, if required, and is not leaking or dripping liquids; and
 - 4. A check box indicating that the contents of the vehicle are covered or completely enclosed so as to prevent any releases of particulate matter.
- E. Certified weigh tickets shall be provided as a prerequisite to payment for all material transported offsite.

- F. All soil, waste material or debris spilled or tracked onto public streets shall be promptly removed and disposed accordingly. Streets shall be cleaned as necessary to remove all soil, waste material or debris.

3.02 LINING AND PROTECTION

- A. Vehicles used to haul materials shall be designed, equipped, operated, and maintained to prevent leakage, spillage, or airborne dust during transport. All vehicles shall be decontaminated, as required, prior to leaving the site. The Contractor shall be responsible for supplying all labor, materials, equipment, and supplies for decontaminating the vehicles used and shall be responsible for disposal of wastes resulting from decontamination.
- B. All vehicles shall be securely covered with a canvas tarp.

3.03 ONSITE DECONTAMINATION

- A. Contractor shall verify that the exterior of all vehicles is visibly clean prior to transport off the Site. If vehicles are not clean, Contractor shall decontaminate the vehicles in accordance with Section 01565.

3.04 TRANSPORTATION OF WASTE MATERIALS

- A. Prior to loading, any precipitation present in vehicles shall be drained in a manner acceptable to Engineer.
- B. Any transport vehicles observed by the Engineer to be leaking or to be a source of airborne dust will be immediately rejected.
- C. Contractor shall be responsible for all measures necessary to correct leaking transport vehicles from the time of loading to the time of tipping at the TSDFs at no additional cost to Owner.
- D. The Contractor shall ensure that all transport vehicles do not exceed regulatory weight limits and shall be responsible for all measures necessary to correct overweight vehicles.
- E. Transport vehicles shall use approved truck routes (shown on Figure 5 of the RAWP) to access interstate highways or limited access highways. Use of the interstate highway system or limited access highways for waste material transport shall be maximized.
- F. Waste materials shall not be repackaged or handled between the Site and the TSDFs/facility(s).

3.05 OFFSITE TRANSPORTATION SPILLS

- A. In the event of an offsite spill during transportation, the Contractor and/or its transportation subcontractor shall immediately take all necessary action to prevent, abate, or minimize the additional release or threat of release of any waste material.

(END OF SECTION)

**SECTION 02250
BACKFILL AND COMPACTION**

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall be responsible for backfilling and compacting in areas disturbed by construction activities as directed by the Engineer.
- B. The Contractor shall furnish all labor, materials, equipment, and incidentals necessary to perform all backfilling and compaction necessary to complete the Work as shown on the Construction Drawings, as specified herein, and as directed by the Engineer.
- C. The Contractor shall provide documentation of the suitability of all procured materials.
- D. The Work shall include, but not necessarily be limited to, hauling, placing, and compacting soil, and other materials.

1.02 PERMITS AND REGULATIONS

- A. The Contractor shall obtain all necessary permits for the Work. The Contractor shall also obtain permits as required by local, state, and federal agencies for earthwork.
- B. The Contractor shall not discharge any water to offsite areas, including storm water management systems and surface waters.

1.03 SUBMITTALS

- A. Common Fill and Topsoil
 - 1. At the time of delivery of each load of common fill or topsoil to the Site, the Contractor shall provide a certified weigh scale ticket indicating the source of supply, weight in tons, and vehicle identification number.

1.04 TESTING

- A. Pre-qualification testing of imported fill materials will be conducted by the Owner or designated representative, as specified herein prior to delivery to project site.
- B. Pre-qualification chemical testing requirements at the source location for the common fill or topsoil include the following:
 - 1. If the NYSDEC agrees that the material originated from a virgin source, then a minimum of one composite sample shall be collected and analyzed per source. If the source is not virgin, the following sampling frequency shall

apply to each source: one composite sample per 250 cubic yards for the first 1,000 yards and one composite sample per 1,000 cubic yards for 1,000 to 5,000 cubic yards.

2. Analysis for herbicides by United States Environmental Protection Agency (USEPA) method SW-846-8151A; pesticides and polychlorinated biphenyls (PCBs) by USEPA methods SW-846-8081A/8082; volatile organic compounds (VOCs) by USEPA method SW-846-8260; semivolatile organic compounds (SVOCs) by USEPA method SW-846-8270; arsenic, barium, beryllium, cadmium, copper, cyanide, lead, manganese, nickel, selenium, silver, thallium, vanadium, and zinc by USEPA method SW-846-6010B); total mercury by USEPA method SW-846-7471; total chromium, hexavalent chromium, and trivalent chromium method SW-846-7196A.

1.04 DELIVERY, STORAGE AND HANDLING

- A. All soil materials shall be stockpiled in an area selected by the Contractor and approved by the Engineer. Common fill or topsoil shall be stockpiled on top of plastic sheeting so as not to blend the offsite fill materials with the underlying soils.
- B. All offsite soil material shall be adequately protected to preserve the fitness and the quality of the material.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. All fill materials used on this project shall consist of natural, clean, hard and durable particles free from vegetation or other objectionable matter. Fill shall be free of chlorides, limestone, and organic material.
- B. Unsuitable material shall include, but not be limited to, all grass, weeds, vegetation of any type, roots, trash, rocks, boulders, debris, demolition materials, or any layer, strata, formation, or deposit of soil determined by the Engineer to be unsuitable for the intended purpose. No material will be classified as unsuitable solely on the basis of excessive moisture content. Fill material with a moisture content that impedes the effective placement and compaction of the material to form a hard stable surface shall not be allowed.
- C. Each truckload of offsite common fill material or topsoil shall have a load ticket prepared by the Contractor certifying the source of the material and the location or stockpile the material was taken from. The load ticket shall specifically identify the type of material, the location where the fill was obtained, a brief history of the site that is the source of the fill, and the quantity of material. The load tickets shall be numbered, multipart forms, and shall be clearly and legibly completed and signed in ink. An original copy of each load ticket shall be given to the Engineer prior to the material being off-loaded at the site.

- A. Common fill and topsoil shall be certified clean from an approved offsite source. Owner and Engineer, with the concurrence of the NYSDEC, will review results of pre-qualification chemical testing of common fill and topsoil. Owner and Engineer will base the acceptability of the material on the lower of the restricted commercial use criteria for human health or the criteria for protection of groundwater presented in Table 375-6.8(b) of Draft Part 375 (Table 14 of the Revised AAR/RAWP).
- D. Common fill or topsoil with concentrations that exceed the criteria presented in Table 14 of the Revised AAR/RAWP will not be imported onto the site without prior approval by NYSDEC.

2.02 COMMON FILL

- A. Common fill shall consist of virgin, clean, inert, uncontaminated soil. It shall have properties as approved by Engineer such that it can be readily spread and compacted. Common fill shall be substantially free of organic material (i.e., roots, stumps, wood, loam, etc.); chunks of earth or clay, shale or other soft, poor durability particles; construction and demolition debris, concrete, asphalt, trash, or other foreign materials; and snow, ice, frozen soil, and other objectionable material, which may be compressible or which cannot be compacted properly. The common fill shall also conform to the following gradation:

<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
2 inch	100
No. 40	0-70
No. 200	0-15

2.03 TOPSOIL

- A. A topsoil thickness of 6" will be required in all areas to be seeded/sodded.
- B. Topsoil shall have a minimum organic content of not less than 2.75% by weight, which shall be guaranteed by the supplier of the topsoil. New topsoil shall be of good quality and approved by the Engineer. All new topsoil shall be from the same source. This additional topsoil shall conform with the following:
 - 1. Be relatively free from large roots, stocks, weeds, brush or stones larger than 1 inch in diameter or other litter and waste products. It shall be a loamy mixture having at least 90 percent passing the No. 10 sieve.
 - 2. It shall contain not less than 1 percent nor more than 10 percent organic matter as determined by the test for organic matter in accordance with AASHTO T-194.

3. It shall contain not less than 12 percent not more than 50 percent clay as determined in accordance with AASHTO T-88.
4. The sand content shall not exceed 55 percent as determined in accordance with AASHTO T-88.

PART 3 – EXECUTION

3.01 INSPECTION

Prior to actual placement of backfill materials, the following will be field verified.

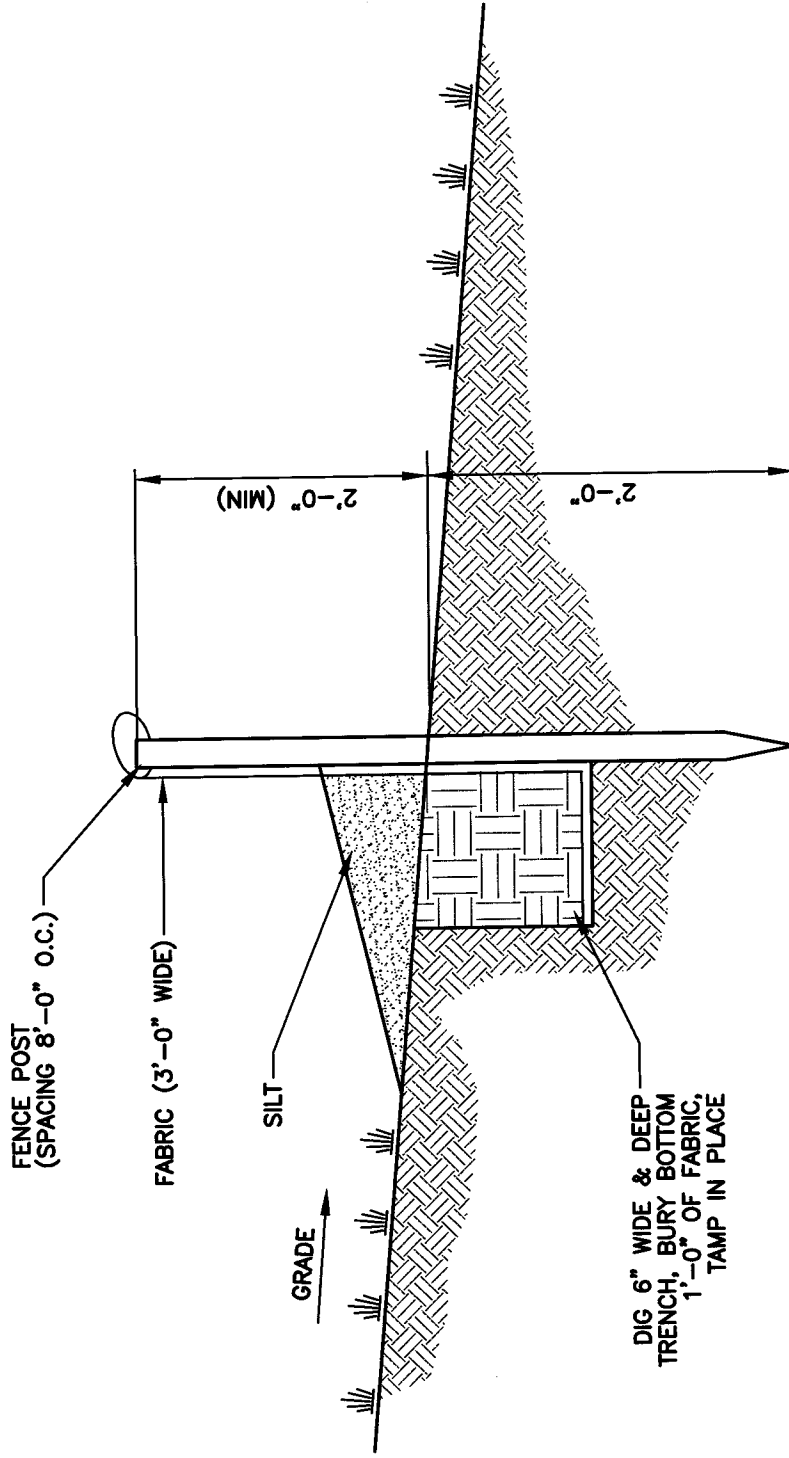
- A. Verify that all materials have been approved for use by the Engineer.
- B. Verify that areas to be backfilled are free of miscellaneous debris or standing water.

3.02 PLACING FILL

- A. The offsite backfill shall be placed within the limits of the excavation as shown on the Drawings and as directed by the Engineer. No material shall be placed without the approval of the Engineer. The Contractor shall survey all excavations as specified herein prior to and after placement of any material.
- B. So far as practical, each layer of materials shall extend the entire length and width of the area being filled.
- C. The loose lifts shall be mixed and spread in a manner assuring uniform lift thickness after placing.
- D. The excavation areas shall be kept dry during fill operations. No fill shall be placed when free water is standing on the surface of the area where fill is to be placed.
- E. The fill surface shall be sloped to facilitate the removal of run-off from the site and to prevent ponding of surface water. During periods of anticipated inclement weather, the surface of the fill shall be graded and covered with polyethylene sheeting as directed by the Engineer to preclude percolation of surface water.
- F. The Contractor shall protect the surface of each lift from desiccation or flooding.
- G. Contractor shall compact common fill and topsoil, as necessary to provide a stable surface for seeding and growth of vegetation. The Engineer and/or Owner shall determine when the backfill has been compacted satisfactorily. Successive lifts shall not be placed until the lift under construction has been compacted, tested, and accepted.

- H. During any backfilling, the Contractor shall provide and implement positive means to control dust in accordance with the Community Air Monitoring Plan. A detailed plan for monitoring vapors and dust shall be included in the Contractor prepared HASP. The Contractor prepared project HASP shall also specifically detail the worker protective measures to be used.

(END OF SECTION)



Title:

SILT FENCE DETAIL

FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For:

EXXONMOBIL OIL CORPORATION



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

Compiled by: N.C.

Date: 08/JAN/07

DRAWING

Prepared by: R.K.

Scale: N.T.S.

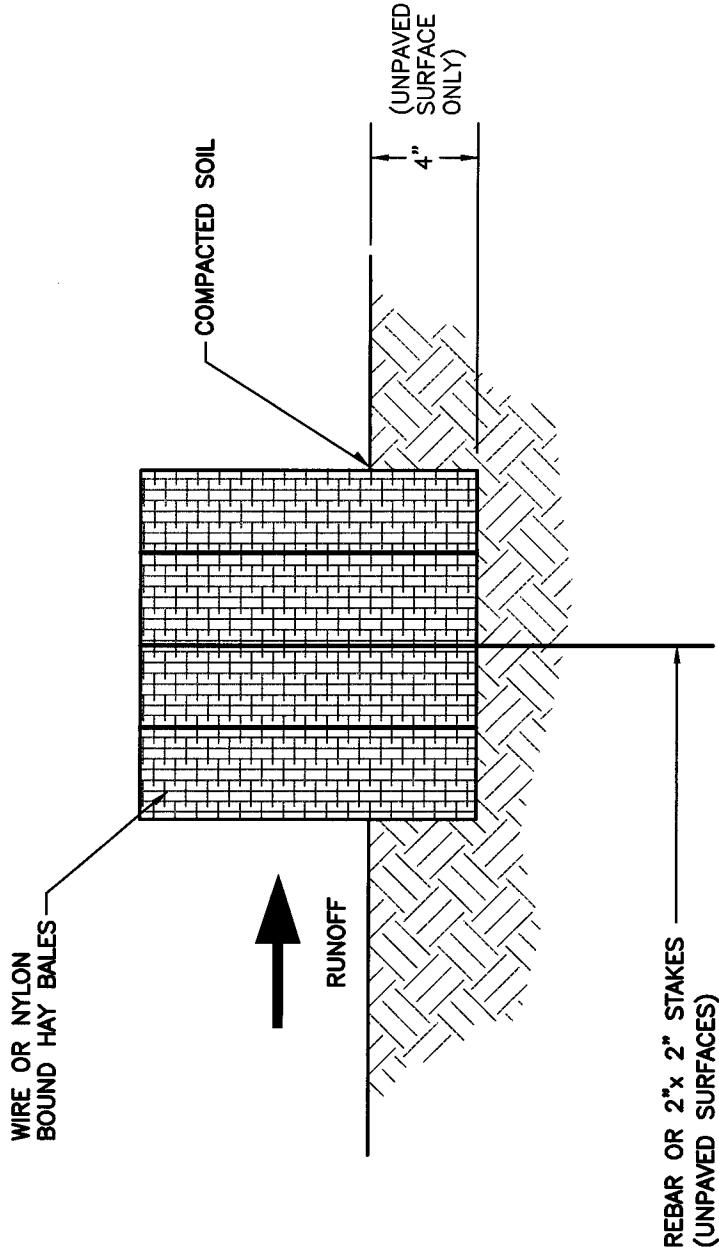
D-1

Project Mgr: N.C.

Office: NY

File No: MC5233017

Project: 17252Y08



NOTES:

1. WHERE HAY BALES AND SILT FENCES ARE REQUIRED TOGETHER, THE HAY BALES SHALL BE LOCATED UPGRADIENT OF SILT FENCE.
2. REBAR OR STAKES SHALL BE EMBEDDED 2'-0" IN GROUND, TWO PLACES IN EACH HAY BALE IN UNPAVED AREAS.
3. WHERE STAKING IS NOT PRACTICAL, HAY BALES SHALL BE TIED TOGETHER TO PREVENT MOVEMENT IN THE BARRIER.

Title:

HAY BALE DETAIL

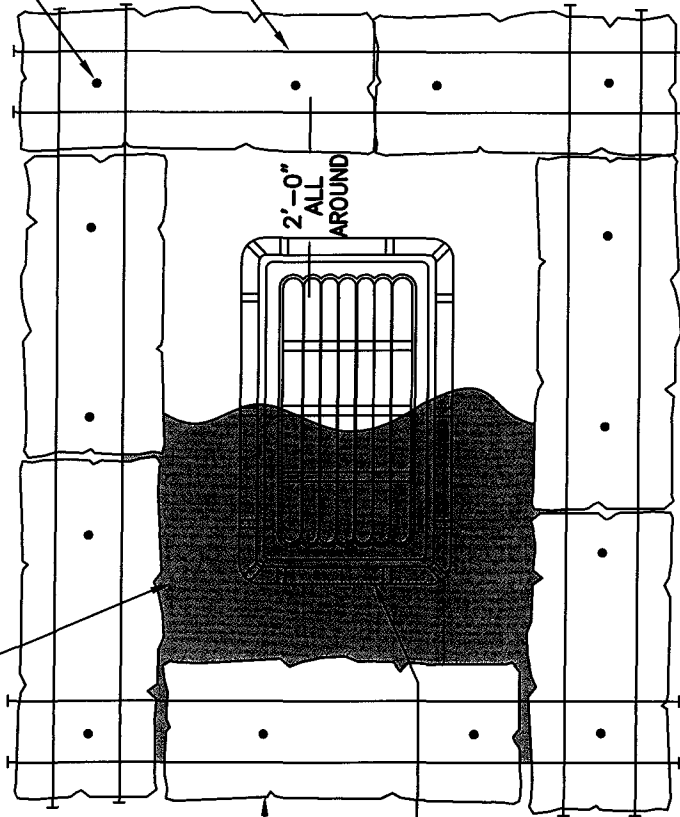
FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For:

EXXONMOBIL OIL CORPORATION

REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: N.C.	Date: 08JAN07	DRAWING
	Prepared by: R.K.	Scale: N.T.S.	D-2
	Project Mgr: N.C.	Office: NY	
	File No: MC5233016	Project: 17252Y08	

8 OZ. NON-WOVEN GEOTEXTILE



Title:

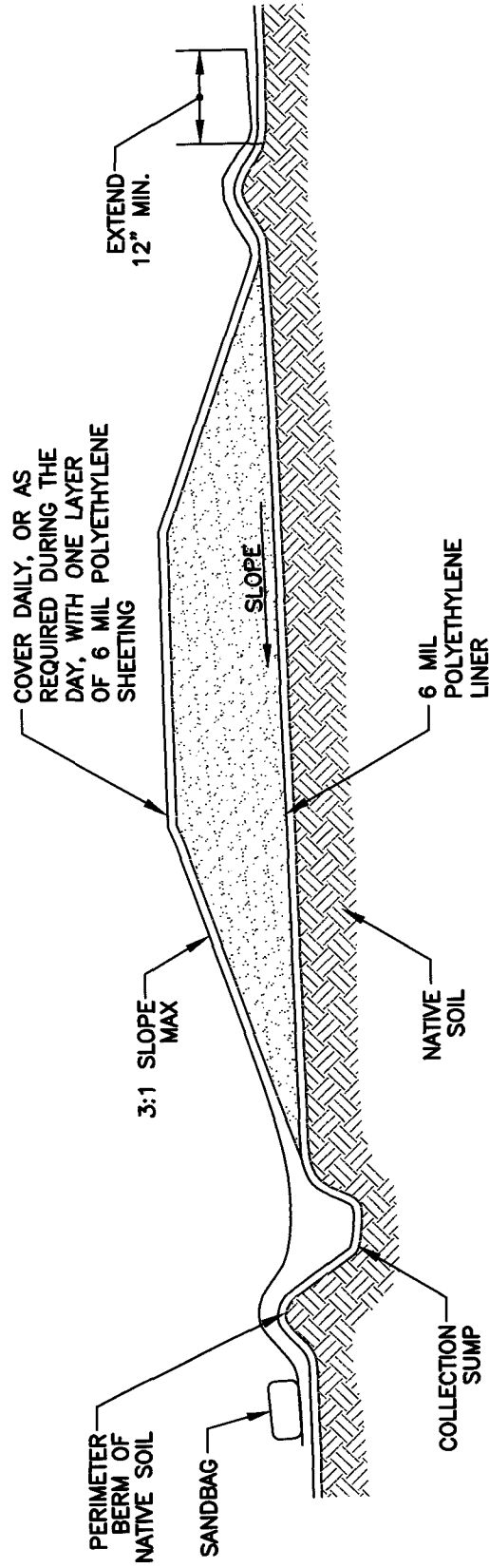
TEMPORARY STOCKPILE/ DECONTAMINATION AREA DETAIL

FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For:

EXXONMOBIL OIL CORPORATION

REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: N.C.	Date: 08JUN07	DRAWING
	Prepared by: R.K.	Scale: AS SHOWN	
	Project Mgr: N.C.	Office: NY	
	File No: MC5233018	Project: 17252Y08	D-3



NOTES:

1. POLY SHEETING SHALL OVERLAP BY A MINIMUM OF TWELVE (12) INCHES AND SHALL BE ANCHORED, USING SAND BAGS OR EQUIVALENT WEIGHTS, AT 5 TO 10 FOOT CENTERS. USE ADDITIONAL WEIGHTS, AS NECESSARY, TO PROPERLY ANCHOR SHEETING DURING WINDY CONDITIONS.
2. ALL STOCKPILES SHALL BE LABELLED WITH SIGNS INDICATING THE STOCKPILE CONTENTS.

Title:

**TEMPORARY STOCKPILE/
DECONTAMINATION AREA DETAIL**

FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For:

EXXONMOBIL OIL CORPORATION

REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: N.C.	Date: 08/JAN/07	DRAWING
	Prepared by: R.K.	Scale: N.T.S.	D-4
	Project Mgr: D.S.	Office: NY	
	File No: MC5233015	Project: 17252Y08	

APPENDIX E

Quality Assurance Project Plan for Operable Unit 1 AAR/RAWP

January 8, 2007

QUALITY ASSURANCE PROJECT PLAN FOR OPERABLE UNIT 1 AAR/RAWP

**ExxonMobil Former Buffalo Terminal
Buffalo, New York**

Prepared for:

**EXXONMOBIL OIL CORPORATION
1001 Wampanoag Trail
Riverside, Rhode Island 02915**

Remedial Engineering, P.C.
Environmental Engineers

and ROUX ASSOCIATES, INC.

209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600

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1.0 INTRODUCTION

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering) have developed this Quality Assurance Project Plan (QAPP) as part of the Alternatives Analysis Report (AAR)/Remedial Action Work Plan (RAWP) for Operable Unit 1 (OU-1) to describe in detail the field sampling and quality assurance/quality control methods to be used during implementation of a remedial action for a portion of properties owned by ExxonMobil Oil Corporation (ExxonMobil) located north of Elk Street. The proposed remediation addresses an area of impacted soil from a historic petroleum release at the Former ExxonMobil Buffalo Terminal, as well as impacts from background influences (i.e., residential uses, previous and current property owner usage, regional industrial influences, nearby highways, and urban fill) on portions of these properties. The former Buffalo terminal and offsite areas currently and formerly owned by ExxonMobil are located at 625 Elk Street, Buffalo, New York (Figure 1 of the AAR/RAWP). The selected remedy is excavation and offsite disposal of the top one foot of soil exceeding the proposed restricted commercial criteria, followed by backfilling with one foot of soil meeting the proposed restricted commercial criteria. The proposed remedy returns OU-1 to a condition that is an upgrade to its current zoning as M-1 Light Industrial.

In order to address the environmental conditions, ExxonMobil entered into a Brownfield Site Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC) on April 3, 2006. Under this agreement, the Site entered into New York State's Brownfield Cleanup Program (BCP). The "Site" is defined, for the purposes of the BCP, as the area within the limits of the five Operable Units (OU) as shown in Figure 2 of the AAR/RAWP. In addition, the Site was divided into nine geographic areas for the purpose of assessing environmental conditions and reporting the results of area-specific activities (Figure 3 of the AAR/RAWP). These areas were designated according to the historical primary operations that occurred in each portion of the Site. The area of impacted soil that is the subject of this remedial action is located within OU-1, within the area previously designated as the Elk Street Properties Area (ESPA). The remedial tasks covered by this QAPP are post-excavation soil sampling, waste characterization sampling, and backfill sampling.

The goals of the sampling that will be conducted during implementation of the remedial action are to document the effectiveness of the soil removal activities, to characterize soil for offsite disposal, and to confirm the acceptability of offsite clean backfill.

This QAPP was prepared in accordance with the NYSDEC's December 2002 Draft DER-10 Technical Guidance for Site Investigation and Remediation (DER-10) and provides guidelines and procedures to be followed by field personnel during performance of the remedial action sampling. Information contained in this QAPP relates to:

- Sampling objectives (Section 2);
- Project organization (Section 3);
- Sample media, sampling locations, analytical suites, sampling frequencies, and analytical laboratory (Section 4);
- Field sampling procedures (Section 5);
- Sample handling, sample analysis, and quality assurance/quality control (Section 6); and
- Site control procedures and decontamination (Section 7).

2.0 SAMPLING OBJECTIVES

The remedial action sampling program is designed to meet the data quality objectives (DQOs) set forth in the Draft DER-10. Specifically, analytical parameters selected for each sample, as described in Section 4, are comprehensive and are intended to meet the following objectives:

- Analyze post-excavation soil samples for likely contaminants of concern given the known history and current use of the property (e.g., sampling for semivolatile organic compounds [SVOCs] and metals which were identified in previous investigations above the proposed restricted commercial criteria presented in the AAR/RAWP);
- Analyze soil to be excavated for parameters required by the selected disposal facility; and
- Analyze offsite backfill for parameters required to evaluate its suitability for use as backfill that meets the proposed restricted commercial criteria.

Sampling procedures are discussed in Section 5 of this QAPP. A discussion of the data quality objectives (DQOs) and quality assurance/quality control for the project is provided in Section 6.

3.0 PROJECT ORGANIZATION

The overall management structure and a general summary of the responsibilities of project team members are presented below.

Project Manager

Noelle Clarke of Roux Associates/Remedial Engineering will serve as Project Manager. The Project Manager is responsible for defining project objectives and bears ultimate responsibility for the successful completion of the remedial action. This individual will provide overall management for the implementation of the scope of work and will coordinate all field activities. The Project Manager is also responsible for data review/interpretation and report preparation. Activities of the Project Manager are supported by the Project Quality Assurance Coordinator.

Field Team Leader

Andrew Janik of Groundwater & Environmental Services, Inc. (GES) will serve as the Field Team Leader. The Field Team Leader bears the responsibility for the successful execution of the field program, as scoped in the AAR/RAWP. The Field Team Leader will direct the activities of the technical staff in the field, as well all subcontractors. He will also assist in the interpretation of data. The Field Team Leader reports to the Project Manager.

Laboratory Project Manager

Gale Lage of TestAmerica, Inc. (TestAmerica) is responsible for sample container preparation, sample custody in the laboratory, and completion of the required analysis through oversight of the laboratory staff. The Laboratory Project Manager will ensure that quality assurance procedures are followed and that an acceptable laboratory report is prepared and submitted. The Laboratory Project Manager reports to the Field Team Leader.

4.0 SAMPLE MEDIA, LOCATIONS, ANALYTICAL SUITES, AND FREQUENCY

The medium to be sampled during the implementation of the remedial action is soil. Sampling locations, analytical suites, and frequency vary by the type of soil to be sampled (i.e., post excavation soil samples, waste characterization samples, and backfill samples). A discussion of the sampling for each type of soil is provided below. Specifics regarding the collection of samples for each type of soil are provided in Section 5 of this QAPP.

4.1 Post-Excavation Soil Sampling

Post excavation sidewall sampling (at a frequency of one sample per 100 linear feet) will be conducted for constituents that exceeded the proposed restricted commercial use criteria in previous sampling events, SVOCs and metals (arsenic, cadmium and lead), to confirm that the restricted commercial criteria were met. Since all of the SVOCs that exceeded the restricted commercial criteria are listed on the NYSDEC STARS Memo # 1 dated August 1992, the post excavation samples will be analyzed for STARS list SVOCs only by USEPA method 8270. Metals will be analyzed by USEPA method 6010. The frequency of sidewall sampling proposed for this alternative is less frequent than the guidance provided in NYSDEC DER-10 Sections 3.5 and 5.4 for excavations 20 to 300 feet in perimeter since the excavations much larger than the referenced excavation size and the guidance allows for different sampling frequencies to be negotiated for larger excavations, since there are numerous existing samples throughout the two parcels to demonstrate soil quality and since the excavation areas area primarily impacted by background influences, except in the northeast portion of Parcel No. 5.

Samples will be collected as a composite of the one foot depth of the excavation sidewall. Areas that appear more heavily impacted, if any, will be given sampling preference. If the post-excavation sample results indicate that concentrations of target constituents are detected below the proposed restricted commercial use criteria, the excavation activities will be considered complete. However, if concentrations of target constituents are detected at a level above the restricted commercial use criteria, the excavation activities, including additional post-excavation sidewall sampling, will continue laterally until these conditions are met or until the OU-1 boundary is reached.

Post excavation bottom samples will not be collected unless there is a visually identified condition that is different than observed in previous sampling rounds. No bottom samples are proposed since there is sufficient soil quality data from the one to two foot below grade sample interval from previous investigations to demonstrate what concentrations will remain below the one foot excavation depth following the remediation. In the one to two foot depth interval on the 7,150 square foot proposed excavation area of Parcel No. 4, there is one grab sample and one composite sample from previous investigations. In the one to two foot depth interval on the 26,300 square foot proposed excavation area of Parcel No. 5, there are seven grab samples and three composite samples from previous investigations.

QA/QC samples, including duplicates, field blanks, and matrix spike/matrix spike duplicate (MS/MSD) will also be collected at the frequencies described in Table 1.

4.2 Waste Characterization Sampling

One sample per 500 cubic yards of material to be excavated will be collected from the soil to be excavated for waste characterization using a hand auger prior to excavation. The sample will be analyzed for the following:

- Target compound list (TCL) volatile organic compounds (VOCs) and SVOCs according to USEPA Methods SW-846 8260 and 8270, respectively;
- Total petroleum hydrocarbons (TPH) for gasoline and diesel range organics by Methods SW-846 8015B;
- Reduced target analyte list (TAL) metals by Method SW-846 6010 (includes cadmium, chromium, lead, nickel, selenium, thallium, and vanadium) and Method SW-846 7471 for mercury;
- The full list of toxicity characteristics leaching procedure (TCLP) analyses (VOCs, SVOCs, metals, pesticides, and herbicides);
- Corrosivity;
- Reactivity; and
- Ignitability.

QA/QC samples are not required for waste characterization samples.

4.3 Backfill Sampling

For offsite fill material (common fill and topsoil), if the NYSDEC agrees that the material originated from a virgin source, then a minimum of one composite sample will be collected and analyzed per source. If the source is not virgin, the following sampling frequency will apply to each source: one composite sample per 250 cubic yards for the first 1,000 yards and one composite sample per 1,000 cubic yards for 1,000 to 5,000 cubic yards. Samples will be analyzed for the following parameters, which are listed in Table 8 of the AAR/RAWP:

- Herbicides by United States Environmental Protection Agency (USEPA) method SW-846-8151A.
- Pesticides and polychlorinated biphenyls (PCBs) by USEPA methods SW-846-8081A/8082.
- VOCs by USEPA method SW-846-8260.
- SVOCs by USEPA method SW-846-8270
- Arsenic, barium, beryllium, cadmium, copper, cyanide, lead, manganese, nickel, selenium, silver, thallium, vanadium, and zinc by USEPA method SW-846-6010B).
- Total mercury by USEPA method SW-846-7471.
- Total chromium, hexavalent chromium, and trivalent chromium method SW-846-7196A.

QA/QC samples are not required for backfill samples.

4.4 Analytical Laboratory

Laboratory analyses will be performed by a NYSDOH ELAP certified laboratory in accordance with the NYSDEC Analytical Services Protocol (ASP) using USEPA SW-846 Methods. The laboratory selected for this project is TestAmerica, located in Nashville, Tennessee.

5.0 FIELD SAMPLING PROCEDURES

This section provides a discussion of the field procedures to be used for sampling of soil during implementation of the remedial action. The post-excavation soil samples will be collected as a composite of the one foot depth of the excavation using pre-cleaned stainless steel sampling tools (i.e., trowels, spatulas, etc.) or the excavator bucket. However, areas that appear more heavily impacted, if any, will be given sampling preference. Samples will be labeled as “OU1-PEB-1” for bottom samples and as “OU1-PES-1” for sidewall samples.

The waste characterization samples will be collected using a hand auger prior to excavation.

The offsite backfill samples will be collected using pre-cleaned stainless steel sampling tools (i.e., trowels, spatulas, etc.) at the source prior to use for the project.

A New York State licensed surveyor will survey all post-excavation soil sample locations.

Additional details regarding soil-sampling protocols are described in Roux Associates’ Standard Operating Procedures (SOP), which are provided in Attachment 1.

6.0 SAMPLE HANDLING AND ANALYSIS

To ensure quality data acquisition and collection of representative samples, there are selective procedures to minimize sample degradation or contamination. These include procedures for preservation of the samples, as well as sample packaging, shipping procedures, and quality assurance/quality control.

6.1 Field Sample Handling

A detailed discussion of the proposed number and types of samples to be collected during each task, as well as the analyses to be performed can be found in Section 4.0 and in Table 1 of this QAPP. The types of containers, volumes, holding times, and preservation techniques for the aforementioned testing parameters are presented in Table 2.

6.2 Sample Custody Documentation

The purpose of documenting sample custody is to ensure that the integrity and handling of the samples is not subject to question. Sample custody will be maintained from the point of sampling through the analysis (and return of unused sample portion, if applicable). Specific procedures regarding sample tracking from the field to the laboratory are described in Roux Associates' SOP for Sample Handling (Attachment 1).

Each individual collecting sample is personally responsible for the care and custody of the samples. All sample labels should be pre-printed or filled out using waterproof ink. The technical staff will review all field activities with the Field Team Leader to determine whether proper custody procedures were followed during the field work and to decide if additional samples are required.

All samples being shipped offsite for analysis must be accompanied by a properly completed TestAmerica chain of custody form (Attachment 2). The sample numbers will be listed on the chain of custody form. When transferring the possession of samples, individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents transfer of custody of samples from the sampler to another person and/or to/from a secure storage area and/or to the shipper, and/or to the laboratory.

Samples will be packaged for shipment and dispatched to the appropriate laboratory for analysis with a separate signed custody record enclosed in each sample box or cooler. Shipping containers will be locked and/or secured with strapping tape in at least two locations for shipment to the laboratory.

6.3 Sample Shipment

Sample packaging and shipping procedures are based upon USEPA specifications, as well as U.S. Department of Transportation (DOT) regulations. The procedures vary according to potential sample analytes, concentration, and matrix and are designed to provide optimum protection for the samples and the public. Sample packaging and shipment must be performed using the general outline described below. Additional information regarding sample handling is provided in Roux Associates' SOP for Sample Handling (Attachment 1).

All samples will be shipped within 24 hours of collection and will be preserved appropriately from the time of sample collection. Hexavalent chromium samples shall be shipped on the evening sampled for overnight delivery to arrive at the laboratory the next morning since the holding time is only 24 hours. Hexavalent chromium samples shall not be shipped on a Friday evening. The field team leader shall notify the laboratory on the day of collection/shipment that hexavalent chromium groundwater samples are being shipped.

A description of the sample packing and shipping procedures is presented below:

1. Prepare cooler(s) for shipment.
 - Tape drain(s) of cooler shut;
 - Affix “This Side Up” arrow labels and “Fragile” labels on each cooler; and
 - Place mailing label with laboratory address on top of cooler(s).
2. Arrange sample containers in groups by sample number.
3. Ensure that all bottle labels are completed correctly. Place clear tape over bottle labels to prevent moisture accumulation from causing the label to peel off.
4. Arrange containers in front of assigned coolers.
5. Place packaging material approximately at the bottom of the cooler to act as a cushion for the sample containers.

6. Arrange containers in the cooler so that they are not in contact with the cooler or other samples.
7. Fill remaining spaces with packaging material.
8. Ensure all containers are firmly packed in packaging material.
9. If ice is required to preserve the samples, ice cubes should be repackaged in Zip-lock™ bags and placed on top of the packaging material.
10. Sign chain of custody form (or obtain signature) and indicate the time and date it was relinquished to courier as appropriate.
11. Separate chain of custody forms. Seal proper copies within a large Zip-lock™ bag and tape to inside cover of cooler. Retain copies of all forms.
12. Close lid and latch.
13. Secure each cooler using custody seals.
14. Tape cooler shut on both ends.
15. Relinquish to overnight delivery service as appropriate. Retain air bill receipt for project records. (Note: All samples will be shipped for “NEXT A.M.” delivery.)

6.4 Quality Assurance/Quality Control

The primary intended use for the samples that will be conducted during implementation of the remedial action are to document the effectiveness of the soil removal activities and to characterize soil for offsite disposal.

The primary DQO of the post-excavation, backfill and waste characterization soil sampling is that data be accurate and precise and, hence, representative of the actual Site conditions. Accuracy refers to the ability of the laboratory to obtain a true value (i.e., compared to a standard) and is assessed through the use of laboratory quality control (QC) samples, including laboratory control samples and matrix spike samples, as well as through the use of surrogates, which are compounds not typically found in the environment that are injected into the samples prior to analysis. Precision refers to the ability to replicate a value and is assessed through both field and laboratory duplicate samples. Field MS/MSD and field duplicate samples will only be collected for the post-excavation soil samples and are not required for the waste characterization or backfill samples.

Sensitivity is also a critical issue in generating representative data. Laboratory equipment must be of sufficient sensitivity to detect target compounds and analytes at levels below NYSDEC standards and guidelines whenever possible. Equipment sensitivity can be decreased by field or laboratory contamination of samples and by sample matrix effects. Assessment of instrument sensitivity is performed through the analysis of reagent blanks, near-detection-limit standards, and response factors. Potential field and/or laboratory contamination is assessed through use of trip blanks, method blanks, and equipment rinse blanks (also called “field blanks”). Field blanks will only be collected for the post-excavation soil samples and are not required for the waste characterization or backfill samples.

Table 1 lists the field and laboratory QC samples that will be analyzed to assess data accuracy and precision, as well as to determine if equipment sensitivity has been compromised. These tables also list the data acceptance criteria against which the data will be compared to verify that the project DQOs have been achieved.

All soil sample analyses will be performed in accordance with the NYSDEC Analytical Services Protocol (ASP) using USEPA SW-846 methods. TestAmerica is the laboratory selected to analyze the field samples collected during the remedial action. TestAmerica maintains New York State Department of Health (NYSDOH) ELAP CLP certification for each of the analyses listed in Section 4.0.

Post-excavation laboratory data are to be reported in NYSDEC ASP Category B deliverables. Waste characterization and backfill characterization laboratory data are to be reported in NYSDEC ASP Category A deliverables. In addition, a Data Usability Summary Report (DUSR) will be prepared for the post-excavation samples only by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10. A DUSR is not required for the waste characterization or backfill samples.

7.0 SITE CONTROL PROCEDURES

Site control procedures have been developed to minimize both the risk of exposure to contamination and the spread of contamination during field activities at the site. In order to accomplish this objective, the QAPP addresses three main considerations:

- The establishment of discrete work zones in the investigative area;
- The decontamination of field equipment; and
- The disposal of all investigation-derived waste.

All personnel who come into designated work areas, including contractors and observers, will be required to adhere strictly to the conditions imposed herein and to the provisions of the consultant's and/or contractor's Site-Specific Health and Safety Plan (HASP), which will be submitted under separate cover.

7.1 Field Work Zones

Field work zones will be limited to areas where excavation, stockpiling, and soil sampling is being conducted. Access to these areas will be limited in accordance with the HASP. Control of work zone access will be the responsibility of the individual(s) designated as a Site Health and Safety Manager. At the completion of each working day, all loose equipment (e.g., sampling equipment, coolers, etc.) will be secured. Heavy equipment, such as the excavator, will remain onsite within an established, secured zone, or be moved to the main portion of the Site south of Elk Street.

7.2 Decontamination

In an attempt to avoid the spread of contamination, all excavation and sampling equipment must be decontaminated at a reasonable frequency. Temporary decontamination pads will be set up by the contractor as deemed necessary. Detailed procedures for the decontamination of field and sampling equipment are included in the attached Roux Associates' SOPs (Attachment 1). The location of the decontamination area(s) will be determined as necessary during the field operations. The decontamination area will be constructed to ensure that any wash water generated during decontamination can be collected. Decontamination water (if any) will be transported to ExxonMobil's water treatment system, which is located in the main portion of the

former terminal south of Elk Street or will be disposed offsite at an ExxonMobil-approved disposal facility.

7.3 Waste Handling and Disposal

All impacted soil excavated from the Site and other remediation-derived waste will be transported and disposed of in accordance with all applicable federal, state, and local regulations (Section 02220) at a facility selected by ExxonMobil. The remediation-derived waste that will be generated during the construction activities include:

- Impacted soil from the portion of Parcel No. 5 of OU-1 that was impacted by the release from former Tank No. 60 in 1976 or by background influences;
- Personal Protective Equipment (PPE); and
- Decontamination water, if any is generated.

Haul vehicles for bulk soil will be secured with appropriate covers prior to exiting the construction area to prevent release of waste.

PPE generated during the implementation of the remedial action will be consolidated and stored in appropriate bulk containers (drums, etc.), and temporarily staged at a waste storage area within the Site limits. Any full or partially filled containers will be appropriately labeled after the completion of the work. ExxonMobil will coordinate waste characterization and disposal.

Decontamination water, if any, will be collected and transported to ExxonMobil's water treatment system, which is located in the main portion of the former terminal south of Elk Street or disposed of offsite at an ExxonMobil-approved disposal facility.

Table 1. Remedial Action Field and Quality Control Sampling Summary

Sample Medium	Sample Parameters	Field Samples	Replicates ¹	Field Blanks ²	Matrix Spikes ¹	Spike Duplicates ¹	Total No. of Samples
Soil (Excavation Sidewalls) ³	SVOCs (STARS List only)	12	1	2	1	1	17
	TAL Metals	12	1	2	1	1	17
Waste Characterization (Soil)	TCL VOCs	1 per 500 cubic yards	0	0	0	0	0
	TCL SVOCs	1 per 500 cubic yards	0	0	0	0	0
	TPH GRO	1 per 500 cubic yards	0	0	0	0	0
	TPH DRO	1 per 500 cubic yards	0	0	0	0	0
	TAL Metals	1 per 500 cubic yards	0	0	0	0	0
	TCLP (VOCS, SVOCs, metals, pesticides and herbicides)	1 per 500 cubic yards	0	0	0	0	0
	RCRA Characteristics	1 per 500 cubic yards	0	0	0	0	0
Backfill Material (Soil) ⁴	VOCs	1 per 500 cubic yards	0	0	0	0	0
	SVOCs	1 per 500 cubic yards	0	0	0	0	0
	Pesticides and PCBs	1 per 500 cubic yards	0	0	0	0	0
	Herbicides	1 per 500 cubic yards	0	0	0	0	0
	TAL Metals	1 per 500 cubic yards	0	0	0	0	0

¹ - Based on 1 per 20 samples or 1 per Sample Delivery Group (3 days max)

² - Based on 1 per day

³ - Based on 1 per 100 linear feet of sidewall

⁴ - Parameters to be sampled are presented in Table 8 of the AAR/RAWP.

STARS - NYSDEC Spill Technology and Remediation Series

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

TAL - USEPA Contract Laboratory Program Target Analyte List

TCL - USEPA Contract Laboratory Program Target Compound List

TCLP - Toxicity Characteristics Leaching Procedure

TPH GRO - Total Petroleum Hydrocarbons - Gasoline Range Organics

TPH DRO - Total Petroleum Hydrocarbons - Diesel Range Organics

RCRA Characteristics - Ignitability, Corrosivity, and Reactivity

Table 2. Preservation, Holding Times and Sample Containers

Analysis	Bottle Type	Preservation^(a)	Holding Time^(b)
Volatile Organic Compounds (VOCs) SW-846 8260B	2 oz. wide-mouth glass w/teflon lined cap	Cool to 4°C	14 days
Semivolatile Organic Compounds (SVOCs) SW-846 8270C	Wide-mouth glass w/teflon lined cap	Cool to 4°C	14 days to extract 40 days for analysis
Total Petroleum Hydrocarbons - Diesel Range Organics (DRO) SW-846 8015B	Wide-mouth glass w/teflon lined cap	Cool to 4°C	14 days
Total Petroleum Hydrocarbons - Gasoline Range Organics (GRO) SW-846 8015B	Wide-mouth glass w/teflon lined cap	Cool to 4°C	14 days
Metals SW-846 6010/7471	Wide-mouth plastic or glass	Cool to 4°C	6 months, except mercury (28 days)
Total Chromium/Hexavalent Chromium/Trivalent Chromium SW-846 7196A	4 oz. wide-mouth glass w/teflon lined cap	Cool to 4°C	28 days
Total Cyanide SW-846 9012B	4 oz. wide-mouth glass w/ teflon lined cap	Cool to 4°C	14 days
Pesticide and PCB Organic Compounds SW-846 8081A/8082	4 oz. wide-mouth glass w/ teflon lined cap	Cool to 4°C	14 days to extract 40 day for analysis
Herbicides SW-846 8151A	4 oz wide-mouth glass	Cool to 4°C	14 days to extract 40 days for analysis

Table 2. Preservation, Holding Times and Sample Containers

Analysis	Bottle Type	Preservation^(a)	Holding Time^(b)
TCLP SW-846 1311 Acid Extractables Base Neutrals Herbicides Metals Pesticides Volatiles	Wide-mouth plastic or glass; 2 oz. wide-mouth glass w/teflon lined cap	Cool to 4°C	14 days, except metals (6 months) and mercury (28 days)
RCRA Characteristics Ignitibility SW-846 1020 Reactive Cyanide SW-846 7332 Reactive Sulfide SW-846 7342 Corrosivity SW-846 9045C	Wide-mouth glass w/teflon lined cap	Cool to 4°C	N/A

^(a) All samples to be preserved in ice during collection and transport

^(b) Days from date of sample collection.

APPENDIX A

Roux Associates' Standard Operating Procedures

Date: May 5, 2000

1.0 PURPOSE

The purpose of this standard operating procedure (SOP) is to establish guidelines for sample handling which will allow consistent and accurate results. Valid chemistry data are integral to investigations that characterize media-quality conditions. Thus, this SOP is designed to ensure that once samples are collected, they are preserved, packed and delivered in a manner which will maintain sample integrity to as great an extent as possible. The procedures outlined are applicable to most sampling events and any required modifications must be clearly described in the work plan.

2.0 CONSIDERATIONS

Sample containers, sampling equipment decontamination, quality assurance/quality control (QA/QC), sample preservation, and sample handling are all components of this SOP.

2.1 Sample Containers

Prior to collection of a sample, considerations must be given to the type of container that will be used to store and transport the sample. The type and number of containers selected is usually based on factors such as sample matrix, potential contaminants to be encountered, analytical methods requested, and the laboratory's internal quality assurance requirements. In most cases, the overriding considerations will be the analytical methodology, or the state or federal regulatory requirements because these regulations generally encompass the other factors. The sample container selected is usually based on some combination of the following criteria:

a. Reactivity of Container Material with Sample

Choosing the proper composition of sample containers will help to ensure that the chemical and physical integrity of the sample is maintained. For sampling potentially hazardous material, glass is the recommended container type because it is chemically inert to most substances. Plastic containers are not recommended for most hazardous wastes because the potential exists for contaminants to adsorb to the surface of the plastic or for the plasticizer to leach into the sample.

In some instances, however, the sample characteristics or analytes of interest may dictate that plastic containers be used instead of glass. Because some metals species will adhere to the sides of the glass containers in an aqueous matrix, plastic bottles (e.g., nalgene) must be used for samples collected for metals analysis. A separate, plastic container should accompany glass containers if metals analysis is to be performed along with other analyses. Likewise, other sample

characteristics may dictate that glass cannot be used. For example, in the case of a strong alkali waste or hydrofluoric solution, plastic containers may be more suitable because glass containers may be etched by these compounds and create adsorptive sites on the container's surface.

b. Volume of the Container

The volume of sample to be collected will be dictated by the analysis being performed and the sample matrix. The laboratory must supply bottles of sufficient volume to perform the required analysis. In most cases, the methodology dictates the volume of sample material required to complete the analysis. However, individual laboratories may provide larger volume containers for various analytes to ensure sufficient quantities for duplicates or other QC checks.

To facilitate transfer of the sample from the sampler into the container and to minimize spillage and sample disturbance, wide-mouth containers are recommended. Aqueous volatile organic samples must be placed into 40-milliliter (ml) glass vials with polytetrafluoroethylene (PTFE) (e.g., Teflon™) septums. Non-aqueous volatile organic samples should be collected in the same type of vials or in 4-ounce (oz) wide-mouth jars provided by the laboratory. These jars should have PTFE-lined screw caps.

c. Color of Container

Whenever possible, amber glass containers should be used to prevent photodegradation of the sample, except when samples are being collected for metals analysis. If amber containers are not available, then containers holding samples should be protected from light (i.e., place in cooler with ice immediately after filling).

d. Container Closures

Container closures must screw on and off the containers and form a leak-proof seal. Container caps must not be removed until the container is ready to be filled with the sample, and the container cap must be replaced (securely) immediately after filling it. Closures should be constructed of a material which is inert with respect to the sampled material, such as PTFE (e.g., Teflon™). Alternately, the closure may be separated from the sample by a closure liner that is inert to the sample material such as PTFE sheeting. If soil or sediment samples are being collected, the threads of the container must be wiped clean with a dedicated paper towel or cloth so the cap can be threaded properly.

e. Decontamination of Sample Containers

Sample containers must be laboratory cleaned by the laboratory performing the analysis. The cleaning procedure is dictated by the specific analysis to be performed on the sample. Sample containers must be carefully examined to ensure that all containers appear clean. Do not mistake the preservative as unwanted residue. The bottles should not be field cleaned. If there is any question regarding the integrity of the bottle, then the laboratory must be contacted immediately and the bottle(s) replaced.

f. Sample Bottle Storage and Transport

No matter where the sample bottles are, whether at the laboratory waiting to be packed for shipment or in the field waiting to be filled with sample, care must be taken to avoid contamination. Sample shuttles or coolers, and sample bottles must be stored and transported in clean environments. Sample bottles and clean sampling equipment must never be stored near solvents, gasoline, or other equipment that is a potential source of cross-contamination. When under chain of custody, sample bottles must be secured in locked vehicles, and custody sealed in shuttles or in the presence of authorized personnel. Information which documents that proper storage and transport procedures have been followed must be included in the field notebook and on appropriate field forms.

2.2 Decontamination of Sampling Equipment

Proper decontamination of all re-usable sampling equipment is critical for all sampling episodes. The SOP for Decontamination of Field Equipment and SOPs for method-specific or instrument-specific tasks must also be referred to for guidance for decontamination of various types of equipment.

2.3 Quality Assurance/Quality Control Samples

QA/QC samples are intended to provide control over the proper collection and tracking of environmental measurements, and subsequent review, interpretation and validation of generated analytical data. The SOPs for Collection of Quality Control Samples, for Evaluation and Validation of Data, and for Field Record Keeping and Quality Assurance/Quality Control must be referred to for detailed guidance regarding these respective procedures. SOPs for method-specific or instrument-specific tasks must also be referred to for guidance for QA/QC procedures.

2.4 Sample Preservation Requirements

Certain analytical methodologies for specific analytes require chemical additives in order to stabilize and maintain sample integrity. Generally, this is accomplished under the following two scenarios:

- a. Sample bottles are preserved at the laboratory prior to shipment into the field.
- b. Preservatives are added in the field immediately after the samples are collected.

Many laboratories provide pre-preserved bottles as a matter of convenience and to help ensure that samples will be preserved immediately upon collection. A problem associated with this method arises if not enough sample could be collected, resulting in too much preservative in the sample. More commonly encountered problems with this method include the possibility of insufficient preservative provided to achieve the desired pH level or the need for additional preservation due to chemical reactions caused by the addition of sample liquids to pre-preserved bottles. The use of pre-preserved bottles is acceptable; however, field sampling teams must always be prepared to add additional preservatives to samples if the aforementioned situations occur. Furthermore, care must be exercised not to overfill sample bottles containing preservatives to prevent the sample and preservative from spilling and therefore diluting the preservative (i.e., not having enough preservative for the volume of sample).

When samples are preserved after collection, special care must be taken. The transportation and handling of concentrated acids in the field requires additional preparation and adherence to appropriate preservation procedures. All preservation acids used in the field should be trace-metal or higher-grade.

2.5 Sample Handling

After the proper sample bottles have been received under chain-of-custody, properly decontaminated equipment has been used to collect the sample, and appropriate preservatives have been added to maintain sample integrity, the final step for the field personnel is checking the sample bottles prior to proper packing and delivery of the samples to the laboratory.

All samples should be organized and the labels checked for accuracy. The caps should be checked for tightness and any 40-ml volatile organic compound (VOC) bottles must be checked for bubbles. Each sample bottle must be placed in an individual "zip-lock" bag to protect the label, and placed on ice. The bottles must be carefully packed to prevent breakage during transport. When several bottles have been collected for an individual sample, they should not be placed adjacent to each other in the cooler to prevent possible breakage of all bottles for a given sample. If there are any samples which are known or suspected to be highly contaminated, these should be placed in an individual cooler under separate chain-of-custody to prevent possible cross contamination. Sufficient ice (wet or blue packs) should be placed in the cooler to maintain the temperature at 4 degrees Celsius (°C) until delivery at the laboratory. Consult the work plan to determine if a particular ice is specified as the preservation for transportation (e.g., the United States Environmental Protection Agency does not like the use of blue packs because they claim that the samples will not hold at 4°C). If additional

coolers are required, then they should be purchased. The chain-of-custody form should be properly completed, placed in a "zip-lock" bag, and placed in the cooler. One copy must be maintained for the project files. The cooler should be sealed with packing tape and a custody seal. The custody seal number should be noted in the field book. Samples collected from Monday through Friday will be delivered to the laboratory within 24 hours of collection. If Saturday delivery is not available, samples collected on Friday must be delivered by Monday morning. Check the work plan to determine if certain analytes require a shorter delivery time. If overnight mail is utilized, then the shipping bill must be maintained for the files and the laboratory must be called the following day to confirm receipt.

3.0 EQUIPMENT AND MATERIALS

3.1 General equipment and materials may include, but not necessarily be limited to, the following:

- a. Sample bottles of proper size and type with labels.
- b. Cooler with ice (wet or blue pack).
- c. Field notebook, appropriate field form(s), chain-of-custody form(s), custody seals.
- d. Black pen and indelible marker.
- e. Packing tape, "bubble wrap", and "zip-lock" bags.
- f. Overnight (express) mail forms and laboratory address.
- g. Health and safety plan (HASP).
- h. Work plan/scope of work.
- i. Pertinent SOPs for specified tasks and their respective equipment and materials.

3.2 Preservatives for specific samples/analytes as specified by the laboratory. Preservatives must be stored in secure, spillproof glass containers with their content, concentration, and date of preparation and expiration clearly labeled.

3.3 Miscellaneous equipment and materials including, but not necessarily limited to, the following:

- a. Graduated pipettes.
- b. Pipette bulbs.
- c. Litmus paper.
- d. Glass stirring rods.

- e. Protective goggles.
- f. Disposable gloves.
- g. Lab apron.
- h. First aid kit.
- i. Portable eye wash station.
- j. Water supply for immediate flushing of spillage, if appropriate.
- k. Shovel and container for immediate containerization of spillage-impacted soils, if appropriate.

4.0 PROCEDURE

- 4.1 Examine all bottles and verify that they are clean and of the proper type, number, and volume for the sampling to be conducted.
- 4.2 Label bottles carefully and clearly with project name and number, site location, sample identification, date, time, and the sampler's initials using an indelible marker.
- 4.3 Collect samples in the proper manner (refer to specific sampling SOPs).
- 4.4 Conduct preservation activities as required after each sample has been collected. Field preservation must be done immediately and must not be done later than 30 minutes after sample collection.
- 4.5 Conduct QC sampling, as required.
- 4.6 Seal each container carefully and place in an individual "zip lock" bag.
- 4.7 Organize and carefully pack all samples in the cooler immediately after collection (e.g., bubble wrap). Insulate samples so that breakage will not occur.
- 4.8 Complete and place the chain-of-custody form in the cooler after all samples have been collected. Maintain one copy for the project file. If the cooler is to be transferred several times prior to shipment or delivery to the laboratory, it may be easier to tape the chain-of-custody to the exterior of the sealed cooler. When exceptionally hazardous samples are known or suspected to be present, this should be identified on the chain-of-custody as a courtesy to the laboratory personnel.
- 4.9 Add additional ice as necessary to ensure that it will last until receipt by the laboratory.
- 4.10 Seal the cooler with packing tape and a custody seal. Record the number of the custody seal in the field notebook and on the field form. If there are any

exceptionally hazardous samples, then shipping regulations should be examined to ensure that the sample containers and coolers are in compliance and properly labeled.

- 4.11 Samples collected from Monday through Friday will be delivered to the laboratory within 24 hours of collection. If Saturday delivery is not available, samples collected on Friday must be delivered by Monday morning. Check the work plan to determine if certain analytes require a shorter delivery time.
- 4.12 Maintain the shipping bill for the project files if overnight mail is utilized and call the laboratory the following day to confirm receipt.

END OF PROCEDURE

STANDARD OPERATING PROCEDURE 5.1
FOR COLLECTION OF SOIL SAMPLES
FOR LABORATORY ANALYSIS

Page 1 of 3

Date: May 5, 2000

1.0 PURPOSE

The purpose of this Standard Operating Procedure (SOP) is to establish guidelines for the collection of soil samples for laboratory analysis. This SOP is applicable to soil samples collected from split-spoon samplers during drilling, hand auger samples, grab samples from stockpiled soils, surface samples, test pit samples, etc.

2.0 CONSIDERATIONS

Soil samples may be collected in either a random or biased manner. Random samples can be based on a grid system or statistical methodology. Biased samples can be collected in areas of visible impact or suspected source areas. Soil samples can be collected at the surface, shallow subsurface, or at depth. When samples are collected at depth the water content should be noted, since generally "soil sampling" is restricted to the unsaturated zone. Equipment selection will be determined by the depth of the sample to be collected. A thorough description of the sampling locations and proposed methods of sample collection should be included in the work plan.

Commonly, surface sampling refers to the collection of samples at a 0 to 6 inch depth interval. Certain regulatory agencies may define the depth interval of a surface sample differently, and this must be defined in the work plan. Collection of surface soil samples is most efficiently accomplished with the use of a stainless steel trowel or scoop. For samples at greater depths a decontaminated bucket auger or power auger may be needed to advance the hole to the point of sample collection. Another clean bucket auger should then be used to collect the sample. To collect samples at depths of greater than approximately six feet the use of a drill rig and split spoon samples will usually be necessary. In some situations, sample locations are accessed with the use of a backhoe.

3.0 MATERIALS/EQUIPMENT

- a. A work plan which outlines soil sampling requirements.
- b. Field notebook, field form(s), maps, chain-of-custody forms, and custody seals.
- c. Decontamination supplies (including: non-phosphate, laboratory grade detergent, buckets, brushes, potable water, distilled water, regulatory-required reagents, aluminum foil, plastic sheeting, etc.).
- d. Sampling device (split-spoon sampler, stainless steel hand auger, stainless steel trowel, etc.).
- e. Stainless steel spoons or spatulas.
- f. Disposable sampling gloves.

- g. Laboratory-supplied sample containers with labels.
- h. Cooler with blue or wet ice.
- i. Plastic sheeting.
- j. Black pen and indelible marker.
- k. Zip-lock bags and packing material.
- l. Tape measure.
- m. Paper towels or clean rags.
- n. Masking and packing tape.
- o. Overnight (express) mail forms.

4.0 DECONTAMINATION

All reusable sampling equipment will be thoroughly cleaned according to the decontamination SOP. Where possible, thoroughly pre-cleaned and wrapped sampling equipment should be used and dedicated to individual sampling locations. Disposable items such as sampling gloves, aluminum foil, and plastic sheeting will be changed after each use and discarded in an appropriate manner.

5.0 PROCEDURE

- 5.1 Prior to collecting soil samples, ensure that all sampling equipment has been thoroughly cleaned according to the decontamination SOP. If samples are to be collected at depth, then the boring must be advanced with thoroughly cleaned equipment to the desired sampling horizon and a different thoroughly cleaned sampler must be used to collect the sample.
- 5.2 Using disposable gloves and a pre-cleaned, stainless steel spatula or spoon, extract the soil sample from the sampler, measure the recovery, and separate the wash from the true sample. Where allowed by regulatory agency(ies), disposable plastic spoons may be used.
- 5.3 Place the sample in a laboratory-supplied, pre-cleaned sample container. This should be done as quickly as possible and this is especially important when sampling for volatile organic compounds (VOCs). Samples to be analyzed for VOCs must be collected prior to other constituents.
- 5.4 The sample container will be labeled with appropriate information such as, client name, site location, sample identification (location, depth, etc.), date and time of collection, and sampler's initials.

STANDARD OPERATING PROCEDURE 5.1
FOR COLLECTION OF SOIL SAMPLES
FOR LABORATORY ANALYSIS

Page 3 of 3

- 5.5 Using the remaining portion of soil from the sampler, log the sample in detail and record sediment characteristics (color, odor, moisture, texture, density, consistency, organic content, layering, grain size, etc.).
- 5.6 If soil samples are to be composited in the field, then equal portions from selected locations will be placed on a clean plastic sheet and homogenized. Alternately, several samples may be submitted to the laboratory for compositing by weight. The method used is dependent upon regulatory requirements. Specific compositing procedures shall be approved by the appropriate regulatory agency and described in the work plan. Samples to be analyzed for VOCs will not be composited unless required by a regulatory agency.
- 5.7 After the sample has been collected, labeled, and logged in detail, it is placed in a zip-lock bag and stored in a cooler at 4°C.
- 5.8 A chain-of-custody form is completed for all samples collected. One copy is retained and two are sent with the samples in a zip-lock bag to the laboratory. A custody seal is placed on the cooler prior to shipment.
- 5.9 Samples collected from Monday to Friday are to be delivered to the laboratory within 24 hours of collection. If Saturday delivery is unavailable, samples collected on Friday must be delivered by Monday morning. Check the work plan to determine if any analytes require a shorter delivery time.
- 5.10 The field notebook and appropriate forms should include, but not be limited to the following: client name, site location, sample location, sample depth, sample identification, date and time collected, sampler's name, method of sample collection, number and type of containers, geologic description of material, description of decontamination procedures, etc. A site map should be prepared with exact measurements to each sample location in case follow-up sampling is necessary.
- 5.11 All reusable sampling equipment must be thoroughly cleaned in accordance with the decontamination SOP. Following the final decontamination (after all samples are collected) the sampling equipment is wrapped in aluminum foil. Discard any gloves, foil, plastic, etc. in an appropriate manner that is consistent with site conditions.

END OF PROCEDURE

Date: May 5, 2000

1.0 PURPOSE

The purpose for this standard operating procedure (SOP) is to establish the guidelines for decontamination of all field equipment potentially exposed to contamination during drilling, and soil and water sampling. The objective of decontamination is to ensure that all drilling, and soil-sampling and water-sampling equipment is decontaminated (free of potential contaminants): 1) prior to being brought onsite to avoid the introduction of potential contaminants to the site; 2) between drilling and sampling events/activities onsite to eliminate the potential for cross-contamination between boreholes and/or wells; and 3) prior to the removal of equipment from the site to prevent the transportation of potentially contaminated equipment offsite.

In considering decontamination procedures, state and federal regulatory agency requirements must be considered because of potential variability between state and federal requirements and because of variability in the requirements of individual states. Decontamination procedures must be in compliance with state and/or federal protocols in order that regulatory agency(ies) scrutiny of the procedures and data collected do not result in non acceptance (invalidation) of the work undertaken and data collected.

2.0 PROCEDURE FOR DRILLING EQUIPMENT

The following is a minimum decontamination procedure for drilling equipment. Drilling equipment decontamination procedures, especially any variation from the method itemized below, will be documented on an appropriate field form or in the field notebook.

- 2.1 The rig and all associated equipment should be properly decontaminated by the contractor before arriving at the test site.
- 2.2 The augers, drilling casings, rods, samplers, tools, rig, and any piece of equipment that can come in contact (directly or indirectly) with the soil, will be steam cleaned onsite prior to set up for drilling to ensure proper decontamination.
- 2.3 The same steam cleaning procedures will be followed between boreholes (at a fixed on-site location[s], if appropriate) and before leaving the site at the end of the study.
- 2.4 All on-site steam cleaning (decontamination) activities will be monitored and documented by a member(s) of the staff of Roux Associates, Inc.
- 2.5 If drilling activities are conducted in the presence of thick, sticky oils (e.g., PCBs) which coat drilling equipment, then special decontamination procedures may have to be utilized before steam cleaning (e.g., hexane scrub and wash).

- 2.6 Containment of decontamination fluids may be necessary (e.g., rinseate from steam cleaning) or will be required (e.g., hexane), and disposal must be in accordance with state and/or federal procedures.

3.0 PROCEDURE FOR SOIL-SAMPLING EQUIPMENT

The following is a minimum decontamination procedure for soil-sampling equipment (e.g., split spoons, stainless-steel spatulas). Soil-sampling equipment decontamination procedures, especially any variation from the method itemized below, will be documented on an appropriate field form or in the field notebook.

- 3.1 Wear disposable gloves while cleaning equipment to avoid cross-contamination and change gloves as needed.
- 3.2 Steam clean the sampler or rinse with potable water. If soil-sampling activities are conducted in the presence of thick, sticky oils (e.g., PCBs) which coat sampling equipment, then special decontamination procedures may have to be utilized before steam cleaning and washing in detergent solution (e.g., hexane scrub and wash).
- 3.3 Prepare a non-phosphate, laboratory-grade detergent solution and distilled or potable water in a clean bucket.
- 3.4 Disassemble the sampler, as necessary and immerse all parts and other sampling equipment in the solution.
- 3.5 Scrub all equipment in the bucket with a brush to remove any adhering particles.
- 3.6 Rinse all equipment with copious amounts of potable water followed by distilled or deionized water.
- 3.7 Place clean equipment on a clean plastic sheet (e.g., polyethylene)
- 3.8 Reassemble the cleaned sampler, as necessary.
- 3.9 Transfer the sampler to the driller (or helper) making sure that this individual is also wearing clean gloves, or wrap the equipment with a suitable material (e.g., plastic bag, aluminum foil).

As part of the decontamination procedure for soil-sampling equipment, state and/or federal protocols must be considered. These may require procedures above those specified as minimum for Roux Associates, Inc., such as the use of nitric acid, acetone, etc. Furthermore, the containment and proper disposal of decontamination fluids must be considered with respect to regulatory agency(ies) requirements.

4.0 PROCEDURE FOR WATER-SAMPLING EQUIPMENT

The following is a decontamination procedure for water-sampling equipment (e.g., bailers, pumps). Water-sampling equipment decontamination procedures, especially any variation from the method itemized below, will be documented on an appropriate field form or in the field notebook.

4.1 Decontamination procedures for bailers follow:

- a. Wear disposable gloves while cleaning bailer to avoid cross-contamination and change gloves as needed.
- b. Prepare a non-phosphate, laboratory-grade detergent solution and potable water in a bucket.
- c. Disassemble bailer (if applicable) and discard cord in an appropriate manner, and scrub each part of the bailer with a brush and solution.
- d. Rinse with potable water and reassemble bailer.
- e. Rinse with copious amounts of distilled or deionized water.
- f. Air dry.
- g. Wrap equipment with a suitable material (e.g., clean plastic bag, aluminum foil).
- h. Rinse bailer at least three times with distilled or deionized water before use.

4.2 Decontamination procedures for pumps follow:

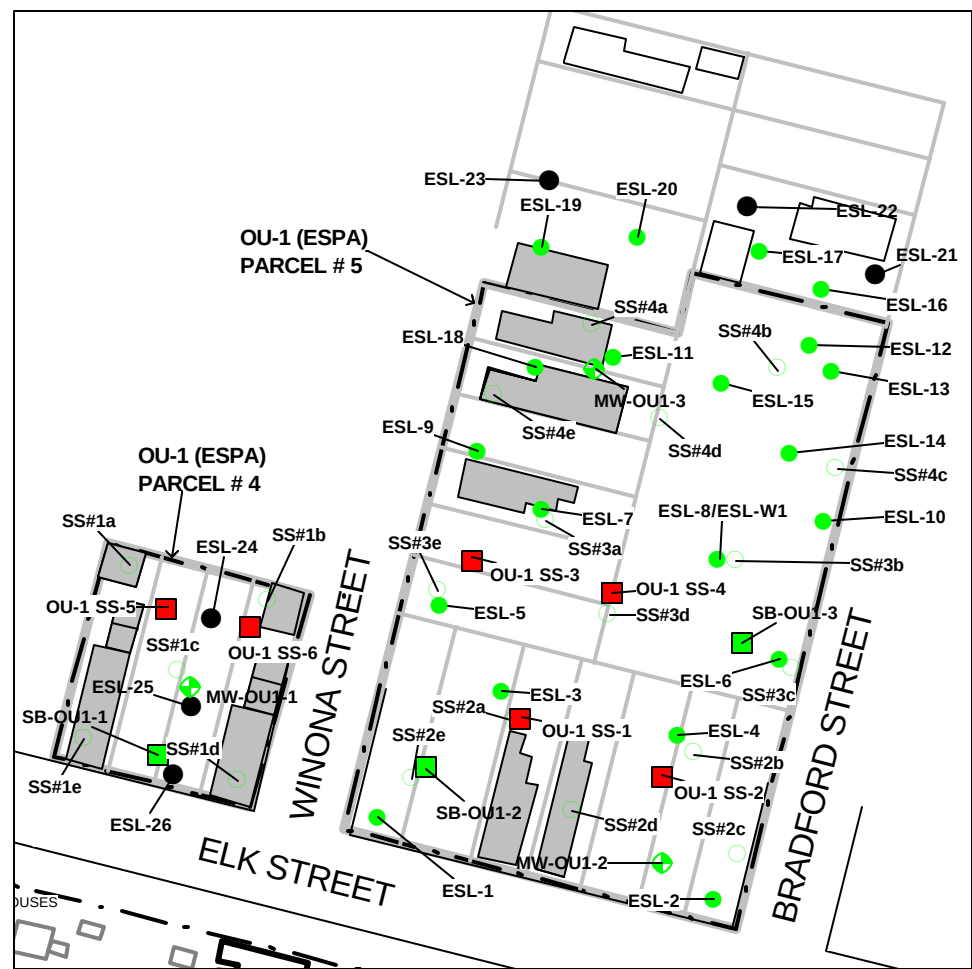
- a. Wear disposable gloves while cleaning pump to avoid cross-contamination and change gloves as needed.
- b. Prepare a non-phosphate, laboratory-grade detergent solution and potable water in a clean bucket, clean garbage can, or clean 55-gallon drum.
- c. Flush the pump and discharge hose (if not disposable) with the detergent solution, and discard disposable tubing and/or cord in an appropriate manner.
- d. Flush the pump and discharge hose (if not disposable) with potable water.
- e. Place the pump on clear plastic sheeting.
- f. Wipe any pump-related equipment (e.g., electrical lines, cables, discharge hose) that entered the well with a clean cloth and detergent solution, and rinse or wipe with a clean cloth and potable water.
- g. Air dry.

- h. Wrap equipment with a suitable material (e.g., clean plastic bag).

As part of the decontamination procedure for water-sampling equipment, state and/or federal protocols must be considered. These may require procedures above those specified as minimum for Roux Associates, Inc., such as the use of nitric acid, acetone, etc. Furthermore, the containment and proper disposal of decontamination fluids must be considered with respect to regulatory agency(ies) requirements.

APPENDIX B

TestAmerica Chain of Custody Form



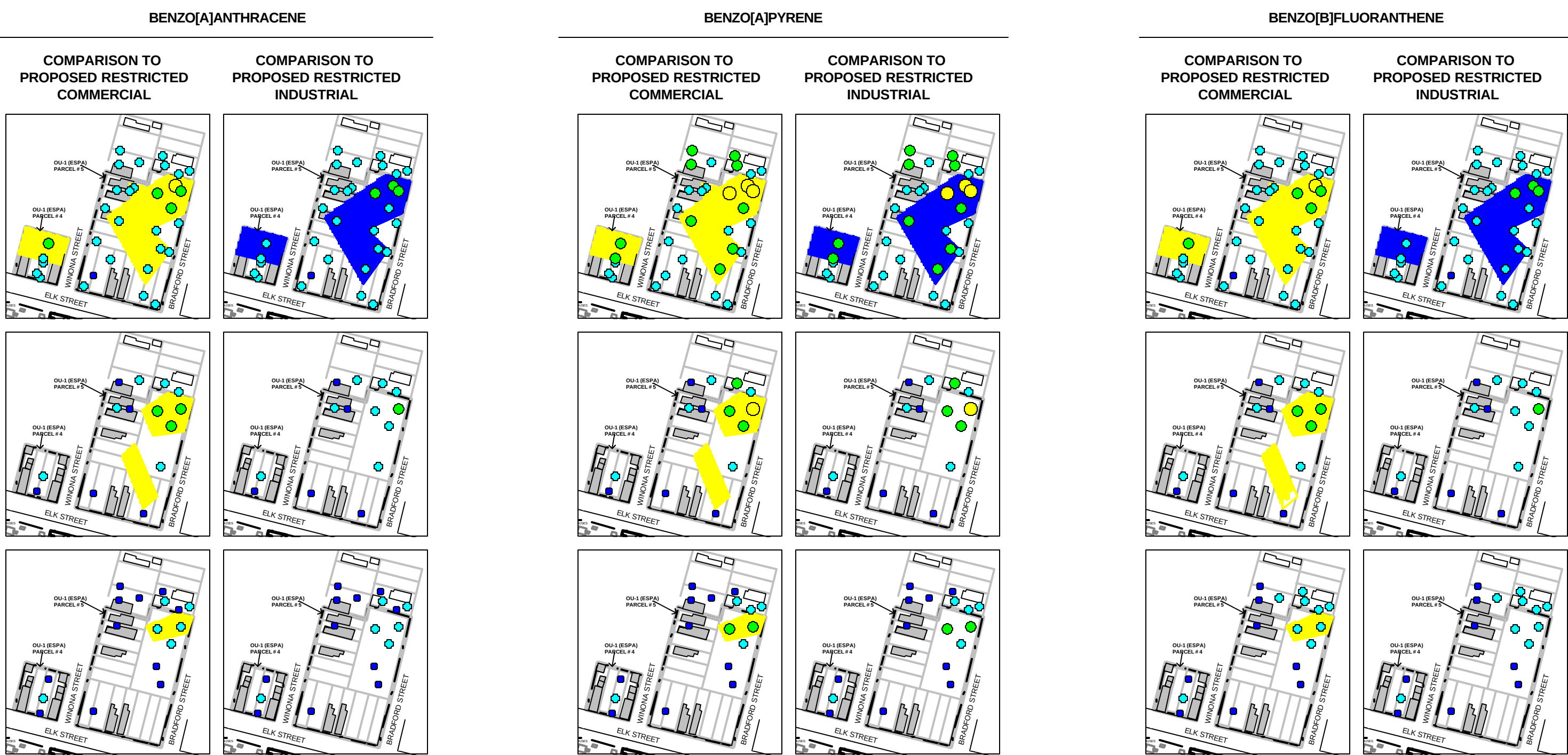
LOCATION MAP



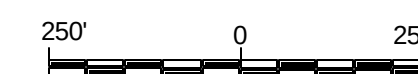
DEPTH INTERVAL
0 - 0.5 FT

DEPTH INTERVAL
1 - 2 FT

DEPTH INTERVAL
GREATER THAN 2 FT



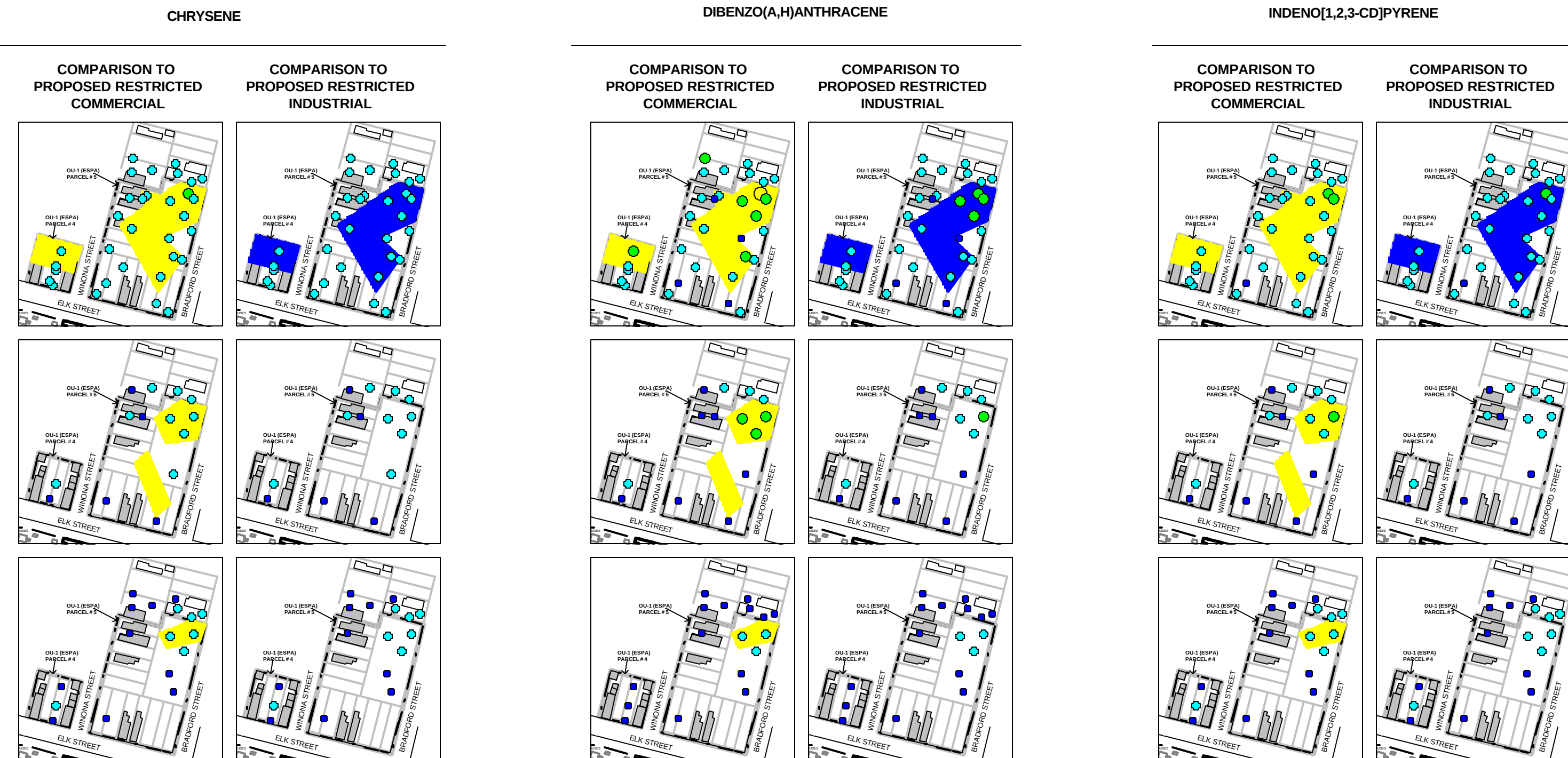
SVOCs



DEPTH INTERVAL
0 - 0.5 FT

DEPTH INTERVAL
1 - 2 FT

DEPTH INTERVAL
GREATER THAN 2 FT



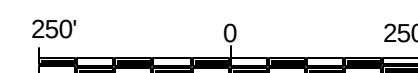
DEPTH INTERVAL
0 - 0.5 FT

DEPTH INTERVAL
1 - 2 FT

DEPTH INTERVAL
GREATER THAN 2 FT



METALS



NOTES: (1) DEPTH INTERVALS INDICATED CORRESPOND TO THE LABORATORY ANALYTICAL SAMPLE INTERVALS AND ARE RELATIVE TO THE BOTTOM OF ANY SURFACE MATERIAL ENCOUNTERED (ASPHALT, CONCRETE, VEGETATION, ETC.).
(2) THE THIRD DEPTH INTERVAL INCLUDES ALL SAMPLE RESULTS DEEPER THAN 2 FEET.
(3) COMPOSITE SAMPLES WERE ONLY COLLECTED IN THE 1-2 FT BLS INTERVAL AND WERE ONLY ANALYZED FOR METALS.

- OU-1 SS-1 LOCATION AND DESIGNATION OF OU-1 ADDITIONAL SOIL BORING COMPLETED IN NOVEMBER 2006
- MW-OU-1 LOCATION AND DESIGNATION OF OU-1 ADDITIONAL INVESTIGATION MONITORING WELL
- SB-OU-1 LOCATION AND DESIGNATION OF OU-1 ADDITIONAL INVESTIGATION SOIL BORING
- SS#1a LOCATION AND DESIGNATION OF 1993 GTI COMPOSITE BORING, ONE SOIL SAMPLE WAS COMPOSITED FROM THE FIVE BORING LOCATIONS (A THROUGH F)
- ESL-1 LOCATION AND DESIGNATION OF SFI SFI COMPLETION SOIL BORING
- ESL-21 LOCATION AND DESIGNATION OF ESPA INVESTIGATION COMPLETION SOIL BORING
- OU-1 OPERABLE UNIT 1
- SFI SITE FACILITY INVESTIGATION

- EXCAVATION AREAS TO MEET PROPOSED COMMERCIAL CRITERIA (REMEDIAL ALTERNATIVE 2 INCLUDES EXCAVATION IN THREE DEPTH INTERVALS, REMEDIAL ALTERNATIVE 3 INCLUDES EXCAVATION IN ZERO TO ONE FOOT BLS DEPTH INTERVAL ONLY)
- REMEDIAL ALTERNATIVE 4 EXCAVATION AREA TO MEET PROPOSED RESTRICTED INDUSTRIAL CRITERIA IN THE ZERO TO ONE FOOT BLS DEPTH INTERVAL
- EXISTING BUILDINGS THAT WERE PRESENT AT TIME OF TANK 60 INCIDENT
- BUILDINGS PRESENT AT TIME OF TANK 60 INCIDENT THAT WERE SUBSEQUENTLY DEMOLISHED
- FORMER PROPERTY DIVISIONS
- OU-1 BOUNDARY
- EXXONMOBIL PROPERTY LINE
- ESPA ELK STREET PROPERTIES AREA

	PROPOSED BCP RESTRICTED COMMERCIAL CRITERIA	PROPOSED BCP RESTRICTED INDUSTRIAL CRITERIA
BENZO(A)ANTHRACENE	5,600 (ug/kg)	11,000 (ug/kg)
BENZO(A)PYRENE	1,000 (ug/kg)	1,100 (ug/kg)
BENZO(B)FLUORANTHENE	5,600 (ug/kg)	11,000 (ug/kg)
CHRYSENE	56,000 (ug/kg)	110,000 (ug/kg)
DIBENZO(A,H)ANTHRACENE	560 (ug/kg)	1,100 (ug/kg)
INDENO(1,2,3-CD)PYRENE	5,600 (ug/kg)	11,000 (ug/kg)
ARSENIC	16 (mg/kg)	16 (mg/kg)
CADMIUM	9.3 (mg/kg)	60 (mg/kg)
LEAD	1,000 (mg/kg)	3,900 (mg/kg)

UG/KG - MICROGRAMS PER KILOGRAM
MG/KG - MILLIGRAMS PER KILOGRAM

- LEGEND FOR DISTRIBUTION OF CONCENTRATIONS RELATIVE TO PROPOSED RESTRICTED COMMERCIAL AND RESTRICTED INDUSTRIAL CRITERIA
- 100 TO LESS THAN 1,000 TIMES CRITERIA (GRAB SAMPLE)
 - 10 TO LESS THAN 100 TIMES CRITERIA (GRAB SAMPLE)
 - 1 TO LESS THAN 10 TIMES CRITERIA (GRAB SAMPLE)
 - LESS THAN CRITERIA (GRAB SAMPLE)
 - NOT DETECTED (GRAB SAMPLE)
 - 100 TO LESS THAN 1,000 TIMES CRITERIA (COMPOSITE SAMPLE)
 - 10 TO LESS THAN 100 TIMES CRITERIA (COMPOSITE SAMPLE)
 - 1 TO LESS THAN 10 TIMES CRITERIA (COMPOSITE SAMPLE)
 - LESS THAN CRITERIA (COMPOSITE SAMPLE)
 - NOT DETECTED (COMPOSITE SAMPLE)

DISTRIBUTION OF SVOCs AND METALS IN SOIL COMPARED TO PROPOSED RESTRICTED COMMERCIAL AND PROPOSED RESTRICTED INDUSTRIAL CRITERIA

Prepared For: EXXONMOBIL OIL CORPORATION

Prepared by: NC Date: 05/08/07

Project Mgr: NC Scale: AS SHOWN

File No: MCD33001.WOR Project: 17052108

PLATE 1



0 TO 1 FOOT BELOW GRADE
EXCAVATION INTERVAL

1 TO 2 FOOT BELOW GRADE
EXCAVATION INTERVAL

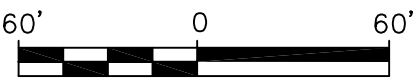
2 TO 3 FOOT BELOW GRADE
EXCAVATION INTERVAL

LEGEND

- ESL-3 ● LOCATION AND DESIGNATION OF SFI/ SFI COMPLETION SOIL BORING
- SS#1C/TWP-05 ○ ○ ○ ○ ○ LOCATION OF 1993 GTI SITE ASSESSMENT INVESTIGATION COMPOSITE SOIL BORINGS SS#1 THROUGH SS#4 (ONE COMPOSITE SAMPLE FROM EACH GROUP OF FIVE BORINGS, GROUPS ARE SHOWN AS FOUR DIFFERENT COLORS; TWP INDICATES TEMPORARY WELL POINT GROUNDWATER SAMPLING LOCATION)
- ESPA INVESTIGATION COMPLETION SOIL SAMPLING LOCATION
- MW-OU1-1 ○ LOCATION AND DESIGNATION OF TEMPORARY MONITORING WELL (SEE NOTE 5)
- SB-OU1-2 ✕ LOCATION AND DESIGNATION OF PROPOSED SHALLOW SOIL SAMPLE (SEE NOTE 5)
- OU-1SS-1 ■ LOCATION AND DESIGNATION OF ADDITIONAL 1-2 FOOT DEPTH INTERVAL SOIL SAMPLES COLLECTED IN NOVEMBER 2006
- hyd FIRE HYDRANT
- SFI SITE FACILITY INVESTIGATION
- FORMER PROPERTY DIVISIONS
- EXXONMOBIL PROPERTY LINE
- EXXONMOBIL FENCE LINE (INSTALLED JULY 2000)
- x ESPA BOUNDARY
- BUILDINGS PRESENT AT TIME OF TANK 60 INCIDENT THAT WERE SUBSEQUENTLY DEMOLISHED
- EXISTING BUILDINGS THAT WERE PRESENT AT TIME OF TANK 60 INCIDENT
- AERIAL EXTENT OF EXCAVATION FOR REMEDIAL ALTERNATIVE 2 (SEE NOTE 6)

NOTES:

- GROUNDWATER AT TEMPORARY WELL POINT TWP-01 WAS NOT SAMPLED IN DURING THE 1993 INVESTIGATION.
- ESL-8/ESL-W1 WAS AN SFI SHALLOW SOIL BORING AND TEMPORARY GROUNDWATER SAMPLING LOCATION.
- ESL-1 THROUGH ESL-12 WERE INSTALLED DURING THE 1998 SFI. ESL-13 THROUGH ESL-20 WERE INSTALLED DURING THE 1999 SFI COMPLETION. ESL-21 THROUGH ESL-26 WERE INSTALLED DURING THE ESPA INVESTIGATION COMPLETION, DECEMBER 14, 2001.
- LOCATION OF FORMER BUILDINGS AND PROPERTY DIVISIONS ARE BASED ON SANBORN FIRE INSURANCE MAPS AND AERIAL PHOTOGRAPHS PRIOR TO 1976.
- MW-OU1-1 THROUGH MW-OU1-3 AND SB-OU1-1 THROUGH SB-OU1-3 WERE INSTALLED AND SAMPLED IN AUGUST 2006.
- REMEDIAL ALTERNATIVE 2 INCLUDES EXCAVATION OF THE HIGHLIGHTED AREAS IN THE THREE DEPTH INTERVALS SHOWN TO MEET PROPOSED RESTRICTED COMMERCIAL CRITERIA.



Title: REMEDIAL ALTERNATIVE 2 TRACK 2 - RESTRICTED COMMERCIAL USE			
FORMER BUFFALO TERMINAL, BUFFALO, NEW YORK			
Prepared For: EXXONMOBIL OIL CORPORATION			
 ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: N.C.	Date: 27DEC06	PLATE 2
	Prepared by: J.A.D.	Scale: SHOWN	
	Project Mgr: N.C.	Office: NY	
	File No: MC5233011	Project: 17252Y08	