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25864-F Business Center Drive
Redlands, California 92374
909.335.6116 TEL
909.335.6120 FAX

**SOIL EXCAVATION REPORT FOR
OLSON URBAN HOUSING, LLC**

**Former Impulse Motors
1210 Bockman Road
San Lorenzo, CA**

**February 1, 2007
Project Number 04OT.29222.73**

Prepared by:

**Jason Adelaars
Staff Scientist**

Reviewed by:

**Kyle D. Emerson
Senior Vice President**



SECOR
INTERNATIONAL
INCORPORATED

www.secor.com
25864-F Business Center Drive
Redlands, California 92374
909.335.6116 TEL
909.335.6120 FAX

February 1, 2007

Steven Plunkett
Department of Environmental Protection
Environmental Protection Division
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

RE: SOIL REMOVAL REPORT
1245 – 1415 Bockman Road
San Lorenzo, California (the "Site")

Dear Mr. Plunkett,

At the request and authorization of Olson Urban Housing, LLC (Olson), SECOR International Incorporated (SECOR) has prepared this report detailing the results of remedial excavation of previously identified petroleum impacted soil at the above referenced Site. The completed remedial action was conducted in general accordance with SECOR's *Proposal for Excavation of Petroleum Impacted Soil*, dated December 11, 2006. In addition, the work was completed in accordance with the terms contained in the Master Consulting Services Agreement (MCSA) with the Olson Company dated November 28, 2001. Notification of proposed field activities was made to the Alameda County Health Care Services Agency (ACHCSA), prior to the implementation of field work. The results of the completed work are summarized in the following Executive Summary, and described in greater detail in the attached report.

EXECUTIVE SUMMARY

Previous environmental assessment activities completed by SECOR and others (SECOR, 2004, 2005; ACC, 2004) at the Site reported the presence of elevated concentrations of petroleum hydrocarbon impacts in soil. The results of these investigations also indicated that the area of soil impact was limited to two separate areas located in the vicinity of the former product fuel lines and dispenser islands. Based on the results of these investigations, SECOR was retained by Olson to complete remedial excavations to physically remove contaminated soils identified in the prior assessments.

Between December 19 and December 20, 2006, under the oversight of the ACHCSA, SECOR supervised the excavation and stockpiling of two (2) remedial soil excavations located in the vicinity of the two former fuel dispensers. Prior to performing the excavation, the Site buildings were surveyed, in order to accurately determine the location of the former dispenser islands. Subsequent to the Site survey, a hydraulic excavator was used to excavate soils to expose and removed contaminated material. The resulting excavated soil was stockpiled on the western portion of the Site using a rubber-tire wheel loader. During removal activities, clean overburden soil and obviously impacted soil were segregated into separate stockpiles (SP-1 and SP-2) based on the use of a photoionization detector calibrated to 100 ppmV hexane and on visual and olfactory observations.

Segregated clean and impacted stockpiles were both placed on 6-mil thick plastic sheeting and periodically moistened to suppress dust. Stockpiles were covered with 6-mil plastic sheeting and sandbags during work stoppages to prevent the migration of contaminants and control fugitive dust.

Two remedial excavations were completed in the vicinity of each of the former fuel dispensers. The first excavation (EX-1; northern-most) measured approximately 48 feet (east-to-west) by approximately 16 feet (north-to-south). The second excavation (EX-2; southern-most) measured approximately 44 feet (east-to-west) by approximately 19 feet (north-to-south) to a depth of 10 feet bgs. Both excavations were limited to a depth of 10 feet bgs vertically, because of the presence of groundwater.

Approximately 500 cubic yards (cyd) of soil was excavated and stockpiled (based on ex-situ measurements). Stockpiled soil remains covered on-Site awaiting final waste characterization and disposal or re-use.

Based on the results of the completed excavations, the following were noted:

Encountered soils generally consisted of silt, clay and silt/clay mixtures to the total depth of excavation (approximately 10 feet bgs). Petroleum impacted soil was easily differentiated from clean soils based on petroleum odors and characteristic greenish gray colorations. PID readings during excavation ranged from 0 to 2,000 ppmV hexane.

First water was encountered at a depth of approximately 10 feet bgs. The presence of shallow water prevented the continuation of excavation in the vertical direction.

Excavation 1 (Northern Fuel Dispenser Excavation)

Sidewall Samples - The confirmation samples collected from the sidewalls of the excavation, reported no presence of TPHg or TPHd at or above the laboratory detection limits. Low concentrations of the fuel oxygenates, MtBE and TBA were reported in one of the southern sidewall samples at concentrations of 0.015 mg/Kg and 0.057 mg/Kg, respectively. Total lead concentrations ranged from 3.88 mg/Kg to 4.27 mg/Kg, well within typical background concentrations.

Bottom Samples - Because of the infiltration of groundwater into the bottom of the excavation, only one bottom sample was collected. The results of the bottom sample reported the presence of TPHg and TPHd at concentrations of 120 and 13 mg/Kg, respectively. MtBE and Ethylbenzene were also reported at concentrations of 0.4 and 0.15 mg/Kg, respectively. Total lead was reported at 6.34 mg/Kg. No other target analytes were reported above laboratory reporting limits.

Excavation 2 (Southern Fuel Dispenser Excavation)

Sidewall Samples - TPHg and TPHd were reported at very low concentrations in one of the sidewall confirmation samples, S-4-5 at concentrations of 0.78 mg/Kg and 19 mg/Kg, respectively. Very low concentrations of MtBE and TBA were reported at concentrations of 0.015 mg/Kg and 0.028 mg/Kg, respectively in this same sample.

Total lead was reported at concentrations ranging from 3.47 mg/Kg to 16.5 mg/Kg, respectively, which is well within typical background concentrations. No other target analytes were reported in sidewall confirmation samples above laboratory reporting limits.

Bottom Samples – Because of infiltration of groundwater into the open excavation, SECOR was only able to collect one bottom verification sample. The sample was collected from the area where the highest PID readings had been observed at during the excavation process. The sample results reported the presence of TPHg at a concentration of 2.7 mg/Kg. Trace concentrations of MtBE and Ethylbenzene were also reported in this sample at concentrations of 0.003 mg/Kg and 0.003 mg/Kg, respectively. Total lead was reported at a concentration of 3.86 mg/Kg, respectively. No other target analytes were reported in this bottom sample at or above laboratory reporting limits.

Excavation Stockpiles –

Stockpile 1 (Impacted Soil) - Composite soil samples taken from the impacted stockpile exhibited concentrations of gasoline range hydrocarbons ranging from 1.4 - 47 mg/kg and a TPHd concentration of 14 mg/kg. Furthermore, the sample results reported the presence of MtBE, TBA, Ethylbenzene, toluene, and total xylenes at concentrations up to 0.005, 0.18, 0.002, and 0.74 mg/Kg, respectively.

Stockpile 2 (Clean overburden) - Composite soil samples taken from clean stockpiles exhibited concentrations of TPHd, Toluene, and Xylenes at 21, 0.004, and 0.005 mg/kg, respectively. Based on these results, SECOR recommends that the ACHCSA authorize the re-use of this material as backfill of the remedial excavation.

The concentrations of contaminants detected during the sampling (as discussed above) are all well below regulatory thresholds or, with respect to lead, well within typical background concentrations. Based on the result of the completed excavation sampling, the lateral limits of impact have been removed in all lateral directions. Very low concentrations of residual TPHg (120 ppm) and other minor petroleum constituents have been reported in the bottom sample collected from excavation one (northern dispenser). However, the residual petroleum concentrations are very low and benzene was not reported in any analyzed sample. Furthermore, the results of Hydropunch groundwater sampling slightly down gradient from the fuel dispensers conducted by SECOR (2005), reported no presence of any gasoline constituent at concentrations at or above laboratory reporting limits.

As a result of the completed remedial excavation and sample results, SECOR recommends that the ACHCSA grant no further action at the Site. This recommendation is based on the following observations/ data:

- Nondetect to low concentrations of reported target analytes in collected and analyzed confirmation samples;
- Absence of benzene in any analyzed samples;
- Presence of total lead at concentrations within published health screening guidance and within typical background concentrations;

- Absence of TPHg and VOCs in previously collected (SECOR, 2005) Hydropunch groundwater samples collected and analyzed down-and cross-gradient from the former fuel dispensers with respect to groundwater flow; and,
- Absence of target analytes in the UST excavation (ACC, 2004) located down-gradient from the fuel dispenser islands with respect to groundwater flow.

To this end, based on the above, this report requests that the ACHCSA review the collected data and Site history for closure purposes. Upon receipt of permission to proceed, the open excavation will be partially backfilled using clean overburden soil removed and tested. Subsequently, the Site will be graded for planned redevelopment.

During field operations, the ACHCSA identified two (2) PVC pipes that protruded out of the ground. The pipes appeared to be temporary monitoring wells that may have been installed by others. SECOR has been unable to ascertain, for what purpose the pipes/wells were placed, of by whom. However, as requested by the ACHCSA, the pipes/wells will attempt to be gauged and then properly abandoned under permit. A supplemental well abandonment report will be provided under separate cover to document the well destruction.

Additionally, the ACHCSA has requested that a sensitive receptor survey be completed to identify the locations of any potential groundwater supply wells. The receptor survey is currently in progress and the results will be submitted to the ACHCSA under separate cover.

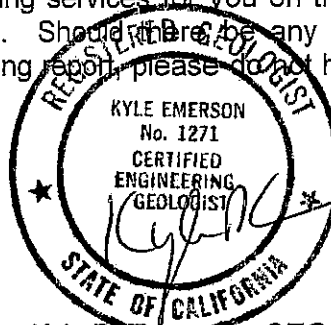
CLOSURE

It has been a pleasure to provide environmental consulting services for you on this project and we look forward to working with you in the future. Should there be any questions regarding the information provided within the accompanying report, please do not hesitate to contact the undersigned at (909) 335-6116.

Respectfully submitted,
SECOR International Incorporated



Jason Adelaars
Staff Scientist



Kyle D. Emerson, CEG 1271
Senior Vice President

cc:

Mr. Gerald Ploof, The Olson Company
Mr. Preston Brooks, Cox, Castle, Nicholson, LLP

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1.0 INTRODUCTION

This report documents the methodology and results of the remedial excavation of petroleum impacted soil completed by SECOR International Incorporated (SECOR) at the former Impulse Motors, located at 1210 Bockman Road, San Lorenzo, California (the "Site")

The completed work was conducted in general accordance with SECOR's approved *Proposal for Excavation of Petroleum Impacted Soil*, dated December 11, 2006 and in accordance with the terms provided in the Olson Company's Master Consulting Services Agreement dated November 28, 2001. The scope of work and the results of the remedial effort are described in subsequent sections. The following subsections provide the site description and a summary of past operations as well as a description of site geology.

Prior to initiation of remedial actions at the Site, notification was made to Mr. Steven Plunkett of Alameda County Health Care Services Agency (ACHCA) who is providing regulatory oversight. Mr. Plunkett visited the Site to observe remedial actions at the Site on December 20, 2007.

1.1 SITE DESCRIPTION AND OPERATIONS

The Site is located on the south side of Bockman Road between Via Chiquita and Via Del Ray in San Lorenzo, California. The approximately three acres of property on the Site is addressed as 1210 through 1366 Bockman Road.

Currently, the Site consists of vacant land which is not being used for any purpose. The Site was formerly the location of the former Impulse Motors which provided automobile repair and fuel services. The facility has, subsequently been demolished in preparation of planned grading and redevelopment of the Site for planned residential purposes.

1.2 SITE GEOLOGY AND HYDROGEOLOGY

The Site is located in an area of recent alluvial fan deposits of Quaternary age. These deposits typically consist of tideland and floodplain deposits. Regionally, the Site and surrounding area is located northeast of the San Francisco Bay, the Santa Cruz Mountains, and the Pacific Ocean. The nearest active faults include the Hayward Fault and the San Andreas Fault (Peninsula) Zones, located approximately 2.5 miles northeast and 16 miles southwest, respectively, and the Calaveras Fault, located approximately 10 miles to the northeast.

The elevation of the Site is approximately 22 feet above mean sea level. The surface topography of the site has a minor slope toward the west-southwest at less than one percent. The surface runoff generally flows toward the San Francisco Bay, located approximately ½ mile southwest of the Site.

According to the EDR report, groundwater monitoring well data within a one mile radius indicates that groundwater is expected to be encountered at a depth of approximately 8 to 10 feet below the ground surface. The general groundwater flow direction is towards the west, in the direction of the San Francisco Bay. According to the EDR report, the Site is located within ¼ mile of a 500 year flood zone.

2.0 BACKGROUND INFORMATION

Numerous investigations and environmental work have been completed at the Site by SECOR and others (SECOR, 2005a,b; ACC, 2004). A summary of the completed environmental work at the Site follows below.

On June 11, 2004, ACC Environmental Consultants submitted an Underground Storage Tank (UST) Closure Report to the ACHCSA that summarized the results of the removal of one 8,000 gallon and two (2) 6,000 gallon USTs and associated piping and fuel dispensers at the Site. Confirmation samples were collected and analyzed for the presence of DRO, GRO, Pb and VOCs (including the fuel oxygenates) following appropriate EPA test methods.

The results of the tank removal activities and field sampling reported the presence of GRO concentrations collected from beneath the product piping and fuel dispensers at concentrations ranging from 690 to 5,900 milligrams per kilogram (mg/Kg). Furthermore, low to non-detect concentrations of BTEX were reported in these samples. ACC interpreted the BTEX to TPHg ratio as indicating that the petroleum concentrations reported in soil as representative of "old" gasoline that likely resulted from a previous set of product dispensers. Target analytes were not reported in samples collected from the UST cavity.

In November, 2004, SECOR was retained to complete a Phase I Environmental Site Assessment Report that included the Site and adjoining properties. The results of the completed Phase I investigation identified the operation of historical retail fuel and automobile repair services at the Site. Based on the historical Site usage and the results of the ACC investigation SECOR recommended that Phase II ESA be completed at the Site to evaluate the potential presence of COPCs in soil and groundwater at the Site.

On December 16-17, 2004, SECOR completed a Phase II ESA at the Site that included the use of a Hydraulic push drilling rig (e.g., GeoProbe™) and hand auger, to advance eight (8) borings at select locations throughout the Site to a maximum explored depth of approximately 14 feet bgs. The completed scope of work was performed to evaluate the former UST locations, product lines, fuel dispensers and below ground hydraulic lifts at the Site. The results of SECOR Phase II investigation and subsequent recommendations are follow below:

- Chemical analysis of selected samples for the presence of pesticides following EPA test method 8081A, reported no presence of pesticides at or above laboratory reporting limits in any analyzed soil samples to a total depth of approximately 0.5 to 1 feet bgs;
- Two borings completed within the former Impulse Motors building to evaluate soils around two (2) in-ground hydraulic lifts and a drainage sump. Neither boring detected levels of petroleum hydrocarbons (C6-C40) or PCBs at levels above laboratory reporting limits for both its 2 and 8 feet bgs samples. Therefore, SECOR considers these hydraulic lifts and drainage sump unlikely to represent an environmental concern to the Site, and recommends no further investigation.

- Groundwater samples HP-1 and HP-2 were proposed to verify the results of the previously completed ACC investigation (ACC, 2004), which indicated that contamination was not significant in the vicinity of the former USTs located at 1210 Bockman Road (see Figure 2). HP-1 and HP-2 were located up-gradient (east) and down-gradient (west) from the former UST location, respectively. The results of testing at both HP-1 and HP-2 showed no TPH-g and VOC concentrations in collected groundwater samples at or above laboratory reporting limits.
- Several samples were obtained from two borings, SB-4 and SB-5, near the former fuel dispenser islands located in front of the Impulse Motors facility at 1210 Bockman Road. The analytical results from these sample locations are discussed as follows:
 - Total petroleum hydrocarbons analyzed against gasoline (TPH-g) were detected in boring SB-4 at 5 feet bgs, which was located adjacent to the northernmost fuel dispenser island at Impulse Motors of 1210 Bockman Road (see Figure 2). TPH-g levels in this sample were detected at 4.9 parts per million (ppm). SB-4 at 5 feet bgs also exhibited concentrations of the VOCs Benzene, n-Butylbenzene, tert-Butylbenzene, Ethylbenzene, Isopropylbenzene, p-Isopropyltoluene, Methyl-tert-butyl ether (MtBE), Naphthalene, n-Propylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, and Xylenes (m-, p-) at levels of 0.003, 0.050, 0.002, 0.007, 0.030, 0.004, 0.11, 0.088, 0.11, 0.024, 0.002, and 0.005 milligrams per kilogram (mg/Kg), respectively. The TPH-g and BTEX were reported at levels in this sample were detected below their respective maximum soil screening levels (California RWQCB, 1996). This boring was placed in close proximity to ACC (2004) sample locations P3-2.0 and D3-2.0, which were sampled on April 29, 2004 upon UST and fuel dispenser removal and showed levels of both TPH-g and BTEX at levels above the California RWQCB maximum soil screening levels.
 - Total petroleum hydrocarbons analyzed against gasoline (TPH-g) were not detected in boring SB-5, which was located adjacent to the southernmost fuel dispenser island at Impulse Motors of 1210 Bockman Road (see Figure 2). SB-5 at 2 feet bgs, however, exhibited concentrations of the VOCs Ethylbenzene, Xylenes (m-, p-), and Xylenes (o-) at levels of 0.002, 0.009, and 0.003 milligrams per kilogram (mg/Kg), respectively. The TPH-g and VOC reported levels in this sample were detected either below their respective laboratory reporting limits or maximum soil screening levels (California RWQCB, 1996). This boring was placed in close proximity to ACC boring D1-2.0, which was sampled on April 29, 2004 upon UST and fuel dispenser removal and showed levels of both TPH-g and BTEX at levels above the California RWQCB maximum soil screening levels.

Based on the results of the completed investigation, SECOR concluded that petroleum impact was limited to shallow soils in the vicinity of the former fuel dispenser islands. As a result, SECOR recommended that these soils be excavated and disposed of off-Site at an approved receiving facility.

The excavation and removal of the identified petroleum impact in the vicinity of the fuel dispensers is the focus of the remainder of this report.

3.0 SOIL MANAGEMENT PROGRAM

3.1 SCOPE-OF-WORK

The scope of work consisted of the following general elements:

- Surveying the Site to determine the location of the former retail building, and location of the former fuel dispensers;
- Preparation of a Site specific health and safety plan;
- Notification of the Bay Area Air pollution Control District (CHECK NAME), of planned remedial excavation (completed by subcontractor);
- Notification of the ACHCSA of current Site condition and planned remedial excavation;
- Use of a track-mounted hydraulic excavator to excavate impacted fills. to end-dump trucks. A wheel loader was used to relocate excavated soils to plastic lined stockpiles.
 - Segregation of excavated material into impacted and relatively clean stockpiles based on field observations (visual and olfactory) and voc readings using a photoionization detector.
 - Placement of stockpile soil on 6-millimeter thick plastic sheeting and moistening to control dust.
 - Covering stockpiles with 6-millimeter thick plastic sheeting and sandbags to control fugitive dust and run-off;
- Collection of clean verification samples from excavation bottom and sidewalls in accordance with the sampling plan required by the ACHCSA for potential chemical analysis;
- Collection and field compositing of stockpile samples for waste characterization purposes;
- Analysis of collected soil samples at a State of California Laboratory for the presence of diesel and gasoline range organics (TPHg and TPHd, respectively) following modified EPA test method 8015B; benzene, toluene, ethylbenzene and total xylenes (collectively BTEX) and the fuel oxygenates following EPA test method 8260B; and, for total lead (Pb) following EPA test method 6010B
- Preparation and submittal of this report documenting the findings and results of the investigation.

3.2 EXCAVATION OF PETROLEUM IMPACTED SOIL

Between December 19 and December 20, 2006, SECOR supervised the excavation and stockpiling of two (2) excavations located in the location of the two former fuel dispensers. Mr. Steven Plunkett of the ACHCSA visited the Site to provide oversight on December 19, 2006. To complete the remedial activities, a hydraulic excavator (and Bobcat) was used to excavate soils to the surface and the excavated soil was relocated to stockpiles on the western portion of the Site using end-dump trucks. During removal activities, clean overburden soils and obviously impacted soil were segregated into separate stockpiles

(SP-1 and SP-2) based on visual and olfactory observations and by utilizing a photoionization detector calibrated to 100 ppmV hexane.

Segregated clean and impacted stockpiles were placed on 6-mil thick plastic sheeting and periodically moistened to suppress dust. Stockpiles were covered with 6-mil plastic sheeting and sandbags during work stoppages.

Two remedial excavations were completed in the vicinity of each of the former fuel dispensers. The first excavation (EX-1; northern-most) measured approximately 48 feet (east-to-west) by approximately 16 feet (north-to-south). The second excavation (EX-2; southern-most) measured approximately 44 feet (east-to-west) by approximately 19 feet (north-to-south) to a depth of 10 feet bgs.

Both excavations were limited to a depth of 10 feet bgs vertically, because of the presence of groundwater.

Approximately 500 cyd of soil was excavated and stockpiled (based on ex-situ measurements). Stockpiled soil remains covered on-Site awaiting final waste characterization and disposal.

3.3 SOIL SAMPLING

Verification samples were collected into laboratory provided 4-ounce glass jars with Teflon® -lined lids for potential chemical analysis. Samples were collected and the soil was deposited into clean, laboratory provided 4-ounce glass jars equipped with Teflon lids.

Stockpiles were sampled by collecting representative soil from four random locations and compositing the sample into one sample (composite sample) for chemical analysis. Samples were collected into pre-cleaned laboratory provided glass jars with Teflon lined lids.

All samples were placed into an ice-filled cooler and transported to Centrum Analytical Laboratories, Inc. (Centrum) in Riverside, California (a California-certified laboratory) under appropriate chain-of-custody.

4.0 LABORATORY TESTING PROGRAM

All soil samples obtained from the subsurface investigation were delivered under chain-of-custody (Appendix A) to Centrum located in Riverside, California. Centrum is certified to perform hazardous waste testing by the State of California Department of Health Services, Environmental Laboratory Accreditation Program.

Selected soil samples were analyzed for total lead following EPA Test method 6010B; TPHg and TPHd by modified EPA Test method 8015b; and BTEX and fuel oxygenates (BTEX, EDB, EDC, MtBE, TAME, ETBE, DIPE, TBA and EtOH) by EPA Test method 8260B. Analytical results are tabulated on Tables 1-3. Analytical laboratory test results are included in Appendix A and discussed in Section 5.0.

5.0 REMEDIATION RESULTS

5.1 FIELD OBSERVATIONS

Soils encountered during the remedial effort consisted of clay and silty clay mixtures with abundant debris (concrete, metal conduit, mortared brick etc.) to the maximum explored depth of approximately 10 feet bgs. Groundwater was encountered at a depth of 10 feet bgs.

In general, native soils had a dark black color and petroleum impacted soils were stained dark greenish gray in color. Measurements of VOCs utilizing a PID calibrated to 100 ppmV Hexane reported VOC concentrations ranging from 1-2000 ppmV.

During field operations, the ACHCSA identified two (2) PVC pipes that protruded out of the ground. The pipes appeared to be temporary monitoring wells that may have been installed by others. SECOR has been unable to ascertain, for purpose of the pipes/wells. However, as requested by the ACHCSA, the pipes/wells will be gauged and then properly abandoned under permit. A supplemental well abandonment report will be provided under separate cover to document the well destruction.

5.2 ANALYTICAL RESULTS

The laboratory test results are discussed below. Laboratory test results for primary COPCs are summarized in attached Tables 1 through 3 and the complete laboratory analytical test results are presented on the laboratory data sheets attached as Appendix A.

5.3 SOIL BACKFILL AND RESTORATION

Backfill and restoration of the open excavation is on hold pending approval of the ACHCSA to proceed

6.0 CONCLUSIONS AND RECOMMENDATIONS

Previously environmental assessment activities completed by SECOR and others (SECOR, 2004, 2005; ACC, 2004) at the Site, reported the presence of elevated concentrations of petroleum hydrocarbon impacted to soil. The results of these investigations also indicated that the area of soil impact was limited to two separate areas located in the vicinity of the former product fuel lines and dispenser islands. Based on the results of these investigations, SECOR was retained by Olson to complete remedial excavations to physically remove contaminated soils identified in the prior assessments.

Between December 19 and December 20, 2006, under the oversight of the ACHCSA, SECOR supervised the excavation and stockpiling of two (2) remedial soil excavations located in the vicinity of the two former fuel dispensers. Prior to performing the excavation, the Site buildings were surveyed, in order to accurately determine the location of the former dispenser islands. Subsequent to the Site survey, a hydraulic excavator was used to excavate soils to expose and removed contaminated material. The resulting excavated soil was stockpiled on the western portion of the Site using a rubber-tire wheel loader. During removal activities, clean overburden soil and obviously impacted soil were segregated into separate stockpiles (SP-1 and SP-2) based on visual and olfactory observations and by utilizing a photo-ionization detector calibrated to 100 ppmV hexane.

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Approximately 500 cubic yards (cyd) of soil was excavated and stockpiled (based on ex-situ measurements). Stockpiled soil remains covered on-Site awaiting final waste characterization and disposal or re-use.

Based on the results of the completed excavations, the following were noted:

Encountered soils generally consisted of silt, clay and silt/clay mixtures to the total depth of excavation (approximately 10 feet bgs). Petroleum impacted soil was easily differentiated from clean soils based on petroleum odors and characteristic greenish gray colorations. PID readings during excavation ranged from 0 to 2,000 ppmV hexane.

First water was encountered at a depth of approximately 10 feet bgs. The presence of shallow water prevented the continuation of excavation in the vertical direction.

Excavation 1 (Northern Fuel Dispenser Excavation)

Sidewall Samples - The confirmation samples collected from the sidewalls of the excavation, did not report the presence of TPHg or TPHd at or above the laboratory detection limits. Low concentrations of the fuel oxygenates, MtBE and TBA were reported in one of the southern sidewall samples at concentrations of 0.015 mg/Kg and 0.057 mg/Kg, respectively. Total lead concentrations ranged from 3.88 mg/Kg to 4.27 mg/Kg, well within typical background concentrations.

Bottom Samples - Because of the infiltration of groundwater into the bottom of the excavation, only one bottom sample was collected. The results of the bottom sample reported the presence of TPHg and TPHd at concentrations of 120 and 13 mg/Kg, respectively. MtBE and Ethylbenzene were also reported at concentrations of 0.4 and 0.15 mg/Kg, respectively. Total lead was reported at 6.34 mg/Kg. No other target analytes were reported above laboratory reporting limits.

Excavation 2 (Southern Fuel Dispenser Excavation)

Sidewall Samples - TPHg and TPHd were reported at very low concentrations in one of the sidewall confirmation samples, S-4-5 at concentrations of 0.78 mg/Kg and 19 mg/Kg, respectively. Very low concentrations of MtBE and TBA were reported at concentrations of 0.015 mg/Kg and 0.028 mg/Kg, respectively in this same sample. Total lead was reported at concentrations ranging from 3.47 mg/Kg to 16.5 mg/Kg, respectively. No other target analytes were reported in sidewall confirmation samples above laboratory reporting limits.

Bottom Samples - Because of infiltration of groundwater into the open excavation, SECOR was only able to collect one bottom verification sample. The sample was collected from the area where the highest PID readings had been observed at during the excavation process. The sample results reported the presence of TPHg at a concentration of 2.7 mg/Kg. Trace concentrations of MtBE and Ethylbenzene were also reported in this sample at concentrations of 0.003 mg/Kg and 0.003 mg/Kg, respectively. Total lead was reported at a concentration of 3.86 mg/Kg, respectively. No other target analytes were reported in this bottom sample at or above laboratory reporting limits.

Excavation Stockpiles -

Stockpile 1 (Impacted Soil) - Composite soil samples taken from the impacted stockpile exhibited concentrations of gasoline range hydrocarbons ranging from 1.4 - 47 mg/kg and a TPHd concentration of 14 mg/kg. Furthermore, the sample results reported the presence of MtBE, TBA, Ethylbenzene, toluene, and total xylenes at concentrations up to 0.005, 0.18, 0.002, and 0.74 mg/Kg, respectively.

Stockpile 2 (Clean overburden) - Composite soil samples taken from clean stockpiles exhibited concentrations of TPHd, Toluene, and Xylenes at 21, 0.004, and 0.005 mg/kg, respectively. Based on these results, SECOR recommends that the ACHCSA authorize the re-use of this material as backfill of the remedial excavation.

Based on the result of the completed excavation sampling, the lateral limits of impact have been removed in all lateral directions. Very low concentrations of residual TPHg (120 ppm) and other minor petroleum constituents have been reported in the bottom sample collected from excavation one (northern dispenser). However, the residual petroleum concentrations are very low and benzene was not reported in any analyzed sample. Furthermore, the results of Hydropunch groundwater sampling slightly down gradient from the fuel dispensers conducted by SECOR (2005), did not report the presence of any gasoline constituent at concentrations at or above laboratory reporting limits.

As a result of the completed remedial excavation and sample results, SECOR recommends that the ACHCSA grant no further action at the Site. This recommendation is based on the following observations/ data:

- Nondetect to low concentrations of reported target analytes in collected and analyzed confirmation samples;
- Absence of benzene in any analyzed samples;
- Presence of total lead at concentrations within published health screening guidance and within typical background concentrations;
- Absence of TPHg and VOCs in previously collected (SECOR, 2005) Hydropunch groundwater samples collected and analyzed down-and cross-gradient from the former fuel dispensers with respect to groundwater flow; and,
- Absence of target analytes in the UST excavation (ACC, 2004) located down-gradient from the fuel dispenser islands with respect to groundwater flow.

To this end, based on the above, this report requests that the ACHCSA review the collected data and Site history for closure purposes. Upon receipt of permission to proceed, the open excavation will be partially backfilled using clean overburden soil removed and tested. Subsequently, the Site will be graded for planned redevelopment.

During field operations, the ACHCSA identified two (2) PVC pipes that protruded out of the ground. The pipes appeared to be temporary monitoring wells that may have been installed by others. SECOR has been unable to ascertain, for what purpose the pipes/wells were placed, of by whom. However, as requested by the ACHCSA, the pipes/wells will attempt to be gauged and then properly abandoned under permit. A supplemental well abandonment report will be provided under separate cover to document the well destruction.

Additionally, the ACHCSA has requested that a sensitive receptor survey be completed to identify the locations of any potential groundwater supply wells. The receptor survey is currently in progress and the results will be submitted to the ACHCSA under separate cover.

7.0 CLOSURE

The conclusions presented in this report are professional opinions based on data described in this report. The opinions of this report have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location, and are subject to the following inherent limitations. SECOR makes no other warranty, either expressed or implied, concerning the conclusions and professional advice that is contained within the body of this report.

Inherent in most projects performed in a heterogeneous subsurface environment, continuing excavation and assessments may reveal findings that are different than those presented herein. This facet of the environmental profession should be considered when formulating professional opinions on the limited data collected on these projects.

This report has been issued with the clear understanding that it is the responsibility of the owner, or their representative, to make appropriate notifications to regulatory agencies. It is specifically not the responsibility of SECOR to conduct appropriate notifications as specified by current County and State regulations.

The information presented in this report is valid as of the date our exploration was performed. Site conditions may degrade with time; consequently, the findings presented herein are subject to change.

Notwithstanding the foregoing, this report was prepared in accordance with SECOR's Master Services Agreement with this Client, and to the extent any provisions of the report conflicts with the Master Services Agreement, the Master Services Agreement shall control.

8.0 REFERENCES

ACC Environmental Consultants (ACC), 2004, *Underground Storage Tank Closure Report, Impulse Motors, 1210 Bockman Road, San Lorenzo, California*, June 11.

SECOR International, Incorporated (SECOR), 2004, *Phase I Environmental Site Assessment, 1210-1415 Bockman Road, San Lorenzo, California*, November 18

SECOR, 2004, *Phase II Environmental Site Assessment Report, 1210-1366 Bockman Road, San Lorenzo, California*, December 22

SECOR, 2006, *Proposal to Conduct Phase II for Excavation of Petroleum Impacted Soils, Former Impulse Motors, 1210 Bockman Road, San Lorenzo, California*, December 11

TABLES

Table 1
 Summary of Soil Analytical Results
 Olson - San Lorenzo
 1245 - 1415 Bockman Road
 San Lorenzo, California
 SECOR Job No.: 04OT.29215.67

	Sample ID	Sampling Depth ⁽¹⁾	Sampling Date	TPH ⁽²⁾ (8015) ⁽³⁾	
				C6-C12 ⁽⁴⁾	C13-C22 ⁽⁵⁾
USEPA PRG (mg/Kg)				100 ^a	100 ^a
Excavation 1 (North)	N-1-5	5	12/20/2006	<0.02	<10
	N-2-5	5	12/20/2006	<0.02	<10
	S-1-5	5	12/20/2006	<0.02	<10
	S-2-5	5	12/20/2006	<0.02	<10
	E-1-5	5	12/20/2006	<0.02	<10
	W-1-5	5	12/20/2006	<0.02	<10
	B-1	10	12/20/2006	120	13
Excavation 2 (South)	N-3-5	5	12/20/2006	<0.02	<10
	N-4-5	5	12/20/2006	<0.02	<10
	S-3-5	5	12/20/2006	<0.02	<10
	S-4-5	5	12/20/2006	0.78	19
	E-2-5	5	12/20/2006	<0.02	<10
	W-2-5	5	12/20/2006	<0.02	23
	B-2	10	12/20/2006	2.7	<10
Impacted Soil	CS-1	Composite	12/20/2006	4.4	<10
	CS-2	Composite	12/20/2006	14	14
	CS-3	Composite	12/20/2006	47	<10
Clean Soil	CS-4	Composite	12/20/2006	<0.02	21
	CS-5	Composite	12/20/2006	<0.02	<10

NOTES:

(1) Sample depth is reported as feet below ground surface

(2) Concentrations reported in mg/Kg

(3) EPA Test Method

(4) Characteristic carbon chain of Gasoline

(5) Characteristic carbon chain of Diesel

a - Maximum Soil Screening Levels in mg/Kg; soil located <20 feet above groundwater;

Source: Cal/EPA CRWQCB-LA Interim Site Assessment & Cleanup Guidebook, 11

< - Indicates the concentration was not detected about the laboratory method detection limit.

Only samples analyzed which reported detections were included on the table.

ABBREVIATIONS:

TPH - Total petroleum hydrocarbons

USEPA PRG - United States Environmental Protection Agency Preliminary Remediation Goals

Table 2
 Summary of Soil Analytical Results
 Olson - San Lorenzo
 1245 - 1415 Bockman Road
 San Lorenzo, California
 SECOR Job No.: 04OT.29215.67

Sample ID	Sampling Depth ⁽¹⁾	Sampling Date	VOCs ⁽²⁾ (8260) ⁽³⁾						
			Methyl-tert-butyl ether (MtBE)	tert-Butanol (TBA)	Benzene	Ethylbenzene	Toluene	Total Xylenes	
USEPA PRG for Residential Soils(mg/Kg)			62		0.6	8.9	5200	2700	
<i>Samples</i>									
Excavation 1 (North)	N-1-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	N-2-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	S-1-5	5	12/20/2006	0.015	0.057	<0.005	<0.005	<0.001	<0.003
	S-2-5	5	12/20/2006	0.002	<0.02	<0.005	<0.005	<0.001	<0.003
	E-1-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	W-1-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	B-1	10	12/20/2006	0.4	<0.02	<0.005	0.15	<0.001	<0.003
Excavation 2 (South)	N-3-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	N-4-5	5	12/20/2006	0.015	0.028	<0.005	<0.005	<0.001	<0.003
	S-3-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	S-4-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	E-2-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	W-2-5	5	12/20/2006	<0.01	<0.02	<0.005	<0.005	<0.001	<0.003
	B-2	10	12/20/2006	0.003	<0.02	<0.005	0.003	<0.001	<0.003
Impacted Soil	CS-1	Composite	12/20/2006	0.005	<0.02	<0.005	0.053	0.002	0.29
	CS-2	Composite	12/20/2006	<0.01	<0.02	<0.005	0.023	<0.001	0.74
	CS-3	Composite	12/20/2006	<0.01	<0.02	<0.005	0.18	<0.001	0.27
Clean Soil	CS-4	Composite	12/20/2006	<0.01	<0.02	<0.005	<0.005	0.004	0.005
	CS-5	Composite	12/20/2006	<0.01	<0.02	<0.005	<0.005	0.002	0.003

NOTES:

(1) Sample depth is reported as feet below ground surface

(2) Concentrations reported in mg/Kg

(3) EPA Test Method

< - Indicates the concentration was not detected above the laboratory method detection limit.

ABBREVIATIONS:

VOCs - volatile organic compounds

USEPA PRG - United States Environmental Protection Agency Preliminary Remediation Goals

Table 3
 Summary of Soil Analytical Results
 Olson - San Lorenzo
 1245 - 1415 Bockman Road
 San Lorenzo, California
 SECOR Job No.: 04OT.29215.67

	Sample ID	Sampling Depth ⁽¹⁾	Sampling Date	Lead by 6010
	USEPA PRG (mg/Kg)			150
	Samples			
Excavation 1 (North)	N-1-5	5	12/20/2006	4.06
	N-2-5	5	12/20/2006	3.97
	S-1-5	5	12/20/2006	4.27
	S-2-5	5	12/20/2006	4.10
	E-1-5	5	12/20/2006	4.03
	W-1-5	5	12/20/2006	3.88
	B-1	10	12/20/2006	6.34
Excavation 1 (South)	N-3-5	5	12/20/2006	4.36
	N-4-5	5	12/20/2006	3.47
	S-3-5	5	12/20/2006	4.08
	S-4-5	5	12/20/2006	16.5
	E-2-5	5	12/20/2006	3.89
	W-2-5	5	12/20/2006	4.24
	B-2	10	12/20/2006	3.86
Clean Soil	CS-4	Composite	12/20/2006	5.84
	CS-5	Composite	12/20/2006	4.82

NOTES:

(1) Sample depth is reported as feet below ground surface

(2) Concentrations reported in mg/Kg

(3) EPA Test Method

< - Indicates the concentration was not detected about the laboratory method detection limit

ABBREVIATIONS:

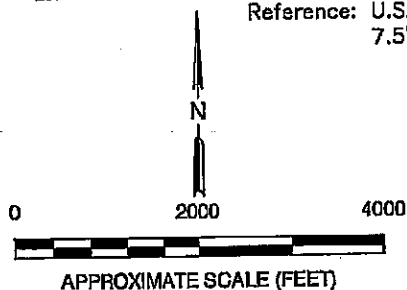
SEPA PRG - United States Environmental Protection Agency Preliminary Remediation Goal


Pb - Lead

FIGURES

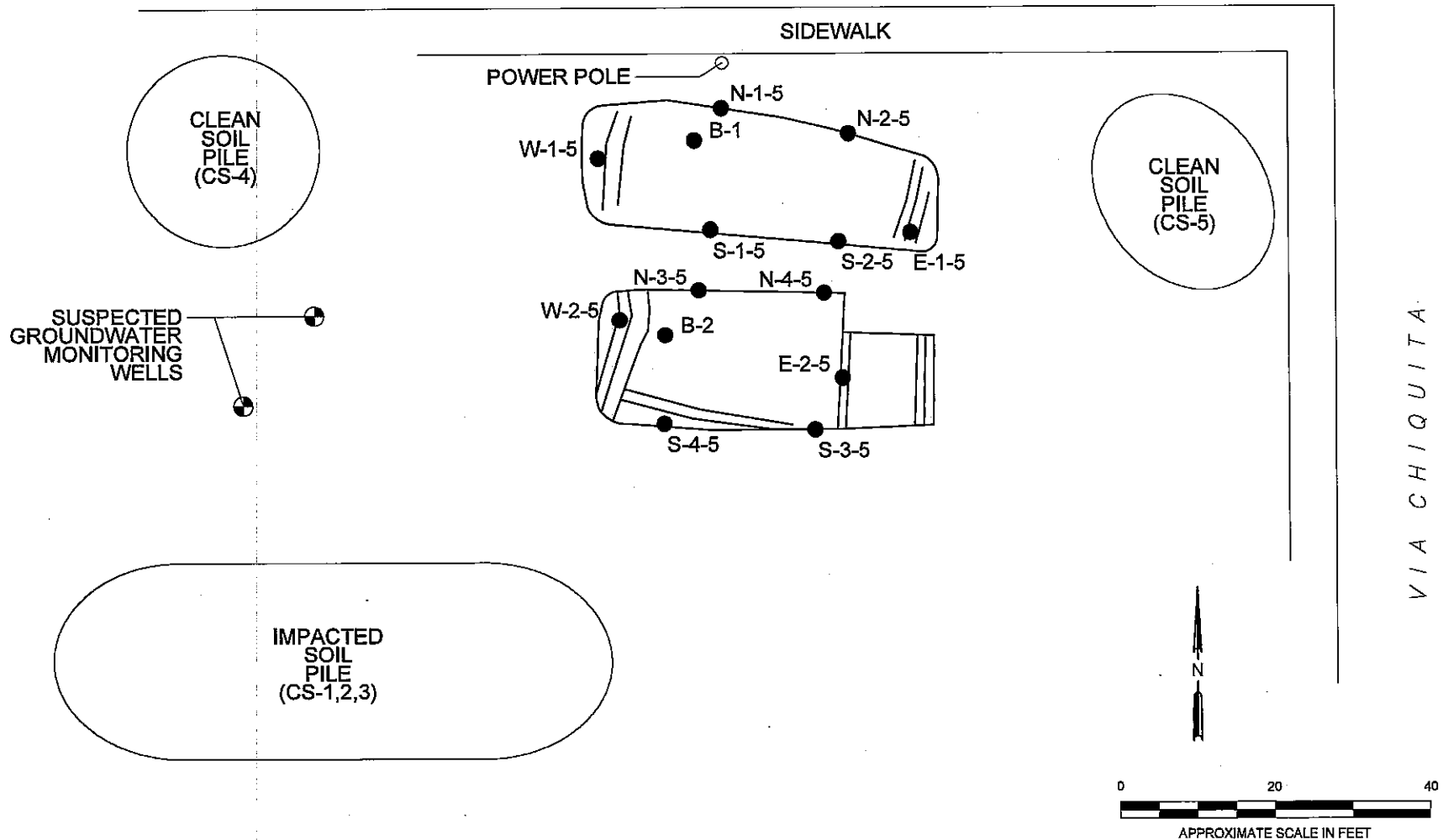



Reference: U.S.G.S., 1959, San Leandro Quadrangle California - Alameda County, 7.5' Series (Topographic). Photorevised 1980.



 SECOR 25864-F BUSINESS CENTER DRIVE REDLANDS, CALIFORNIA 92374 PH: (909) 335-8118 / FAX: (909) 335-8120	PREPARED FOR: THE OLSON COMPANY		SITE LOCATION MAP		FIGURE: 1	
	1210-1415 BOCKMAN ROAD SAN LORENZO, CALIFORNIA				JOB NUMBER: 04OT.29215.B1	DRAWN BY: JMH

BOCKMAN ROAD



 SECOR 25864-F BUSINESS CENTER DRIVE REDLANDS, CA 92374 PHONE: (909) 335-6116 FAX: (909) 335-6120	FOR: OLSON - SAN LORENZO 1210-1366 BOCKMAN ROAD SAN LORENZO, CA		SITE PLAN SHOWING SAMPLE LOCATIONS		FIGURE: 2
	JOB NUMBER: 04OT.29215.54	DRAWN BY: GH	CHECKED BY: JA	APPROVED BY:	DATE: 12/21/06

APPENDIX A
LABORATORY DATA SHEETS AND QA/QC RESULTS



**Centrum
Analytical
Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

Client: SECOR
25864-F Business Center Drive
Redlands, CA 92374-4515

Date Sampled: 12/20/06
Date Received: 12/21/06
Job Number: 29082

Project: Olson - San Lorenzo


CASE NARRATIVE

The following information applies to samples which were received on 12/21/06:

The samples were received at the laboratory chilled and sample containers were intact.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples for every analysis requested. The date of issue for this report is 01/02/07.

Report approved by:

 2007.01.02
15:44:34 -08'00'

Robert R. Clark, PhD
President

ELAP Lab# 2419, 2479, 2527, 2373, 2562

RL: Reporting Limit -- The lowest level at which the compound can be reliably detected under normal laboratory conditions.
ND: Not Detected -- The compound was analyzed for, but was not found to be present at or above the Reporting Limit.
NA: Not Analyzed -- This compound was not on the list of compounds requested for analysis.

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951•779•0310 or 800•798•9336 fax 951•779•0344
www.centrum-labs.com 1401 Research Park Drive, Suite 100, Riverside, CA 92507



Lead by EPA 6010B

Client: SECOR
Project: Olson - San Lorenzo
Job No.: 29082
Matrix: Soil
Analyst: TLB

Date Sampled: 12/20/06
Date Received: 12/21/06
Date Digested: 12/27/06
Date Analyzed: 12/27-28/06
Batch Number: 6010S3839

Sample ID	Reporting Limit mg/Kg	Lead mg/Kg
Method Blank	1.0	ND
N-1-5	1.0	4.06
N-2-5	1.0	3.97
N-3-5	1.0	4.36
N-4-5	1.0	3.47
S-1-5	1.0	4.27
S-2-5	1.0	4.10
S-3-5	1.0	4.08
S-4-5	1.0	16.5
E-1-5	1.0	4.03
E-2-5	1.0	3.89
W-1-5	1.0	3.88
W-2-5	1.0	4.24
B-1	1.0	6.34
B-2	1.0	3.86
CS-4	1.0	5.84
CS-5	1.0	4.82



QC Sample Report - Metals by EPA 6010B

Matrix: Soil
Batch Number: 6010S3839

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
Lead	50	97	75 - 125	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: 29078-4

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
Lead	64.77	72.39	11%	20%	Pass

Analytical Notes:

MS: Matrix Spike LCS: Laboratory Control Sample
MSD: Matrix Spike Duplicate LCSD: Laboratory Control Sample Duplicate



Extractable Hydrocarbons as Diesel by mod. EPA 8015B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: AW

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Extracted: 12/22/06
 Date Analyzed: 12/22-23/06
 Batch Number: 8015DS3989

Sample ID	Reporting Limit mg/Kg	Diesel mg/Kg	Surrogate (OTP) Limit: 50 - 150%
Method Blank	10	ND	93 %
N-1-5	10	ND	106 %
N-2-5	10	ND	103 %
N-3-5	10	ND	83 %
N-4-5	10	ND	84 %
S-1-5	10	ND	89 %
S-2-5	10	ND	92 %
S-3-5	10	ND	104 %
S-4-5	10	19	112 %
E-1-5	10	ND	93 %
E-2-5	10	ND	90 %
W-1-5	10	ND	99 %
W-2-5	10	23	96 %
B-1	10	13	109 %
B-2	10	ND	93 %
CS-4	10	21	100 %
CS-5	10	ND	98 %



QC Sample Report - Extractable Hydrocarbons as Diesel by mod. EPA 8015B

Matrix: Soil

Batch Number: 8015DS3989

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Analytical Notes:

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
Diesel	100	90	70 - 130	Pass

Batch Precision Results

MS/MSD Sample ID: N-2-5

Analytical Notes:

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
Diesel	91.5	92.7	1%	25%	Pass

MS: Matrix Spike

MSD: Matrix Spike Duplicate

LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate



QC Sample Report - Extractable Hydrocarbons as Diesel by GC/FID

Matrix: Soil
Batch Number: 8015DS3989

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
Diesel	100	90	70 - 130	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: N-2-5

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
Diesel	91.5	92.7	1%	25%	Pass

Analytical Notes:

MS: Matrix Spike
MSD: Matrix Spike Duplicate

LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate



**Centrum
Analytical
Laboratories, Inc.**

Volatile Hydrocarbons as Gasoline by GCMS

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Sample ID	Reporting Limit mg/Kg	Volatile Hydrocarbons as Gasoline mg/Kg
Method Blank	0.20	ND
N-1-5	0.20	ND
N-2-5	0.20	ND
N-3-5	0.20	ND
N-4-5	0.20	ND
S-1-5	0.20	ND
S-2-5	0.20	ND
S-3-5	0.20	ND
S-4-5	0.20	0.78
E-1-5	0.20	ND
E-2-5	0.20	ND
W-1-5	0.20	ND
W-2-5	0.20	ND
B-1	10	120
B-2	0.20	2.7
CS-4	0.20	ND
CS-5	0.20	ND

QC Sample Report - Volatile Hydrocarbons as Gasoline by GCMS

Matrix: Soil
Batch Number: MS2TPHGS1057

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
Gasoline	2.0	98	70 - 130	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
Gasoline	1.97	1.78	10%	25%	Pass

Analytical Notes:

MS: Matrix Spike
MSD: Matrix Spike Duplicate

LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate

QC Sample Report - Volatile Hydrocarbons as Gasoline by GCMS

Matrix: Soil

Batch Number: MS2TPHGS1058

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
Gasoline	2.0	91	70 - 130	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
Gasoline	1.85	1.83	1%	25%	Pass

Analytical Notes:

MS: Matrix Spike

MSD: Matrix Spike Duplicate

LCS: Laboratory Control Sample

LCSD: Laboratory Control Sample Duplicate

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID: RL	Blank mg/Kg	N-1-5 mg/Kg	N-2-5 mg/Kg	N-3-5 mg/Kg	N-4-5 mg/Kg	S-1-5 mg/Kg
tert-Amyl Methyl Ether (TAME)	0.002	ND	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND	0.028	0.057
1,2-Dibromoethane	0.002	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.002	ND	ND	ND	ND	ND	ND
Ethanol	1.0	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.002	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.002	ND	ND	ND	ND	0.015	0.015
Toluene	0.001	ND	ND	ND	ND	ND	ND
Xylenes, m-p-	0.002	ND	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND	ND

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

Sample ID:	Blank	N-1-5	N-2-5	N-3-5	N-4-5	S-1-5
Dibromofluoromethane	108	102	107	103	99	76
Toluene-d8	105	105	105	105	106	107
Bromofluorobenzene	97	97	95	97	98	97

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID:	S-2-5	S-3-5	S-4-5	E-1-5	E-2-5	W-1-5
	RL	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
tert-Amyl Methyl Ether (TAME)	0.002	ND	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.002	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.002	ND	ND	ND	ND	ND	ND
Ethanol	1.0	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.002	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.002	0.002	ND	ND	ND	ND	ND
Toluene	0.001	ND	ND	ND	ND	ND	ND
Xylenes, m-, p-	0.002	ND	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND	ND

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

	Sample ID:	S-2-5	S-3-5	S-4-5	E-1-5	E-2-5	W-1-5
Dibromofluoromethane		102	102	109	72	102	98
Toluene-d8		105	105	107	106	104	106
Bromofluorobenzene		98	99	98	98	97	97

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID:	W-2-5	B-2	CS-4	CS-5
	RL	mg/Kg	mg/Kg	mg/Kg	mg/Kg
tert-Amyl Methyl Ether (TAME)	0.002	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND
1,2-Dibromoethane	0.002	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.002	ND	ND	ND	ND
Ethanol	1.0	ND	ND	ND	ND
Ethylbenzene	0.001	ND	0.003	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.002	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.002	ND	0.003	ND	ND
Toluene	0.001	ND	ND	0.004	0.002
Xylenes, m-p-	0.002	ND	0.002	0.003	0.002
Xylene, o-	0.001	ND	ND	0.002	0.001

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

	Sample ID:	W-2-5	B-2	CS-4	CS-5
Dibromofluoromethane		105	97	101	99
Toluene-d8		105	96	97	97
Bromofluorobenzene		93	101	89	89

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Sample ID: B-1		
Compounds	RL	mg/Kg
tert-Amyl Methyl Ether (TAME)	0.10	ND
Benzene	0.050	ND
tert-Butanol (TBA)	1.0	ND
1,2-Dibromoethane	0.10	ND
1,2-Dichloroethane	0.050	ND
Diisopropyl Ether (DIPE)	0.10	ND
Ethanol	50	ND
Ethylbenzene	0.050	0.15
Ethyl tert-Butyl Ether (EtBE)	0.10	ND
Methyl-tert-butyl ether (MtBE)	0.10	0.40
Toluene	0.050	ND
Xylenes, m-p-	0.10	ND
Xylene, o-	0.050	ND

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

Sample ID: B-1	
Dibromofluoromethane	72
Toluene-d8	106
Bromofluorobenzene	100

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID:	Blank	CS-1
	RL	mg/Kg	mg/Kg
Acetone	0.050	ND	ND
tert-Amyl Methyl Ether (TAME)	0.002	ND	ND
Benzene	0.001	ND	ND
Bromobenzene	0.005	ND	ND
Bromochloromethane	0.005	ND	ND
Bromodichloromethane	0.001	ND	ND
Bromoform	0.005	ND	ND
Bromomethane	0.005	ND	ND
tert-Butanol (TBA)	0.020	ND	ND
2-Butanone (MEK)	0.010	ND	ND
n-Butylbenzene	0.002	ND	0.031
sec-Butylbenzene	0.002	ND	ND
tert-Butylbenzene	0.002	ND	ND
Carbon disulfide	0.010	ND	ND
Carbon tetrachloride	0.001	ND	ND
Chlorobenzene	0.001	ND	ND
Chloroethane	0.005	ND	ND
Chloroform	0.002	ND	ND
Chloromethane	0.001	ND	ND
2-Chlorotoluene	0.002	ND	ND
4-Chlorotoluene	0.002	ND	ND
Dibromochloromethane	0.002	ND	ND
1,2-Dibromoethane	0.002	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND
Dibromomethane	0.001	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND
1,3-Dichlorobenzene	0.002	ND	ND
1,4-Dichlorobenzene	0.002	ND	ND
Dichlorodifluoromethane	0.005	ND	ND
1,1-Dichloroethane	0.001	ND	ND
1,2-Dichloroethane	0.001	ND	ND
1,1-Dichloroethene	0.005	ND	ND
cis-1,2-Dichloroethene	0.002	ND	ND
trans-1,2-Dichloroethene	0.002	ND	ND
1,2-Dichloropropane	0.001	ND	ND
1,3-Dichloropropane	0.001	ND	ND
2,2-Dichloropropane	0.001	ND	ND
1,1-Dichloropropene	0.001	ND	ND

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID: RL	Blank mg/Kg	CS-1 mg/Kg
cis-1,3-Dichloropropene	0.001	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND
Diisopropyl Ether (DIPE)	0.002	ND	ND
Ethylbenzene	0.001	ND	0.053
Ethyl tert-Butyl Ether (EtBE)	0.002	ND	ND
Hexachlorobutadiene	0.001	ND	ND
2-Hexanone	0.010	ND	ND
Isopropylbenzene	0.001	ND	0.018
p-Isopropyltoluene	0.002	ND	0.029
Methylene chloride	0.050	ND	ND
4-Methyl-2-pentanone	0.010	ND	ND
Methyl tert-Butyl Ether (MtBE)	0.002	ND	0.005
Naphthalene	0.002	ND	0.18
n-Propylbenzene	0.001	ND	0.081
Styrene	0.001	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND
Tetrachloroethene	0.001	ND	ND
Toluene	0.001	ND	0.002
1,2,3-Trichlorobenzene	0.002	ND	ND
1,2,4-Trichlorobenzene	0.002	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND
1,1,2-Trichloroethane	0.003	ND	ND
Trichloroethene	0.001	ND	ND
1,2,3-Trichloropropane	0.003	ND	ND
Trichlorofluoromethane	0.001	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	1.9
1,3,5-Trimethylbenzene	0.001	ND	0.24
Vinyl chloride	0.002	ND	ND
Xylenes, m-,p-	0.002	ND	0.20
Xylene, o-	0.001	ND	0.091

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

Sample ID:	Blank	CS-1
Dibromofluoromethane	108	96
Toluene-d8	105	98
Bromofluorobenzene	97	96

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID:	CS-2
	RL	mg/Kg
Acetone	0.25	ND
tert-Amyl Methyl Ether (TAME)	0.010	ND
Benzene	0.005	ND
Bromobenzene	0.025	ND
Bromochloromethane	0.025	ND
Bromodichloromethane	0.005	ND
Bromoform	0.025	ND
Bromomethane	0.025	ND
tert-Butanol (TBA)	0.10	ND
2-Butanone (MEK)	0.050	ND
n-Butylbenzene	0.010	0.16
sec-Butylbenzene	0.010	ND
tert-Butylbenzene	0.010	ND
Carbon disulfide	0.050	ND
Carbon tetrachloride	0.005	ND
Chlorobenzene	0.005	ND
Chloroethane	0.025	ND
Chloroform	0.010	ND
Chloromethane	0.005	ND
2-Chlorotoluene	0.010	ND
4-Chlorotoluene	0.010	ND
Dibromochloromethane	0.010	ND
1,2-Dibromoethane	0.010	ND
1,2-Dibromo-3-chloropropane	0.050	ND
Dibromomethane	0.005	ND
1,2-Dichlorobenzene	0.005	ND
1,3-Dichlorobenzene	0.010	ND
1,4-Dichlorobenzene	0.010	ND
Dichlorodifluoromethane	0.025	ND
1,1-Dichloroethane	0.005	ND
1,2-Dichloroethane	0.005	ND
1,1-Dichloroethene	0.025	ND
cis-1,2-Dichloroethene	0.010	ND
trans-1,2-Dichloroethene	0.010	ND
1,2-Dichloropropane	0.005	ND
1,3-Dichloropropane	0.005	ND
2,2-Dichloropropane	0.005	ND
1,1-Dichloropropene	0.005	ND

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Sample ID: CS-2		
Compounds	RL	mg/Kg
cis-1,3-Dichloropropene	0.005	ND
trans-1,3-Dichloropropene	0.005	ND
Diisopropyl Ether (DIPE)	0.010	ND
Ethylbenzene	0.005	0.023
Ethyl tert-Butyl Ether (EtBE)	0.010	ND
Hexachlorobutadiene	0.005	ND
2-Hexanone	0.050	ND
Isopropylbenzene	0.005	0.019
p-Isopropyltoluene	0.010	0.11
Methylene chloride	0.25	ND
4-Methyl-2-pentanone	0.050	ND
Methyl tert-Butyl Ether (MtBE)	0.010	ND
Naphthalene	0.010	0.37
n-Propylbenzene	0.005	0.13
Styrene	0.005	ND
1,1,1,2-Tetrachloroethane	0.005	ND
1,1,2,2-Tetrachloroethane	0.010	ND
Tetrachloroethene	0.005	ND
Toluene	0.005	ND
1,2,3-Trichlorobenzene	0.010	ND
1,2,4-Trichlorobenzene	0.010	ND
1,1,1-Trichloroethane	0.005	ND
1,1,2-Trichloroethane	0.015	ND
Trichloroethene	0.005	ND
1,2,3-Trichloropropane	0.015	ND
Trichlorofluoromethane	0.005	ND
Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.005	1.5
1,3,5-Trimethylbenzene	0.005	0.46
Vinyl chloride	0.010	ND
Xylenes, m-,p-	0.010	0.12
Xylene, o-	0.005	0.62

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

Sample ID: CS-2	
Dibromofluoromethane	95
Toluene-d8	96
Bromofluorobenzene	100

Volatile Organic Compounds by EPA 8260B

Client: SECOR
 Project: Olson - San Lorenzo
 Job No.: 29082
 Matrix: Soil
 Analyst: TH

Date Sampled: 12/20/06
 Date Received: 12/21/06
 Date Analyzed: 12/27-29/06
 Batch Number: MS2TPHGS1057
 MS2TPHGS1058

Compounds	Sample ID:	CS-3
	RL	mg/Kg
Acetone	2.5	ND
tert-Amyl Methyl Ether (TAME)	0.10	ND
Benzene	0.050	ND
Bromobenzene	0.25	ND
Bromochloromethane	0.25	ND
Bromodichloromethane	0.050	ND
Bromoform	0.25	ND
Bromomethane	0.25	ND
tert-Butanol (TBA)	1.0	ND
2-Butanone (MEK)	0.50	ND
n-Butylbenzene	0.10	0.49
sec-Butylbenzene	0.10	0.20
tert-Butylbenzene	0.10	ND
Carbon disulfide	0.50	ND
Carbon tetrachloride	0.050	ND
Chlorobenzene	0.050	ND
Chloroethane	0.25	ND
Chloroform	0.10	ND
Chloromethane	0.050	ND
2-Chlorotoluene	0.10	ND
4-Chlorotoluene	0.10	ND
Dibromochloromethane	0.10	ND
1,2-Dibromoethane	0.10	ND
1,2-Dibromo-3-chloropropane	0.50	ND
Dibromomethane	0.050	ND
1,2-Dichlorobenzene	0.050	ND
1,3-Dichlorobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND
Dichlorodifluoromethane	0.25	ND
1,1-Dichloroethane	0.050	ND
1,2-Dichloroethane	0.050	ND
1,1-Dichloroethene	0.25	ND
cis-1,2-Dichloroethene	0.10	ND
trans-1,2-Dichloroethene	0.10	ND
1,2-Dichloropropane	0.050	ND
1,3-Dichloropropane	0.050	ND
2,2-Dichloropropane	0.050	ND
1,1-Dichloropropene	0.050	ND



Volatile Organic Compounds by EPA 8260B

Client: SECOR
Project: Olson - San Lorenzo
Job No.: 29082
Matrix: Soil
Analyst: TH

Date Sampled: 12/20/06
Date Received: 12/21/06
Date Analyzed: 12/27-29/06
Batch Number: MS2TPHGS1057
MS2TPHGS1058

Sample ID: CS-3	
Compounds	RL mg/Kg
cis-1,3-Dichloropropene	0.050 ND
trans-1,3-Dichloropropene	0.050 ND
Diisopropyl Ether (DIPE)	0.10 ND
Ethylbenzene	0.050 0.18
Ethyl tert-Butyl Ether (EtBE)	0.10 ND
Hexachlorobutadiene	0.050 ND
2-Hexanone	0.50 ND
Isopropylbenzene	0.050 0.17
p-Isopropyltoluene	0.10 0.075
Methylene chloride	2.5 ND
4-Methyl-2-pentanone	0.50 ND
Methyl tert-Butyl Ether (MtBE)	0.10 ND
Naphthalene	0.10 0.81
n-Propylbenzene	0.050 0.87
Styrene	0.050 ND
1,1,1,2-Tetrachloroethane	0.050 ND
1,1,2,2-Tetrachloroethane	0.10 ND
Tetrachloroethene	0.050 ND
Toluene	0.050 ND
1,2,3-Trichlorobenzene	0.10 ND
1,2,4-Trichlorobenzene	0.10 ND
1,1,1-Trichloroethane	0.050 ND
1,1,2-Trichloroethane	0.15 ND
Trichloroethene	0.050 ND
1,2,3-Trichloropropane	0.15 ND
Trichlorofluoromethane	0.050 ND
Trichlorotrifluoroethane	0.25 ND
1,2,4-Trimethylbenzene	0.050 3.9
1,3,5-Trimethylbenzene	0.050 0.73
Vinyl chloride	0.10 ND
Xylenes, m-,p-	0.10 0.27
Xylene, o-	0.050 ND

Surrogates in % Recovery (Acceptance Limits: 70 - 130%)

Sample ID: CS-3	
Dibromofluoromethane	73
Toluene-d8	114
Bromofluorobenzene	103



QC Sample Report - Volatile Organic Compounds by EPA 8260B

Matrix: Soil
Batch Number: MS28260S1057

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
1,1-Dichloroethene	0.050	99	70 - 130	Pass
Benzene	0.050	107	70 - 130	Pass
Trichloroethene	0.050	109	70 - 130	Pass
Toluene	0.050	108	70 - 130	Pass
Chlorobenzene	0.050	112	70 - 130	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: N-1-5

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
1,1-Dichloroethene	0.0332	0.0389	16%	25%	Pass
Benzene	0.0478	0.0504	5%	25%	Pass
Trichloroethene	0.0486	0.0526	8%	25%	Pass
Toluene	0.0505	0.0521	3%	25%	Pass
Chlorobenzene	0.0501	0.0518	3%	25%	Pass

Analytical Notes:

MS: Matrix Spike
MSD: Matrix Spike Duplicate

LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate

QC Sample Report - Volatile Organic Compounds by EPA 8260B

Matrix: Soil
Batch Number: MS28260S1058

Batch Accuracy Results

Spike Sample ID: Laboratory Control Sample

Compound	Spike Concentration (mg/Kg)	Spike Sample % Recovery	% Recovery Acceptance Limits	Pass/Fail
1,1-Dichloroethene	0.050	92	70 - 130	Pass
Benzene	0.050	105	70 - 130	Pass
Trichloroethene	0.050	100	70 - 130	Pass
Toluene	0.050	105	70 - 130	Pass
Chlorobenzene	0.050	102	70 - 130	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Compound	MS Sample Result (mg/Kg)	MSD Sample Result (mg/Kg)	Relative Percent Difference (RPD)	RPD Acceptance Limit	Pass/Fail
1,1-Dichloroethene	0.0461	0.0461	0%	25%	Pass
Benzene	0.0523	0.0513	2%	25%	Pass
Trichloroethene	0.0499	0.0485	3%	25%	Pass
Toluene	0.0525	0.0510	3%	25%	Pass
Chlorobenzene	0.0508	0.0513	1%	25%	Pass

Analytical Notes:

MS: Matrix Spike
MSD: Matrix Spike Duplicate

LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate