Pacific Gas and Electric Company

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September 26, 2012

Mr. Jerry Wickham
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577



**Reference:** **Report of Soil Excavation Activities**
**Pacific Gas and Electric Company**
**L105N Pipeline Property**
**997 Grant Avenue**
**San Lorenzo, California 94580**
**RO#3094**

Dear Mr. Wickham:

Enclosed is the Report of Soil Excavation Activities (Report) for the PG&E property located at 997 Grant Avenue in San Lorenzo, California. PG&E is currently constructing a pipeline inspection gauge (pig) receiving station on a portion of the site for the L105N natural gas pipeline and the City of San Lorenzo is planning to develop the unused portion of the site into a public park. This Report transmits the results of the soil excavation activities that occurred between August 17 and 24, 2012. The work was completed in accordance with the July 24, 2012 Revised Work Plan for Limited Soil Excavation which was approved by the Alameda County Health Care Services Agency (ACHCSA) in letter dated August 14, 2012. The soil excavation was completed to address residual petroleum hydrocarbon contamination related to former site uses and to facilitate current development plans. Based on the results of confirmation soil samples, impacted soil containing concentrations above San Francisco Bay Regional Water Quality Control Board - Environmental Screening Levels (ESL) was successfully removed. Accordingly, PG&E respectfully requests ACHCSA provide a "No Further Action" letter.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

Loren Loo
Senior Manager Environmental Remediation
Pacific Gas and Electric Co.
3401 Crow Canyon Road
San Ramon, CA 94583
(925) 415-6357

Enclosure: Report of Soil Excavation Activities

**Report of Soil**
**Excavation Activities**
**Pacific Gas and Electric Company**
**L105N Pipeline Property**

997 Grant Avenue
San Lorenzo, California 94580
PN: 185702540

Stantec

September 26, 2012

One Team. Infinite Solutions.

# Limitations and Certifications

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Pacific Gas and Electric Company for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third party information, but Stantec cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by Stantec.

Prepared by:

Greg D. Hoehn
Principal Geologist

Information, conclusions, and recommendations provided by Stantec in this document has been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.

Licensed Approver:

Bruce E. Scarbrough, P.G., #4931
Principal Geologist

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# List of Acronyms and Abbreviations

| | |
|---|---|
| ACHCSA | Alameda County Health Care Services Agency |
| ACPWA | Alameda County Public Works Agency |
| bgs | below ground surface |
| DTSC | Department of Toxic Substances Control |
| ERRG | Engineering/Remediation Resources Group, Inc. |
| ESA | Environmental Site Assessment |
| ESL | environmental screening level |
| HASP | Health and Safety Plan |
| LRL | laboratory reporting limit |
| LUFT | leaking underground fuel tank |
| PG&E | Pacific Gas and Electric Company |
| PID | photoionization detector |
| PIG | pipeline inspection gauge |
| µg/kg | micrograms per kilogram |
| mg/kg | milligrams per kilogram |
| RWQCB | Regional Water Quality Control Board |
| Stantec | Stantec Consulting Services Inc. |
| TestAmerica | TestAmerica Laboratories, Inc. |
| TPHd | total petroleum hydrocarbons in the diesel range |
| TPHg | total petroleum hydrocarbons in the gasoline range |
| USA | Underground Service Alert |
| US EPA | United States Environmental Protection Agency |
| UST | underground storage tank |
| VOC | volatile organic compound |

# 1.0 Introduction

Stantec Consulting Services Inc. (Stantec) has prepared this soil excavation report on behalf of Pacific Gas and Electric Company (PG&E) for the L105N Pipeline Property located at 997 Grant Avenue in San Lorenzo, California (the Site; see Figures 1 and 2). PG&E is currently constructing a pipeline inspection gauge (PIG) receiving station on a portion of the Site for the L105N natural gas pipeline, and per agreement with Alameda County and City of San Lorenzo, is planning to develop the unused portion of the Site into a "pocket park" for public use. The soil excavation work was completed to address residual petroleum hydrocarbon contamination in soil related to former Site uses and to facilitate current development plans. The work was performed in accordance with the Revised Limited Soil Excavation Work Plan (Work Plan) dated July 24, 2012. The Work Plan was approved by the Alameda County Health Care Services Agency (ACHCSA) in a letter dated August 14, 2012.

## 1.1 SITE DESCRIPTION AND HISTORY

The subject property is an approximate 1.4 acre vacant lot located at the northeast corner of Washington Avenue and Grant Avenue in San Lorenzo, California (see Figure 2). The subject property was a former Chevron gas station that received a "Fuel Leak Site Case Closure" from ACHCSA in a letter dated September 19, 1997. Stantec completed a Phase I Environmental Site Assessment (ESA) for the property dated December 10, 2010, that documented potential residual petroleum hydrocarbon contamination left in-place in soil. The Phase I ESA documented that dissolved hydrocarbons in groundwater were not migrating, aquifers with beneficial uses were not affected, and residual petroleum impacts do not pose a significant risk to human health or the environment.

Stantec's document entitled, *"Limited Phase II Environmental Site Assessment Report,"* dated June 27, 2011, describes additional soil sampling and analysis conducted to assess petroleum hydrocarbons and metals concentrations in soil prior to PG&E beginning the pig receiver station construction. Stantec advanced 12 soil borings on May 26, 2011, to 10 feet below ground surface (bgs) in the vicinity of the former gas station underground storage tanks (USTs) and pump islands. Soil samples were collected from depths of 2 to 10 feet bgs and submitted for laboratory analysis of total petroleum hydrocarbons in the diesel range (TPHd) by United States Environmental Protection Agency (US EPA) Method 8015B, total petroleum hydrocarbons in the gasoline range (TPHg), volatile organic compounds (VOCs) by US EPA Method 8260B, and leaking underground fuel tank (LUFT) metals (cadmium, chromium, lead, nickel and zinc) by US EPA Method 6010B. No groundwater was encountered in any of the boreholes.

The Phase II ESA identified the following impacts in soil within the area to be developed by the City into a park (outside of PG&E's planned fence for the pig receiving station):

- Residual TPHg and VOCs (benzene, ethylbenzene, and total xylenes) concentrations above San Francisco Bay Regional Water Quality Control Board (RWQCB) residential environmental screening levels (ESLs) were present at 10 feet bgs in boring SB-6 in the former UST cavity (see

Figure 2). The residual concentrations are slightly higher, but similar to the post-cleanup concentrations documented in the "Fuel Leak Site Case Closure" from ACHCSA dated September 19, 1997.

- Residual TPHd concentrations above the San Francisco Bay RWQCB residential ESL were present in a shallow soil sample (3.5 feet bgs) collected in the vicinity of the former southern pump island (boring SB-11; see Figure 2). The deeper sample analyzed from the same boring (7.5 feet bgs) contained a TPHd concentration below the ESL. No TPHd impacts were detected in the post-cleanup sample results included in the "Fuel Leak Site Case Closure."

Based on the residual hydrocarbon impacts identified during the Phase II ESA, PG&E retained Stantec to prepare a work plan to remove TPH-impacted soil containing concentrations above the San Francisco Bay RWQCB ESLs for residential land use.

# 2.0 Scope of Work

The scope of work included soil excavation in the former gas station UST area (SB-6 excavation) and the southern pump island (SB-11 excavation) to remove soil containing petroleum hydrocarbon concentrations above the corresponding San Francisco Bay RWQCB ESLs for residential land use (see Figure 3). The following sections detail the scope of work completed.

## 2.1 PRELIMINARY ACTIVITIES

A Site-specific Health and Safety Plan (HASP) was prepared to address potential chemical and physical hazards associated with the soil excavation. A copy of the HASP was kept on-Site at all times while work occurred. Stantec's remediation contractor, Engineering/Remediation Resources Group, Inc. (ERRG) contacted Alameda County Public Works Agency (ACPWA) to inquire on the need for a grading permit. On July 6, 2012, the ACPWA notified ERRG via email that due to the limited scope and since the project was being overseen by the ACHCSA, the work would be exempt from grading permit requirements.

In advance of field activities, ERRG marked the excavation areas in accordance with Underground Service Alert (USA) guidelines and notified USA of upcoming subsurface activities so that existing underground utilities in the area of proposed work could be located and avoided. On August 15, 2012, a private utility locator cleared the proposed excavation areas for underground utilities and obstructions.

### 2.1.1 Community Notification

A fact sheet (see Appendix A) prepared by ACHCSA was distributed to the ACHCSA-provided mailing list on July 16, 2012. PG&E distributed a formal work notice (Construction Notice – Appendix A) to nearby tenants of the pending work. Copies of the work notice were also available to the public in information boxes attached to the Site fences along Washington Avenue and Grant Avenue. ACHCSA was notified via email on August 9, 2012, of the excavation start date of August 17, 2012.

## 2.2 EXCAVATION ACTIVITIES

Excavation activities were performed by ERRG with a backhoe and small loader (Bobcat) under the direction of Stantec on August 17, 2012, and included removing soil from the SB-6 and SB-11 boring areas. The excavation areas are shown on Figure 3. Dust generation was controlled by spraying water from a portable water tank on soils prior to and during excavation activities. The need for water application was monitored visually and the perimeter of the site was monitored with a dust meter to verify adequate dust control measures were employed. Copies of air monitoring logs are included in Appendix B.

*Former UST Excavation Area (SB-6)*

The SB-6 excavation was approximately 14 feet by 9 feet at the surface (sloped to approximately 8 feet by 5 feet at the bottom) and completed to a depth of approximately 11 feet bgs. Groundwater was encountered in the excavation at approximately 10.5 feet bgs which precluded extending the excavation to 12 feet bgs as proposed in the Revised Work Plan. The upper 8.5 feet of clean soil was stockpiled and covered for reuse as backfill. The soil removed from below the clean soil was stockpiled on and under plastic for subsequent transport and off-Site disposal.

*Former Fuel Dispenser Island (SB-11)*

The SB-11 excavation was approximately 8 feet by 6 feet at the surface (sloped to approximately 7 feet by 5 feet at the bottom) and completed to a depth of approximately 5 feet bgs. The soil removed was added to the impacted soil stockpile generated from the former UST excavation area and covered for subsequent transport and off-Site disposal.

### 2.2.1 Air/Noise Monitoring

In addition to the dust monitoring noted previously, organic vapors were measured with a photoionization detector (PID) and noise was monitored with a noise dosimeter. Readings were collected at the perimeter of the property to ensure the site excavation activities did not cause a nuisance condition for neighbors. The results of the dust, organic vapor, and noise monitoring documented that no appreciable effects above ambient conditions were detected along the site perimeter. Copies of the August 17, 2012, monitoring logs and the August 24, 2012, dust and noise monitoring logs are included in Appendix B.

### 2.2.2 Site Security

Access to the site was restricted by locked, temporary construction fencing. Additionally, the excavations were covered with plywood and encircled with snow fencing while awaiting confirmation sample analytical results before backfilling.

## 2.3 CONFIRMATION SOIL SAMPLING

After the excavations were completed on August 17, 2012, the excavation sidewalls and the bottom of the SB-11 excavation were visually inspected and soil was field screened with a PID to assess if contamination remained in place. Since no contamination was observed by visual inspection or field screening, in accordance with the Revised Work Plan, the sidewall confirmation soil samples from the SB-6 excavation were collected from 10 feet bgs and the sidewall samples from the SB-11 excavation were collected from a depth of 3.5 feet bgs. Due to the accumulation of groundwater in the bottom of the SB-6 excavation, no bottom confirmation soil sample could be collected. The bottom sample from the SB-11 excavation was collected from 5 feet bgs. Excavation dimensions and confirmation sample locations are shown on Figure 4.

The confirmation samples were collected from soil removed with the backhoe bucket. Soil was placed in laboratory-supplied containers, labeled, and immediately placed on ice. Confirmation soil samples were submitted under chain-of-custody documentation to TestAmerica Laboratories, Inc. (TestAmerica) in Pleasanton, California, a State of California-certified laboratory. The nine confirmation soil samples were analyzed on an expedited turnaround for TPHg and VOCs using US EPA Method 8260B. Additionally, the five confirmation samples from the SB-11 excavation were analyzed for TPHd with a silica gel cleanup using modified US EPA Method 8015B.

## 2.4 ANALYTICAL RESULTS

Analytical results for soil samples are summarized on Table 1 and Figure 4 depicts the TPH and VOC results. For comparison purposes, the San Francisco Bay RWQCB residential and commercial/industrial ESLs where groundwater is a current or potential source of drinking water are included on Table 1. ESLs are not promulgated cleanup standards, but are conservative screening concentrations used to assess whether further evaluation of potential risks posed by the presence of organic chemicals or metals in soil are warranted. The complete laboratory confirmation sample laboratory report is included in Appendix C. The confirmation soil sample results are summarized below:

- TPHd was detected above the laboratory reporting limit (LRL) in one soil sample collected from the bottom of the SB-11 excavation (5 feet bgs) at a concentration of 1.5 milligrams per kilogram (mg/kg). The result is below the applicable residential and commercial/industrial ESL of 83 mg/kg.

- TPHg was detected above the LRL in two sidewall soil samples collected at 10 feet bgs from the SB-6 excavation. The south sidewall sample reported a concentration of 0.43 mg/kg and the west sidewall sample reported a concentration of 0.32 mg/kg. The results are below the applicable residential and commercial/industrial ESL of 83 mg/kg.

- The only VOC detected above the LRL was tert-butylbenzene in three of the sidewall samples collected from 10 feet bgs from the SB-6 excavation. The detected tert-butylbenzene concentrations ranged from 4.9 micrograms per kilogram (µg/kg) to 8.3 µg/kg. Tert-butylbenzene does not have an ESL or other screening level established.

## 2.5 SOIL DISPOSAL AND SITE RESTORATION

After the confirmation sample results verified adequate soil excavation had been completed, ERRG and Stantec returned to the Site on August 24, 2012, to backfill the excavations and load the impacted soil for transport to the landfill.

### 2.5.1 Soil Transportation and Disposal

The impacted soil was pre-profiled as non-hazardous soil, based on the soil sample analytical results from the Limited Phase II ESA. On August 24, 2012, 18.64 tons of impacted soil was loaded and transported under a non-hazardous waste manifest to the Republic Services, Forward, Inc. landfill in Manteca, California for beneficial reuse (Class II waste). Copies of the profile, non-hazardous waste manifest and the landfill weight ticket are included in Appendix D.

### 2.5.2 Backfilling and Site Restoration

Before clean imported material was used for backfilling, the material was tested to verify fill meets the criteria for imported fill material as presented in the Department of Toxic Substances Control (DTSC) "*Information Advisory, Clean Imported Fill Material,"* dated October 2001. A sample of the fill material was collected on August 9, 2012. Soil was placed in laboratory-supplied containers, labeled and submitted under chain-of-custody documentation to Curtis and Tompkins in Berkeley, California, a State of California-certified laboratory. Since the imported fill was from a quarry, in accordance with the DTSC advisory, the material was analyzed for Title 22 metals using US EPA Methods 6010B/7471A, for pH using US EPA Method 9045D, and for asbestos using US EPA Method 600/R-93-116. The Title 22 metals results were less than ESL levels or within the range of normal background levels, pH was measured at 7.9, and no asbestos was detected. A copy of the laboratory report for the testing of the imported backfill material is included in Appendix C.

*Former UST Excavation Area (SB-6)*

Due to the presence of groundwater in the bottom of the excavation, ¾-inch drain rock was placed in the bottom of the excavation to 9.5 feet bgs (approximately one-foot above the groundwater level) and ¾-inch Class II aggregate base was placed to approximately 5 feet bgs in approximately 12- to 18-inch lifts and compacted with the backhoe bucket. Clean stockpiled soil was placed from 5 feet bgs to the surface in approximately 12- to 18-inch lifts and compacted with the backhoe bucket. The excavation was backfilled to the surface to match the existing area dirt surface.

*Former Fuel Dispenser Island (SB-11)*

The excavation was backfilled with ¾-inch Class II aggregate base from the bottom (approximately 5 feet bgs) to approximately 2.5 feet bgs in approximately 6- to 12-inch lifts and compacted with the backhoe bucket. Clean stockpiled soil was placed from 2.5 feet bgs to the surface in approximately 6- to 12-inch lifts and compacted with the backhoe bucket. The excavation was backfilled to the surface to match the existing area dirt surface.

# 3.0 Summary of Soil Excavation Activities

Excavation activities were completed on August 17, 2012, and included removing soil from two areas (based on borings SB-6 and SB-11 advanced in conjunction with the Limited Phase II Environmental Site Assessment conducted in May 2011). The SB-6 excavation in the former UST areas was approximately 14 feet by 9 feet at the surface (sloped to approximately 8 feet by 5 feet at the bottom) and completed to a depth of approximately 11 feet bgs. Groundwater was encountered in the excavation at approximately 10.5 deep which precluded excavation to the proposed depth of 12 feet bgs. The upper 8.5 feet of clean soil was stockpiled and covered for reuse as backfill. The soil removed from below the clean soil was stockpiled on and under plastic for subsequent disposal at a landfill. The SB-11 excavation in the former south pump island area was approximately 8 feet by 6 feet at the surface (sloped to approximately 7 feet by 5 feet at the bottom) and completed to a depth of approximately 5 feet bgs. The soil was added to the impacted soil stockpile and covered for subsequent transport and disposal to the landfill.

Confirmation soils samples were collected from the four sidewalls of the SB-6 excavation (a bottom sample could not be collected due to groundwater) and from the bottom and four sidewalls of the SB-11 excavation. The results of TPHg and VOC analyses for the SB-6 excavation samples and the TPHg, VOC, and TPHd analyses for the SB-11 were compared to San Francisco Bay RWQCB ESLs to confirm adequate soil removal had been completed.

On August 24, 2012, the impacted soil (18.64 tons) was loaded and transported under a non-hazardous waste manifest to the Republic Services, Forward, Inc. landfill in Manteca, California for beneficial reuse (Class II waste). Clean imported backfill material and stockpiled clean soil was used to backfill and compact the two excavations. The excavations were backfilled to the surface to match the existing area dirt surface.

# TABLE

Report of Soil Excavation Activities
Pacific Gas and Electric Company
L105N Property
997 Grant Avenue
San Lorenzo, California
Stantec PN: 185702540.200.0003
September 26, 2012

**Table 1**
**Soil Excavation Confirmation Sample Analytical Results**
**PG&E L105N Property**
**997 Grant Avenue**
**San Lorenzo, California**

| Sample ID | Sample Depth (ft bgs) | Sample Date | TPHd | TPHg | VOCs | |
|---|---|---|---|---|---|---|
| | | | EPA Method 8015B with silica gel cleanup (mg/kg) | EPA Method 8260B (mg/kg) | EPA Method 8260B (µg/kg) | |
| | | | TPH as Diesel | TPH as Gasoline | tert-Butylbenzene | All Other VOCs |
| SB6-EXC-N-10' | 10 | 08/17/12 | -- | <0.23 | **4.9** | <4.7 - 47 |
| SB6-EXC-S-10' | 10 | 08/17/12 | -- | **0.43** | **6.2** | <5.0 -50 |
| SB6-EXC-E-10' | 10 | 08/17/12 | -- | <0.24 | <4.9 | <4.9 - 49 |
| SB6-EXC-W-10' | 10 | 08/17/12 | -- | **0.32** | **8.3** | <5.0 - 50 |
| SB-11-N-3.5' | 3.5 | 08/17/12 | <1.0 | <0.23 | <4.6 | <4.6 - 46 |
| SB-11-S-3.5' | 3.5 | 08/17/12 | <0.99 | <0.24 | <4.8 | <4.8 - 48 |
| SB-11-E-3.5' | 3.5 | 08/17/12 | <0.98 | <0.24 | <4.9 | <4.9 - 49 |
| SB-11-W-3.5' | 3.5 | 08/17/12 | <0.99 | <0.25 | <4.9 | <4.9 - 49 |
| SB-11-B-5' | 5 | 08/17/12 | **1.5** | <0.24 | <4.8 | <4.8 - 48 |
| ESL[1] | | **Residential (<3m)** | 83 | 83 | NE | NA |
| | | **Residential (>3m)** | 83 | 83 | NE | NA |
| ESL[2] | | **Commercial/Ind (<3m)** | 83 | 83 | NE | NA |
| | | **Commercial/Ind (>3m)** | 83 | 83 | NE | NA |

Notes:

Only COCs detected in one or more samples are displayed. See the laboratory report for a complete list of analytes and reporting limits for the VOC analyses.

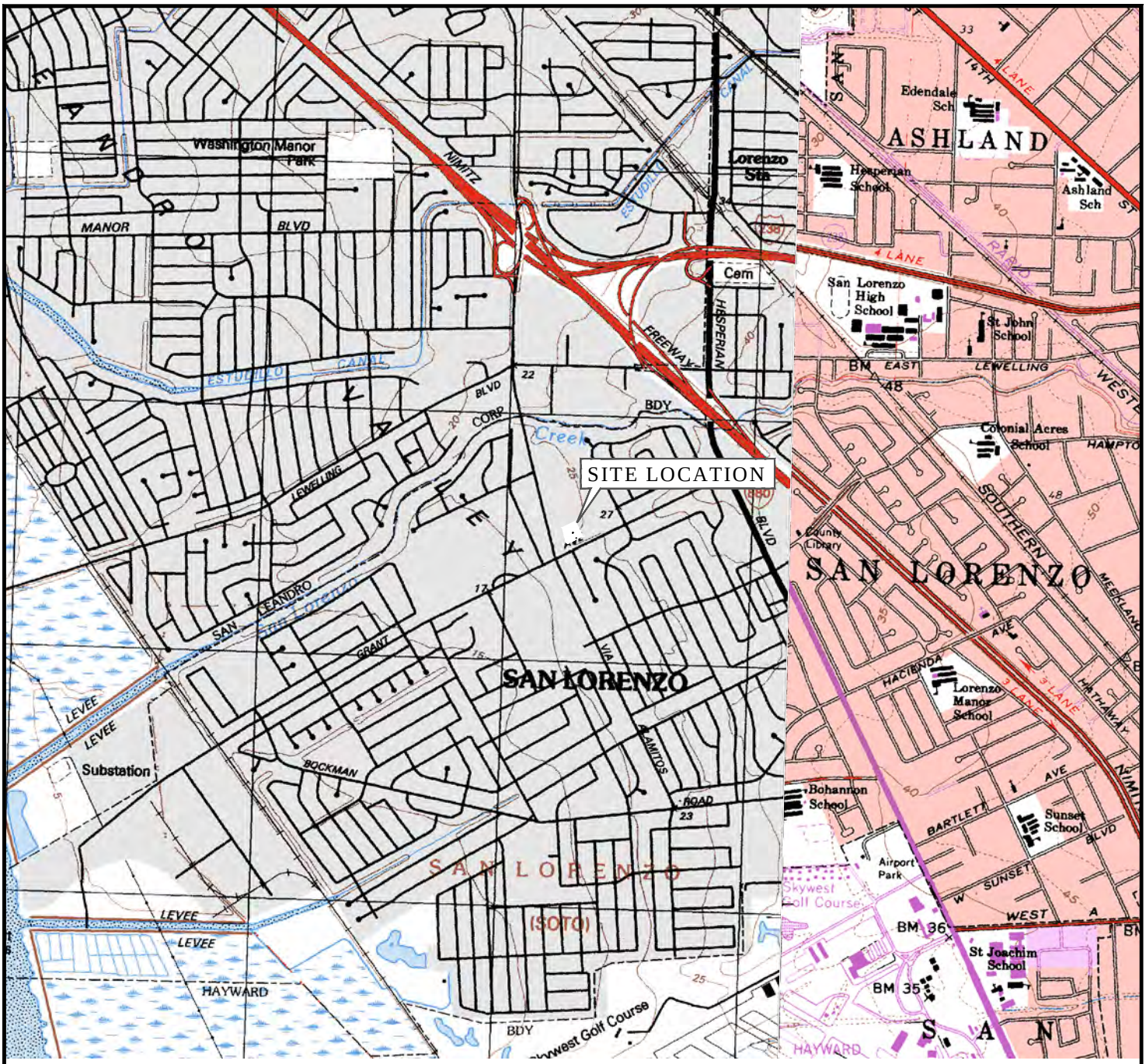
1 Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for exposure to subsurface soils in a residential setting, where groundwater is a current or potential source of drinking water (SF Bay RWQCB, Interim Final, May 2008, Summary Tables A and C).

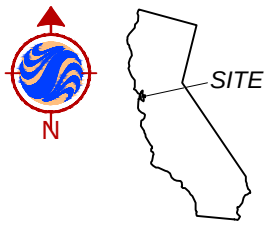
2 Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for exposure to subsurface soils in a commercial/industrial setting, where groundwater is a current or potential source of drinking water (SF Bay RWQCB, Interim Final, May 2008, Summary Tables B and D).

EPA = Environmental Protection Agency
VOCs = Volatile organic compounds
mg/kg = Milligrams per kilogram
µg/kg = Micrograms per kilogram
ft bgs = Feet below ground surface
TPHd = Total petroleum hydrocarbons as diesel
TPHg = Total petroleum hydrocarbons as gasoline
NE = Not established
NA = Not applicable
-- = Not analyzed
< = Analyte not detected at shown reporting limit.

# FIGURES

Report of Soil Excavation Activities
Pacific Gas and Electric Company
L105N Property
997 Grant Avenue
San Lorenzo, California
Stantec PN: 185702540.200.0003
September 26, 2012




1 1/2 0 1

SCALE IN MILE

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE IN FEET

Image courtesy of the U.S. Geological Survey and Microsoft TerraService OpenGIS Map Server

Stantec
57 Lafayette Circle, 2nd Floor
Lafayette California
PHONE: (925) 299-9300 FAX: (925) 299-9302

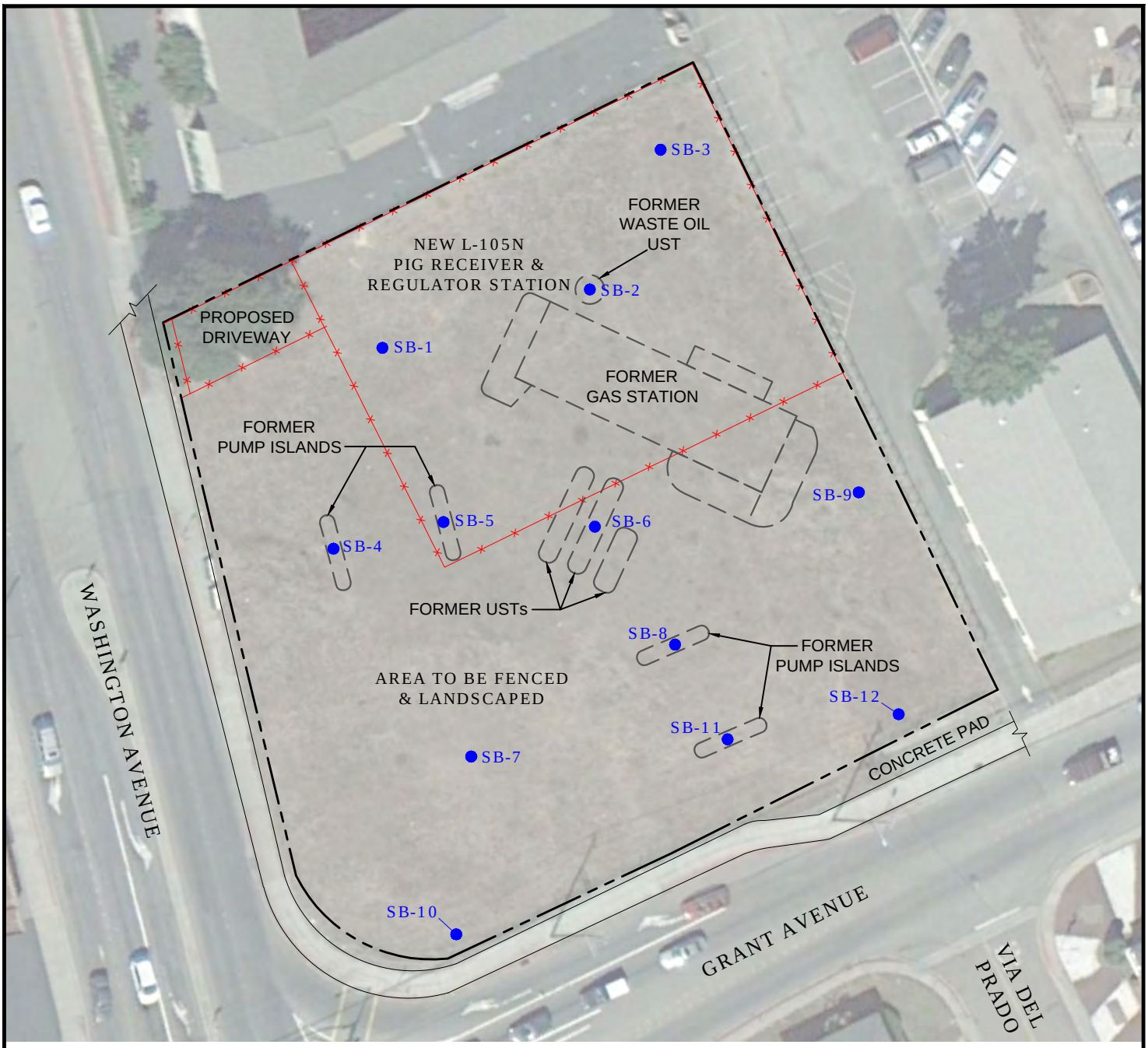
FOR:
PACIFIC GAS AND ELECTRIC COMPANY
L105N PIPELINE
997 GRANT AVENUE
SAN LORENZO, CA

SITE LOCATION MAP

FIGURE: 1

| JOB NUMBER: | DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: |
|---|---|---|---|---|
| 185702540.200.0001 | RRR | KC | GH | 09/04/12 |

FILEPATH:M:\PG&E\PG&E - San Lorenzo\185702540\185702540-F1_F2_F3-SLM_SP_Excavation_Locations.dwg|RRoggasch|Sep 04, 2012 at 9:07|Layout: SITE LOCATION MAP




LEGEND:

- SB-1 SOIL BORING LOCATION (MAY 2011)
- APPROXIMATE PROPERTY BOUNDARY
- PROPOSED FENCE LINE
- FORMER GAS STATION FEATURES

N

0 50 100

APPROXIMATE SCALE IN FEET

Image courtesy of the U.S. Geological Survey and Microsoft TerraService OpenGIS Map Server

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FOR:
PACIFIC GAS AND ELECTRIC COMPANY
L105N PIPELINE
997 GRANT AVENUE
SAN LORENZO, CA

SITE PLAN

FIGURE: 2

| JOB NUMBER: | DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: |
|---|---|---|---|---|
| 185702540.200.0001 | RRR | GH | GH | 09/04/12 |

FILEPATH:M:\PG&E\PG&E - San Lorenzo\185702540\185702540-F1_F2_F3-SLM_SP_Excavation_Locations.dwg|RRoggasch|Sep 04, 2012 at 9:06|Layout: SITE PLAN


LEGEND:

- SB-1 SOIL BORING LOCATION (MAY 2011)
- APPROXIMATE PROPERTY BOUNDARY
- PROPOSED FENCE LINE
- FORMER GAS STATION FEATURES
- SB-6 AND SB-11 EXCAVATION AREAS (SEE FIGURE 4)

N

0 50 100

APPROXIMATE SCALE IN FEET

Image courtesy of the U.S. Geological Survey and Microsoft TerraService OpenGIS Map Server

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| FOR: | | | FIGURE: |
|---|---|---|---|
| PACIFIC GAS AND ELECTRIC COMPANY<br>L105N PIPELINE<br>997 GRANT AVENUE<br>SAN LORENZO, CA | | AUGUST 17, 2012<br>EXCAVATIONS | 3 |

| JOB NUMBER: | DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: |
|---|---|---|---|---|
| 185702540.200.0001 | RRR | GH | GH | 09/04/12 |

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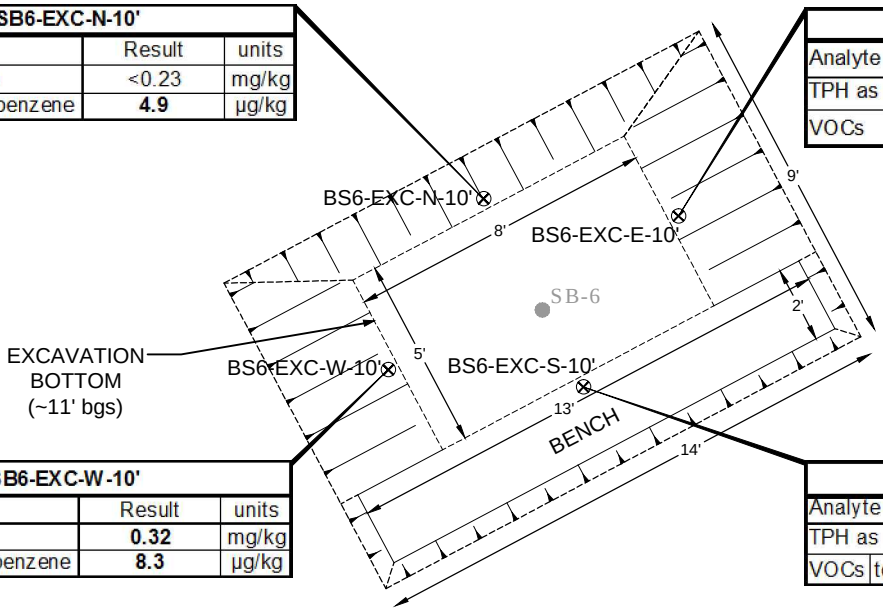
| SB6-EXC-N-10' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as gasoline | <0.23 | mg/kg |
| VOCs tert-Butylbenzene | **4.9** | µg/kg |

| SB6-EXC-E-10' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as gasoline | <0.24 | mg/kg |
| VOCs | All non-detect | |




| SB6-EXC-W-10' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as gasoline | **0.32** | mg/kg |
| VOCs tert-Butylbenzene | **8.3** | µg/kg |

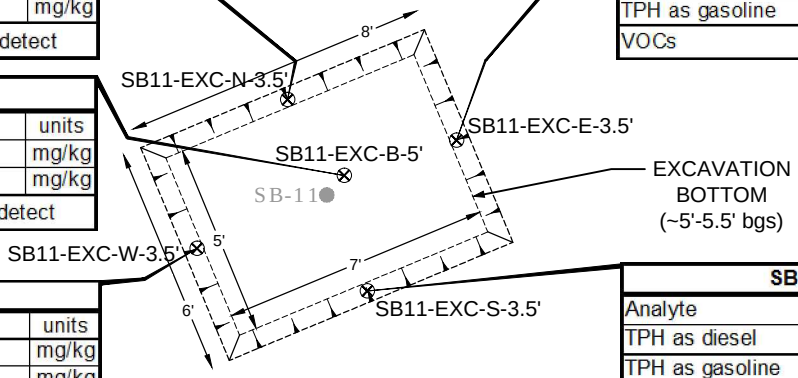
| SB6-EXC-S-10' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as gasoline | **0.43** | mg/kg |
| VOCs tert-Butylbenzene | **6.2** | µg/kg |

## SB-6 EXCAVATION LOCATION

| SB11-EXC-N-3.5' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as diesel | <1.0 | mg/kg |
| TPH as gasoline | <0.23 | mg/kg |
| VOCs | All non-detect | |

| SB11-EXC-E-3.5' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as diesel | <0.98 | mg/kg |
| TPH as gasoline | <0.24 | mg/kg |
| VOCs | All non-detect | |

| SB11-EXC-B-5' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as diesel | **1.5** | mg/kg |
| TPH as gasoline | <0.24 | mg/kg |
| VOCs | All non-detect | |




| SB11-EXC-W-3.5' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as diesel | <0.99 | mg/kg |
| TPH as gasoline | <0.25 | mg/kg |
| VOCs | All non-detect | |

| SB11-EXC-S-3.5' | | |
|---|---|---|
| Analyte | Result | units |
| TPH as diesel | <0.99 | mg/kg |
| TPH as gasoline | <0.24 | mg/kg |
| VOCs | All non-detect | |

## SB-11 EXCAVATION LOCATION

LEGEND:

⊗ SIDEWALL OR BOTTOM CONFIRMATION SOIL SAMPLE LOCATION (AUGUST 17, 2012)

● SB-1 SOIL BORING LOCATION (MAY 2011)

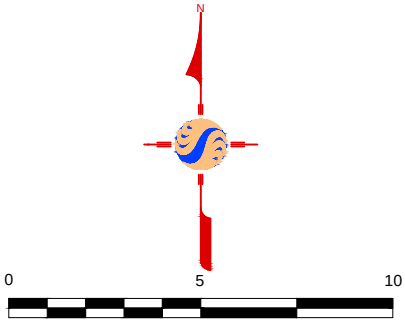
---------- EXCAVATION LIMITS (AUGUST 17, 2012)

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons
VOCs = Volatile Organic Compounds
bgs = Below Ground Surface
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram

NOTE:

SEE THE LABORATORY REPORT FOR A COMPLETE LIST OF VOC ANALYTES AND REPORTING LIMITS.




APPROXIMATE SCALE IN FEET


Stantec
57 Lafayette Circle, 2nd Floor
Lafayette California
PHONE: (925) 299-9300 FAX: (925) 299-9302


FOR:
PACIFIC GAS AND ELECTRIC COMPANY
L105N PIPELINE
997 GRANT AVENUE
SAN LORENZO, CA

AUGUST 17, 2012
EXCAVATION CONFIRMATION
SOIL SAMPLE RESULTS

FIGURE: 4

| JOB NUMBER: | DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: |
|---|---|---|---|---|
| 185702540.200.0001 | RRR | GH | GH | 09/04/12 |


FILEPATH:M:\PG&E\PG&E - San Lorenzo\185702540\185702540-F4-Excavation_and_Soil_Sample_Results.dwg|RRoggasch|Sep 06, 2012 at 10:43|Layout: F4

# APPENDIX A
# Public Notifications

Report of Soil Excavation Activities
Pacific Gas and Electric Company
L105N Property
997 Grant Avenue
San Lorenzo, California
Stantec PN: 185702540.200.0003
September 26, 2012

ALAMEDA COUNTY
**HEALTH CARE SERVICES**
AGENCY
ALEX BRISCOE, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

**FACT SHEET**
**PG&E**
**July 11, 2012**

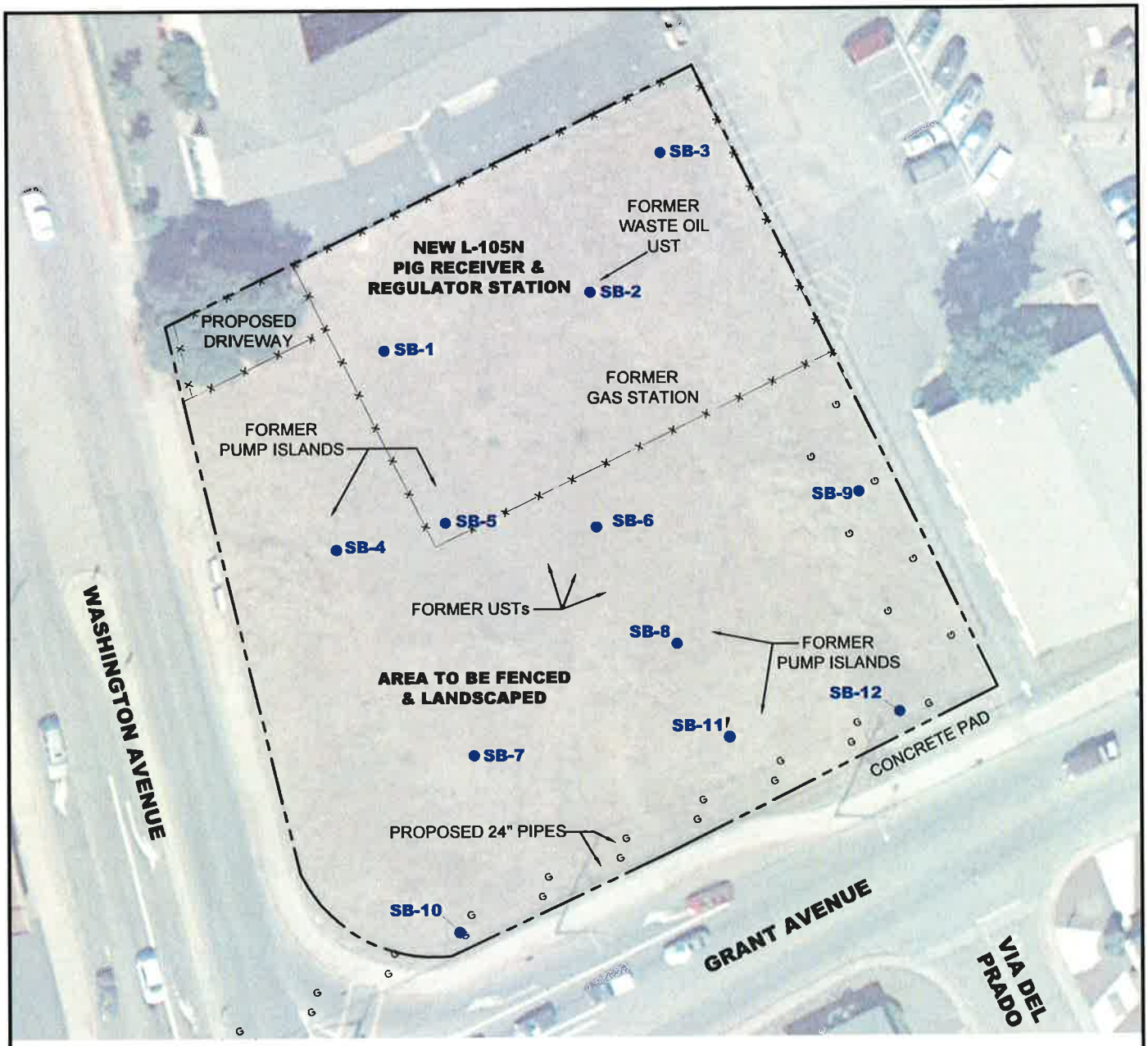
**Site Location: PG&E, 997 Grant Avenue, San Lorenzo, CA 94580**
**SLIC Case #RO0003094 and GeoTracker Global ID # T10000003439**

**Summary** – This fact sheet has been prepared to inform community members and other interested parties of a plan to excavate and remove residual petroleum hydrocarbon contaminated soil from a Pacific Gas & Electric Company (PG&E) property located at the intersection of Washington Avenue and Grant Avenue in San Lorenzo, California (see map on the back). PG&E is currently constructing a pig receiving station on a portion of the site and the City of San Lorenzo is planning to develop the remainder of the site into a public park. The residual petroleum hydrocarbons are from a former gasoline service station on the site that had a leaking fuel case. On May 26, 2011, twelve soil borings were advanced at various locations throughout the former gasoline service station to assess current conditions. Analytical results from the soil samples indicated that total petroleum hydrocarbons (TPH) as diesel, TPH as gasoline, benzene, ethylbenzene, and xylenes were present in soil at concentrations that exceeded Environmental Screening Levels developed by the San Francisco Bay Regional Water Quality Control Board. PG&E is proposing excavation of petroleum hydrocarbon contamination from the former service station southern pump island and former underground storage tank (UST) areas. The excavated soil will be disposed off-site as non-Hazardous (Class II) waste at a facility that is permitted to take petroleum-contaminated soil. Dust and odor control measures consisting primarily of wetting and sprinkling will be implemented to minimize airborne dust and odor during excavation. Confirmation soil samples will be collected during and following excavation to confirm that soils with elevated concentrations of petroleum hydrocarbons have been removed. The excavations will be backfilled with clean imported fill.

**Background** – The site is a 1.4-acre lot that was formerly a gasoline service station until the USTs were removed in December 1990. A PG&E pig-receiving station is under construction in the northern corner of the site and the remainder of the site will be developed as a public park (see map on the back).

**Next Step** – Pacific Gas & Electric Company is working with Alameda County Environmental Health (ACEH) to implement a soil cleanup at the site. The proposed soil cleanup is described in a plan prepared by Stantec Consulting Services, Inc. on behalf of PGE entitled, "*Work Plan for Limited Soil Excavation*," and dated June 19, 2012. The public is invited to review and comment on the cleanup action proposed in this Work Plan. This Work Plan and the entire case file can be viewed over the Internet on the ACEH website (http://www.acgov.org/aceh/lop/ust.htm) or the State of California Water Resources Control Board Geotracker website (http://geotracker.swrcb.ca.gov). Please send written comments to Jerry Wickham at the address below; all comments will be forwarded to the responsible parties. **Comments received by August 13, 2012** will be considered and responded to prior to a final determination on the proposed cleanup.

Additional information: Contact Jerry Wickham of the Alameda County Department of Environmental Health, 1131 Harbor Bay Parkway, Alameda, CA 94502 at 510-567-6791 or by email at jerry.wickham@acgov.org




LEGEND:

- SB-1 SOIL BORING LOCATION (MAY 2011)
- APPROXIMATE PROPERTY BOUNDARY
- PROPOSED FENCE LINE
- PROPOSED 24" UNDERGROUND GAS LINES
- FORMER GAS STATION FEATURES

N

0 50 100

APPROXIMATE SCALE IN FEET

Image courtesy of the U.S. Geological Survey and Microsoft TerraService OpenGIS Map Server

Stantec
57 Lafayette Circle, 2nd Floor
Lafayette California
PHONE: (925) 299-9300 FAX:(925) 299-9302

FOR:
PACIFIC GAS AND ELECTRIC COMPANY
L105N PROPERTY
997 GRANT AVENUE
SAN LORENZO, CA

SITE PLAN

FIGURE: 2

| JOB NUMBER: | DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: |
|---|---|---|---|---|
| 185702540.200.0001 | RRR | GH | GH | 05/25/12 |

FILEPATH:M:\PG&E\PG&E - San Lorenzo\185702540\185702540-F1_F2-SLM_SP.dwg|rroggasch|May 25, 2012 at 11:19|Layout: SITE PLAN

# Construction Notice – August 2012

**PG&E San Lorenzo Pipeline Property**
**997 Grant Avenue**
**San Lorenzo, California**

## Introduction

Between August 17th and 24th, PG&E will be conducting a short project to remove soils impacted with gasoline and diesel fuels at its San Lorenzo Pipeline Property located in the northeast corner of Washington Avenue and Grant Avenue in San Lorenzo. Work is anticipated to last two to three days and there will be some noise and vibrations associated with typical heavy construction projects. The County of Alameda is providing oversight and approval of this work.

## Work Planned

The cleanup is expected to last about two to three days and work will take place between the hours of 7:00 a.m. and 5:00 p.m., as follows:

- Beginning Friday , August 17, PG&E will perform excavation work in two small areas of the property to a depth of 5 feet in one area to remove soil containing diesel fuel residues and to 12.5 feet in the other area to remove soil containing gasoline residues;
- Soils samples from the bottom and sides of the excavation areas will be collected and analyzed to document the soil removal efforts;
- Excavated soil will be stored on-site and covered and secured with plastic during the week of August 20th;
- Upon receipt of sample results, PG&E will return to the site on Friday, August 24th to remove the excavated soil, backfill and compact the excavated areas, and cleanup and restore the site.

The work will include the use of major construction equipment such as backhoes, loaders, compactors, and trucks to haul soil to and from the site. Neighbors located near the site may expect to experience limited noise and vibrations associated with typical construction work.

To ensure that the surrounding community is protected, all work will take place in accordance with a site-specific Health and Safety Plan and an environmental project manager will be on-site throughout the work. Dust and odor suppression activities will be conducted and airborne dust monitoring will be conducted during all excavation activities and throughout the daytime work schedule. The excavated area will be covered with plywood and secured with fencing until it is backfilled with clean soil. The site will remain fenced and locked.

## For More Information

Thank you for your patience as we move forward with this project. For more information please contact Tracy Craig at 510.334.4866 or by email at tacm@pge.com.

# APPENDIX B
# Field Monitoring Forms

Report of Soil Excavation Activities
Pacific Gas and Electric Company
L105N Property
997 Grant Avenue
San Lorenzo, California
Stantec PN: 185702540.200.0003
September 26, 2012

## AIR MONITORING LOG

Noise Logging

Instrument(s) Used: Make: Quest Electronics Model: M-27 Dosimeter

| DATE | TIME | LOCATION/SOURCE (Personal/Area Sampling) | WORK ACTIVITY DURING SAMPLING (Be specific) | Measurement (Units) | WHAT DID YOU DO BECAUSE OF THE RESULT? (PPE Change/Activity Change/Nothing Needed) | SAMPLED BY |
|---|---|---|---|---|---|---|
| 8/17/12 | 852 | perimeter | stand-by - background level | 51-81 | | KE |
| | 1020 | Washington | SB-6 3ft bgs | 70-72 | | KE |
| | 1024 | Grant | SB-6 upper 5' | 71-88 | | |
| | 1025 | school fence | SB-6 " " | 69-71 | | |
| | 1054 | @ excavation | | 70 | | |
| | 1107 | perimeter concrete | excavating SB6@ bg. | 60-75 | | |
| | 1108 | perimeter Washington | @ SB-6, but not excavating | 66-68 | | |
| | 1109 | " " | direct loading to bobcat | 76-79 | | |
| | 1112 | peri along Grant | bobcat stockpiling | 72-78 | | |
| 1114 | ~~1116~~ | ~~@ exc~~ School | actively exc | ~~65~~ 65 | | |
| | 1116 | @ exc. | actively exc | 95-99 | | |
| | 1313 | peri@Washington | ex SB-11, exc. | 73.6-75 | | |
| | 1315 | peri@ Grant | excavating SB-11 | 70-86 | | |
| | 1318 | peri@School | excavating SB-11 | 68-73 | | |
| | 1320 | peri@condos | " " | 65 | | KE |

* Submit copies of logs to Daniel Spencer within 24 hours, if a PEL is exceeded, or personal protective equipment level is upgraded.

## AIR MONITORING LOG

Instrument(s) Used: Make: MIE Model: PDR-1000

| DATE | TIME | LOCATION/SOURCE (Personal/Area Sampling) | WORK ACTIVITY DURING SAMPLING (Be specific) | Measurement (Units) mg/m3 | WHAT DID YOU DO BECAUSE OF THE RESULT? (PPE Change/Activity Change/Nothing Needed) | SAMPLED BY |
|---|---|---|---|---|---|---|
| 8/17/12 | 855 | Perimeter | stand-by; background level | .000 | | KO |
| | 920 | Washington | SB-6 ~3' bgs | .014-.039 | | |
| | 922 | @ Grant, near authorized | SB-6 - upper 5' | .002 | | |
| | 1025 | fence near school | SB-6 | .006 | | |
| | 1054 | @ excavation | moving clean SP | .081 | | |
| | 1105 | perimeter near housing | exc. SB-6 ~8' | .052 | | |
| | 1109 | peri near Washington | @ exc, but not actively exc. | ~~.016~~ .034 | direct loading soil to bobcat | |
| | | peri @ grant @ grant | direct loading to bobcat SP | .017-.032 | | |
| | 1113 | peri - School | bobcat loading SB | .035 | | |
| | 1116 | @ exc | actively excavating | .041 | | |
| | 1313 | peri @ Washington | SB-11 exc, active exc. | .011 | | |
| | 1315 | peri @ grant | " " | .024 | | |
| | 1318 | peri @ school | " " | .022 | | |
| | 1320 | peri @ condos | " " | .011 | | |

* Submit copies of logs to Daniel Spencer within 24 hours, if a PEL is exceeded, or personal protective equipment level is upgraded.

## AIR MONITORING LOG

Instrument(s) Used: Make: PID Model: Rae 3000

| DATE | TIME | LOCATION/SOURCE (Personal/Area Sampling) | WORK ACTIVITY DURING SAMPLING (Be specific) | Measurement (Units) ppm | WHAT DID YOU DO BECAUSE OF THE RESULT? (PPE Change/Activity Change/Nothing Needed) | SAMPLED BY |
|---|---|---|---|---|---|---|
| 8/17/12 | 857 | Perimeter | background | 0.0ppm | no action needed | KC |
| | 921 | Washington | SB-6 exc. | 6.0 | | |
| | 922 | Grant | SB-6 exc upper5' | 0.0 | | |
| | 1026 | School fence | SB-6 exc. | 0.0 | | |
| | 1047 | @SB-6 exc | SB-6 exc | 6.0ppm | | |
| | 1110 | Perimeter cracks | SB-6, near 8' dep | 0.0 | | |
| | 1112 | Washington-Peri | @ exc. but not directly in exc | 0.0 | | |
| | 1115 | grant-Peri | direct loading to bobcat | 0.0 | | |
| | 1115 | school-peri | bobcat loading | 0.0 | | |
| | 1116 | @ exc | see field notes @SB-6 | .3-2.8ppm | | |
| | 1313 | washington | SB-11 exc. | 0.0 | | |
| | 1316 | grant | ↓ | 0.0 | | |
| | 1320 | school | ↓ | 0.0ppm | | |
| ↓ | 1325-1322 | housing/corridor | @ exc SB-11 | 0.0-0.3ppm 0.0ppm | ↓ | ↓ |

* Submit copies of logs to Daniel Spencer within 24 hours, if a PEL is exceeded, or personal protective equipment level is upgraded.

peri = perimeter

## AIR MONITORING LOG

Instrument(s) Used: Make: Noise Dosimeter Model: Quest model m-27

| DATE | TIME | LOCATION/SOURCE (Personal/Area Sampling) | WORK ACTIVITY DURING SAMPLING (Be specific) | Measurement (Units) | WHAT DID YOU DO BECAUSE OF THE RESULT? (PPE Change/Activity Change/Nothing Needed) | SAMPLED BY |
|---|---|---|---|---|---|---|
| 9/24/12 | 930 | ② | backfilling/compacting SB-11 | 75-81 | Nothing, no change warranted | JE |
| | 932 | ③ | | 63-75 | | |
| | 935 | ④ | | 67-77 | | |
| | 937 | ① | | 63-64 | | |
| | 941 | | ② SB-11 during compact | 84-90 | | |
| | 1038 | ② | loading truck | 69-80 | | |
| | 946 | ① | ↓ | 66-75 | | |
| | 1043 | ③ | ↓ | 67-72 | | |
| | 948 | ④ | ↓ | 72-84 | | |
| | 1140 | ④ | Backfilling/compacting SB-6 | 73-78 | | |
| | 1142 | ① | ↓ | 63-73 | | |
| | 1147 | ② | ↓ | 75-92 | | |
| | 1150 | ③ | wind toward schools | 70-79 | | |
| | | | | | | |

* Submit copies of logs to Daniel Spencer within 24 hours, if a PEL is exceeded, or personal protective equipment level is upgraded.

① Washington Ave
② Grant Ave
③ School
④ condos

## AIR MONITORING LOG

Instrument(s) Used: Make: PDR-1000 Model: Mini Rae

| DATE | TIME | LOCATION/SOURCE (Personal/Area Sampling) | WORK ACTIVITY DURING SAMPLING (Be specific) | Measurement (Units) | WHAT DID YOU DO BECAUSE OF THE RESULT? (PPE Change/Activity Change/Nothing Needed) | SAMPLED BY |
|---|---|---|---|---|---|---|
| 8/24/22 | 930 | ② | ② backfilling SB-11 | .060-.081 | No change warranted | KE |
| | 932 | ③ | ③ | .039-.035 | | |
| | 935 | ④ | ④ | .027-.025 | | |
| | 937 | ① | ① | .033-.036 | | |
| | 941 | | @ SB-11 during cuttings | .046 | | |
| | 943 | ②③ | loading truck, wind to Grant | .047 | | |
| | 944 | ① | | .040 | | |
| | 946 | ④ | | .038 | | |
| | 950 | ③ | | | | |
| | 1140 | ④ | Backfilling SB-6 | .055 | | |
| | 1143 | ① | | .055 | | |
| | 1146 | ② | | .073 | | |
| | 1150 | ③ | wind toward schools | .084 | | |
| | | | | | | |

* Submit copies of logs to Daniel Spencer within 24 hours, if a PEL is exceeded, or personal protective equipment level is upgraded.

① along Washington Ave
② along Grant ave
③ school
④ near condos

# APPENDIX C
# Analytical Laboratory Reports

Report of Soil Excavation Activities
Pacific Gas and Electric Company
L105N Property
997 Grant Avenue
San Lorenzo, California
Stantec PN: 185702540.200.0003
September 26, 2012


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 238700**
**ANALYTICAL REPORT**

| | |
|---|---|
| Engineering/Remediation Resource Grp | Project : 2012-099 |
| 4585 Pacheco Blvd. | Location : 997 Grant Avenue, San Lorenzo, CA |
| Martinez, CA 94553 | Level : II |

| Sample ID | Lab ID |
|---|---|
| 2012-099 | 238700-001 |

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 08/16/2012

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **238700** |
| Client: | **Engineering/Remediation Resource Grp** |
| Project: | **2012-099** |
| Location: | **997 Grant Avenue, San Lorenzo, CA** |
| Request Date: | **08/09/12** |
| Samples Received: | **08/09/12** |

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 08/09/12. The sample was received intact.

**Metals (EPA 6010B and EPA 7471A):**
Low recoveries were observed for lead and thallium in the MS/MSD for batch 189317; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. High recoveries were observed for cobalt and nickel in the MSD for batch 189317; the BS/BSD were within limits. High RPD was observed for cobalt in the MS/MSD for batch 189317; the RPD was acceptable in the BS/BSD. No other analytical problems were encountered.

**pH (EPA 9045D):**
No analytical problems were encountered.

**Asbestos PLM (EPA 600/R-93-116):**
Forensic Analytical in Hayward, CA performed the analysis (not NELAP certified). Please see the Forensic Analytical case narrative.

ERRG

Engineering / Remediation Resources Group, Inc.
4585 Pacheco Blvd, Suite 200
Martinez, CA 94553
Phone: (925) 969-0750
Fax: (925) 969-0751

238700

Lab No. _____
Address _____



# Chain-of-Custody Record and Analysis Request

| | |
|---|---|
| **Project Contact (Hardcopy or PDF To):** Erik Brown | **California EDF Report?** ☑ Yes ☐ No<br>**Navy EDD Report?** ☐ Yes ☑ No |
| **Laboratory:** Curtis & Tompkins<br>2323 Fifth Street, Berkeley, CA 94710 | **Electronic Deliverables To (Email Address):** erik.brown@errg.com |
| **Phone No.:** 510-486-0900 / **Fax No.:** 510-486-0532 | **Sampler :** Erik Brown |
| **Project Number:** 2012-099 / **Phase # / Task #** 01.01 | |
| **Project Name:** Stantec San Lorenzo | **Project Address:** 997 Grant Avenue, San Lorenzo, CA |
| **Project Manager:** Erik Brown | |

**Analysis Request**

| | Sample Designation | Sampling Date | Sampling Time | Container: 16 oz. glass | Container | Container | Container | Container | Matrix: Soil | Matrix: Water | Matrix | TPH - purgeables 8015 | TPH - extractables 8015 | VOCs 8260 | SVOCs 8270 | Metals 6010/7471 TTLC | pH | Asbestos by PLM | | | | STD (1 wk) TAT | Number of Containers | Comments | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2012-099 | 8/9/12 | 1040 | 6 | | | | | X | | | | | | | X | X | X | | | | X | | | |
| 2. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Date | Time | Received by: |
|---|---|---|---|
| E B | 8/9/12 | 1125 | Pat Hamilton |
| Relinquished by: | Date | Time | Received by: |
| Relinquished by: | Date | Time | Received by Laboratory: |

**Remarks:**
Run pH, asbestos, metals
HOLD remaining samples for additional analyses

**Bill to:** Engineering / Remediation Resources Group, Inc.
4585 Pacheco Blvd, Suite 200
Martinez, CA 94553

**COOLER RECEIPT CHECKLIST**

Curtis & Tompkins, Ltd.

Login # 238700 Date Received 8/9/12 Number of coolers 0
Client ERRG Project 2012-099

Date Opened 8/9/12 By (print) AM (sign) Adrian Ahmad
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☑ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☑ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☑ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

# California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Project#: | 2012-099 |
| Client: | Engineering/Remediation Resource Grp | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Field ID: | 2012-099 | Diln Fac: | 1.000 |
| Lab ID: | 238700-001 | Sampled: | 08/09/12 |
| Matrix: | Soil | Received: | 08/09/12 |
| Units: | mg/Kg | Analyzed: | 08/14/12 |
| Basis: | as received | | |

| Analyte | Result | RL | Batch# | Prepared | Prep | Analysis |
|---|---|---|---|---|---|---|
| Antimony | 1.5 | 0.49 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Arsenic | 4.2 | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Barium | 12 | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Beryllium | 0.15 | 0.097 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Cadmium | ND | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Chromium | 7.0 | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Cobalt | 13 | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Copper | 31 | 0.25 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Lead | ND | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Mercury | 0.58 | 0.017 | 189437 | 08/14/12 | METHOD | EPA 7471A |
| Molybdenum | ND | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Nickel | 10 | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Selenium | ND | 0.49 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Silver | ND | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Thallium | ND | 0.49 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Vanadium | 100 | 0.24 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |
| Zinc | 47 | 0.97 | 189317 | 08/09/12 | EPA 3050B | EPA 6010B |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | EPA 3050B |
| Project#: | 2012-099 | Analysis: | EPA 6010B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC651176 | Batch#: | 189317 |
| Matrix: | Soil | Prepared: | 08/09/12 |
| Units: | mg/Kg | Analyzed: | 08/10/12 |

| Analyte | Result | RL |
|---|---|---|
| Antimony | ND | 0.50 |
| Arsenic | ND | 0.25 |
| Barium | ND | 0.25 |
| Beryllium | ND | 0.10 |
| Cadmium | ND | 0.25 |
| Chromium | ND | 0.25 |
| Cobalt | ND | 0.25 |
| Copper | ND | 0.26 |
| Lead | ND | 0.25 |
| Molybdenum | ND | 0.25 |
| Nickel | ND | 0.25 |
| Selenium | ND | 0.50 |
| Silver | ND | 0.25 |
| Thallium | ND | 0.50 |
| Vanadium | ND | 0.25 |
| Zinc | ND | 1.0 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | EPA 3050B |
| Project#: | 2012-099 | Analysis: | EPA 6010B |
| Matrix: | Soil | Batch#: | 189317 |
| Units: | mg/Kg | Prepared: | 08/09/12 |
| Diln Fac: | 1.000 | Analyzed: | 08/10/12 |

Type: BS Lab ID: QC651177

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Antimony | 100.0 | 95.71 | 96 | 80-120 |
| Arsenic | 50.00 | 48.26 | 97 | 80-121 |
| Barium | 100.0 | 96.61 | 97 | 80-120 |
| Beryllium | 2.500 | 2.563 | 103 | 80-120 |
| Cadmium | 10.00 | 9.913 | 99 | 80-120 |
| Chromium | 100.0 | 96.28 | 96 | 80-120 |
| Cobalt | 25.00 | 23.92 | 96 | 80-120 |
| Copper | 12.50 | 11.95 | 96 | 80-120 |
| Lead | 100.0 | 93.60 | 94 | 80-120 |
| Molybdenum | 20.00 | 19.70 | 98 | 80-120 |
| Nickel | 25.00 | 23.87 | 95 | 80-120 |
| Selenium | 50.00 | 46.89 | 94 | 80-120 |
| Silver | 10.00 | 9.479 | 95 | 80-120 |
| Thallium | 50.00 | 47.87 | 96 | 80-120 |
| Vanadium | 25.00 | 24.73 | 99 | 80-120 |
| Zinc | 25.00 | 23.89 | 96 | 80-120 |

Type: BSD Lab ID: QC651178

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Antimony | 100.0 | 96.48 | 96 | 80-120 | 1 | 20 |
| Arsenic | 50.00 | 48.51 | 97 | 80-121 | 1 | 20 |
| Barium | 100.0 | 96.51 | 97 | 80-120 | 0 | 20 |
| Beryllium | 2.500 | 2.543 | 102 | 80-120 | 1 | 20 |
| Cadmium | 10.00 | 9.907 | 99 | 80-120 | 0 | 20 |
| Chromium | 100.0 | 95.73 | 96 | 80-120 | 1 | 20 |
| Cobalt | 25.00 | 23.88 | 96 | 80-120 | 0 | 20 |
| Copper | 12.50 | 12.01 | 96 | 80-120 | 1 | 20 |
| Lead | 100.0 | 93.67 | 94 | 80-120 | 0 | 23 |
| Molybdenum | 20.00 | 19.84 | 99 | 80-120 | 1 | 20 |
| Nickel | 25.00 | 23.83 | 95 | 80-120 | 0 | 20 |
| Selenium | 50.00 | 47.25 | 94 | 80-120 | 1 | 20 |
| Silver | 10.00 | 9.402 | 94 | 80-120 | 1 | 20 |
| Thallium | 50.00 | 47.91 | 96 | 80-120 | 0 | 20 |
| Vanadium | 25.00 | 24.64 | 99 | 80-120 | 0 | 20 |
| Zinc | 25.00 | 23.87 | 95 | 80-120 | 0 | 20 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | EPA 3050B |
| Project#: | 2012-099 | Analysis: | EPA 6010B |
| Field ID: | ZZZZZZZZZZ | Batch#: | 189317 |
| MSS Lab ID: | 238683-001 | Sampled: | 08/09/12 |
| Matrix: | Soil | Received: | 08/09/12 |
| Units: | mg/Kg | Prepared: | 08/09/12 |
| Basis: | as received | Analyzed: | 08/10/12 |
| Diln Fac: | 1.000 | | |

Type: MS Lab ID: QC651179

| Analyte | MSS Result | Spiked | Result | %REC | Limits |
|---|---|---|---|---|---|
| Antimony | <0.1528 | 90.91 | 32.40 | 36 | 12-120 |
| Arsenic | 10.03 | 45.45 | 46.74 | 81 | 73-121 |
| Barium | 52.91 | 90.91 | 123.3 | 77 | 51-135 |
| Beryllium | 0.4984 | 2.273 | 2.504 | 88 | 79-120 |
| Cadmium | 0.3492 | 9.091 | 7.981 | 84 | 74-120 |
| Chromium | 57.02 | 90.91 | 134.7 | 85 | 62-124 |
| Cobalt | 17.35 | 22.73 | 32.23 | 66 | 62-120 |
| Copper | 49.22 | 11.36 | 59.63 | 92 NM | 48-150 |
| Lead | 60.85 | 90.91 | 93.98 | 36 * | 58-124 |
| Molybdenum | 0.3645 | 18.18 | 14.68 | 79 | 69-120 |
| Nickel | 58.15 | 22.73 | 77.56 | 85 | 49-135 |
| Selenium | <0.1406 | 45.45 | 32.08 | 71 | 68-120 |
| Silver | 0.7359 | 9.091 | 8.598 | 86 | 76-120 |
| Thallium | <0.1568 | 45.45 | 33.32 | 73 | 68-120 |
| Vanadium | 59.08 | 22.73 | 80.07 | 92 | 54-137 |
| Zinc | 93.57 | 22.73 | 110.4 | 74 NM | 43-147 |

Type: MSD Lab ID: QC651180

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Antimony | 92.59 | 33.58 | 36 | 12-120 | 2 | 36 |
| Arsenic | 46.30 | 51.00 | 88 | 73-121 | 7 | 40 |
| Barium | 92.59 | 135.0 | 89 | 51-135 | 8 | 40 |
| Beryllium | 2.315 | 2.563 | 89 | 79-120 | 1 | 21 |
| Cadmium | 9.259 | 8.442 | 87 | 74-120 | 4 | 20 |
| Chromium | 92.59 | 135.4 | 85 | 62-124 | 1 | 34 |
| Cobalt | 23.15 | 50.57 | 144 * | 62-120 | 43 * | 35 |
| Copper | 11.57 | 63.94 | 127 NM | 48-150 | 7 | 39 |
| Lead | 92.59 | 94.58 | 36 * | 58-124 | 0 | 44 |
| Molybdenum | 18.52 | 15.47 | 82 | 69-120 | 3 | 25 |
| Nickel | 23.15 | 99.67 | 179 * | 49-135 | 24 | 37 |
| Selenium | 46.30 | 32.85 | 71 | 68-120 | 1 | 29 |
| Silver | 9.259 | 8.918 | 88 | 76-120 | 2 | 29 |
| Thallium | 46.30 | 31.02 | 67 * | 68-120 | 9 | 21 |
| Vanadium | 23.15 | 81.43 | 97 | 54-137 | 1 | 31 |
| Zinc | 23.15 | 126.1 | 141 NM | 43-147 | 13 | 41 |

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | METHOD |
| Project#: | 2012-099 | Analysis: | EPA 7471A |
| Analyte: | Mercury | Diln Fac: | 1.000 |
| Type: | BLANK | Batch#: | 189437 |
| Lab ID: | QC651675 | Prepared: | 08/14/12 |
| Matrix: | Soil | Analyzed: | 08/14/12 |
| Units: | mg/Kg | | |

| Result | RL |
|---|---|
| ND | 0.017 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | METHOD |
| Project#: | 2012-099 | Analysis: | EPA 7471A |
| Analyte: | Mercury | Batch#: | 189437 |
| Matrix: | Soil | Prepared: | 08/14/12 |
| Units: | mg/Kg | Analyzed: | 08/14/12 |
| Diln Fac: | 1.000 | | |

| Type | Lab ID | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|---|
| BS | QC651676 | 0.2083 | 0.2408 | 116 | 80-120 | | |
| BSD | QC651677 | 0.2083 | 0.2401 | 115 | 80-120 | 0 | 20 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## California Title 22 Metals

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | METHOD |
| Project#: | 2012-099 | Analysis: | EPA 7471A |
| Analyte: | Mercury | Diln Fac: | 1.000 |
| Field ID: | ZZZZZZZZZZ | Batch#: | 189437 |
| MSS Lab ID: | 238743-001 | Sampled: | 08/10/12 |
| Matrix: | Soil | Received: | 08/10/12 |
| Units: | mg/Kg | Prepared: | 08/14/12 |
| Basis: | as received | Analyzed: | 08/14/12 |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|---|---|
| MS | QC651678 | 0.04749 | 0.2049 | 0.2888 | 118 | 76-138 | | |
| MSD | QC651679 | | 0.2083 | 0.2952 | 119 | 76-138 | 1 | 42 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# pH

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | METHOD |
| Project#: | 2012-099 | Analysis: | EPA 9045D |
| Analyte: | pH | Batch#: | 189389 |
| Field ID: | 2012-099 | Sampled: | 08/09/12 10:40 |
| Lab ID: | 238700-001 | Received: | 08/09/12 |
| Matrix: | Soil | Prepared: | 08/13/12 11:30 |
| Units: | SU | Analyzed: | 08/13/12 13:20 |
| Diln Fac: | 1.000 | | |

| Result | RL |
|---|---|
| 7.9 | 1.0 |

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## pH

| | | | |
|---|---|---|---|
| Lab #: | 238700 | Location: | 997 Grant Avenue, San Lorenzo, CA |
| Client: | Engineering/Remediation Resource Grp | Prep: | METHOD |
| Project#: | 2012-099 | Analysis: | EPA 9045D |
| Analyte: | pH | Diln Fac: | 1.000 |
| Field ID: | ZZZZZZZZZZ | Batch#: | 189389 |
| Type: | SDUP | Sampled: | 08/06/12 11:35 |
| MSS Lab ID: | 238616-024 | Received: | 08/07/12 |
| Lab ID: | QC651482 | Prepared: | 08/13/12 11:30 |
| Matrix: | Soil | Analyzed: | 08/13/12 13:20 |
| Units: | SU | | |

| MSS Result | Result | RL | RPD | Lim |
|---|---|---|---|---|
| 6.590 | 6.580 | 1.000 | 0 | 20 |

RL= Reporting Limit
RPD= Relative Percent Difference

# Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Curtis & Tompkins Ltd
Project Manager
2323 Fifth St.

Berkeley, CA 94710

**Client ID:** 1137
**Report Number:** B167046
**Date Received:** 08/10/12
**Date Analyzed:** 08/15/12
**Date Printed:** 08/15/12
**First Reported:** 08/15/12

**Job ID/Site:** 238700 - 997 Grant Avenue, San Lorenzo, CA

**Date(s) Collected:**

**FALI Job ID:** 1137
**Total Samples Submitted:** 1
**Total Samples Analyzed:** 1

| Sample ID | Lab Number | Asbestos Type | Percent in Layer | Asbestos Type | Percent in Layer | Asbestos Type | Percent in Layer |
|---|---|---|---|---|---|---|---|
| **2012-099** | 11288051 | | | | | | |
| Layer: Green Soil | | | **ND** | | | | |
| Total Composite Values of Fibrous Components: | | **Asbestos (ND)** | | | | | |

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.





3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

**Laboratory Job Number 238700**

**Subcontracted Products**

**Forensic Analytical**

# Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Curtis & Tompkins Ltd
Project Manager
2323 Fifth St.

Berkeley, CA 94710

**Client ID:** 1137
**Report Number:** B167046
**Date Received:** 08/10/12
**Date Analyzed:** 08/15/12
**Date Printed:** 08/15/12
**First Reported:** 08/15/12

**Job ID/Site:** 238700 - 997 Grant Avenue, San Lorenzo, CA

**Date(s) Collected:**

**FALI Job ID:** 1137
**Total Samples Submitted:** 1
**Total Samples Analyzed:** 1

| Sample ID | Lab Number | Asbestos Type | Percent in Layer | Asbestos Type | Percent in Layer | Asbestos Type | Percent in Layer |
|---|---|---|---|---|---|---|---|
| **2012-099** | 11288051 | | | | | | |
| Layer: Green Soil | | | **ND** | | | | |
| Total Composite Values of Fibrous Components: | | **Asbestos (ND)** | | | | | |

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.





3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-44026-1
Client Project/Site: PGE San Lorenzo

For:
Stantec Consulting Corp.
57 Lafayette Circle
2nd Floor
Lafayette, California 94549-4321

Attn: Mr. Greg Hoehn

*Authorized for release by:*
*8/20/2012 12:38:30 PM*

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com

# Table of Contents

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| F | MS or MSD exceeds the control limits |
| F | RPD of the MS and MSD exceeds the control limits |
| * | RPD of the LCS and LCSD exceeds the control limits |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 720-44026-1

### Laboratory: TestAmerica Pleasanton

**Narrative**

**Job Narrative**
**720-44026-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 8/17/2012 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 11.8º C.

Except:

Samples starting with the ID SB11 and ends with 3.5' on the sample container ends with 3'. No 3.5'.

**GC/MS VOA**
Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries and %RPD for batch #119325 were outside control limits. This is attributed to matrix interferences.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample 44026-1 and 3 is due to non-target compounds

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample 44026-6 and 9. The sample(s) shows evidence of matrix interference and confirmed by reanalysis.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample 43983-20ms and msd. The sample(s) shows evidence of matrix interference.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries and %RPD for batch #119354 were outside control limits. This is attributed to matrix interferences.

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch #119354 exceeded control limits for the following analytes: Acetone, MIBK, 2-Hexanone and MEK.

No other analytical or quality issues were noted.

**GC VOA**
No analytical or quality issues were noted.

**GC Semi VOA**
No analytical or quality issues were noted.

**Organic Prep**
No analytical or quality issues were noted.

# Detection Summary

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## Client Sample ID: SB6-EXC-W-10' — Lab Sample ID: 720-44026-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 8.3 | | 5.0 | | ug/Kg | 1 | | 8260B | Total/NA |
| Gasoline Range Organics (GRO) -C5-C12 | 320 | | 250 | | ug/Kg | 1 | | 8260B | Total/NA |

## Client Sample ID: SB6-EXC-N-10' — Lab Sample ID: 720-44026-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 4.9 | | 4.7 | | ug/Kg | 1 | | 8260B | Total/NA |

## Client Sample ID: SB6-EXC-S-10' — Lab Sample ID: 720-44026-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 6.2 | | 5.0 | | ug/Kg | 1 | | 8260B | Total/NA |
| Gasoline Range Organics (GRO) -C5-C12 | 430 | | 250 | | ug/Kg | 1 | | 8260B | Total/NA |

## Client Sample ID: SB6-EXC-E-10' — Lab Sample ID: 720-44026-4

No Detections

## Client Sample ID: SB11-EXC-B-5' — Lab Sample ID: 720-44026-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 1.5 | | 0.99 | | mg/Kg | 1 | | 8015B | Silica Gel Cleanup |

## Client Sample ID: SB11-EXC-W-3.5' — Lab Sample ID: 720-44026-6

No Detections

## Client Sample ID: SB11-EXC-N-3.5' — Lab Sample ID: 720-44026-7

No Detections

## Client Sample ID: SB11-EXC-E-3.5' — Lab Sample ID: 720-44026-8

No Detections

## Client Sample ID: SB11-EXC-S-3.5' — Lab Sample ID: 720-44026-9

No Detections

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB6-EXC-W-10'**
**Date Collected: 08/17/12 11:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-1**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Acetone | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Benzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Dichlorobromomethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Bromobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Chlorobromomethane | ND | | 20 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Bromoform | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Bromomethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 2-Butanone (MEK) | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| n-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| sec-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| **tert-Butylbenzene** | **8.3** | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Carbon disulfide | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Carbon tetrachloride | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Chlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Chloroethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Chloroform | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Chloromethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Chlorodibromomethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Ethylene Dibromide | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Dibromomethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Dichlorodifluoromethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Ethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 2-Hexanone | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Isopropylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Naphthalene | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| N-Propylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Styrene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Tetrachloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-EXC-W-10'**
**Date Collected: 08/17/12 11:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-1**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Trichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Vinyl acetate | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Vinyl chloride | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| Xylenes, Total | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |
| **Gasoline Range Organics (GRO) -C5-C12** | **320** | | 250 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 22:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *102* | | *45 - 131* | *08/17/12 20:43* | *08/17/12 22:41* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *60 - 140* | *08/17/12 20:43* | *08/17/12 22:41* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *58 - 140* | *08/17/12 20:43* | *08/17/12 22:41* | *1* |

**Client Sample ID: SB6-EXC-N-10'**
**Date Collected: 08/17/12 11:40**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-2**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Acetone | ND | | 47 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Benzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Dichlorobromomethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Bromobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Chlorobromomethane | ND | | 19 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Bromoform | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Bromomethane | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 2-Butanone (MEK) | ND | | 47 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| n-Butylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| sec-Butylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| **tert-Butylbenzene** | **4.9** | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Carbon disulfide | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Carbon tetrachloride | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Chlorobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Chloroethane | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Chloroform | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Chloromethane | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 2-Chlorotoluene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 4-Chlorotoluene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Chlorodibromomethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,3-Dichloropropane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-EXC-N-10'**
**Date Collected: 08/17/12 11:40**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-2**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Ethylene Dibromide | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Dibromomethane | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Dichlorodifluoromethane | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1-Dichloroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2-Dichloroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1-Dichloroethene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2-Dichloropropane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Ethylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Hexachlorobutadiene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 2-Hexanone | ND | | 47 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Isopropylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 4-Isopropyltoluene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Methylene Chloride | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 47 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Naphthalene | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| N-Propylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Styrene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Tetrachloroethene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Toluene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Trichloroethene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Trichlorofluoromethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Vinyl acetate | ND | | 47 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Vinyl chloride | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Xylenes, Total | ND | | 9.4 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| 2,2-Dichloropropane | ND | | 4.7 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 230 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *98* | | *45 - 131* | *08/17/12 20:43* | *08/17/12 23:10* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *60 - 140* | *08/17/12 20:43* | *08/17/12 23:10* | *1* |
| *Toluene-d8 (Surr)* | *106* | | *58 - 140* | *08/17/12 20:43* | *08/17/12 23:10* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB6-EXC-S-10'**
**Date Collected: 08/17/12 11:50**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-3**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Acetone | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Benzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Dichlorobromomethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Bromobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Chlorobromomethane | ND | | 20 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Bromoform | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Bromomethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 2-Butanone (MEK) | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| n-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| sec-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| **tert-Butylbenzene** | **6.2** | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Carbon disulfide | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Carbon tetrachloride | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Chlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Chloroethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Chloroform | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Chloromethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Chlorodibromomethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Ethylene Dibromide | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Dibromomethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Dichlorodifluoromethane | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Ethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 2-Hexanone | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Isopropylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Naphthalene | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| N-Propylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Styrene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Tetrachloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-EXC-S-10'**
**Date Collected: 08/17/12 11:50**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-3**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Trichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Vinyl acetate | ND | | 50 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Vinyl chloride | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| Xylenes, Total | ND | | 10 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |
| **Gasoline Range Organics (GRO) -C5-C12** | **430** | | 250 | | ug/Kg | | 08/17/12 20:43 | 08/17/12 23:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *103* | | *45 - 131* | *08/17/12 20:43* | *08/17/12 23:39* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *60 - 140* | *08/17/12 20:43* | *08/17/12 23:39* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *58 - 140* | *08/17/12 20:43* | *08/17/12 23:39* | *1* |

**Client Sample ID: SB6-EXC-E-10'**
**Date Collected: 08/17/12 12:00**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-4**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Acetone | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Benzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Dichlorobromomethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Bromobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Chlorobromomethane | ND | | 19 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Bromoform | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Bromomethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 2-Butanone (MEK) | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| n-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| sec-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| tert-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Carbon disulfide | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Carbon tetrachloride | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Chlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Chloroethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Chloroform | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Chloromethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 2-Chlorotoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 4-Chlorotoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Chlorodibromomethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,3-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-EXC-E-10'**
**Date Collected: 08/17/12 12:00**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-4**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Ethylene Dibromide | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Dibromomethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Dichlorodifluoromethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1-Dichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2-Dichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Ethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Hexachlorobutadiene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 2-Hexanone | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Isopropylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 4-Isopropyltoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Methylene Chloride | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Naphthalene | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| N-Propylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Styrene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Tetrachloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Toluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Trichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Trichlorofluoromethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Vinyl acetate | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Vinyl chloride | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Xylenes, Total | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| 2,2-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 240 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *95* | | *45 - 131* | *08/17/12 20:43* | *08/18/12 00:08* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *60 - 140* | *08/17/12 20:43* | *08/18/12 00:08* | *1* |
| *Toluene-d8 (Surr)* | *106* | | *58 - 140* | *08/17/12 20:43* | *08/18/12 00:08* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB11-EXC-B-5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-5**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Acetone | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Benzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Dichlorobromomethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Bromobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Chlorobromomethane | ND | | 19 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Bromoform | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Bromomethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 2-Butanone (MEK) | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| n-Butylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| sec-Butylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| tert-Butylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Carbon disulfide | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Carbon tetrachloride | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Chlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Chloroethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Chloroform | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Chloromethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 2-Chlorotoluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 4-Chlorotoluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Chlorodibromomethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,3-Dichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1-Dichloropropene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Ethylene Dibromide | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Dibromomethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Dichlorodifluoromethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1-Dichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2-Dichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1-Dichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2-Dichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Ethylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Hexachlorobutadiene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 2-Hexanone | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Isopropylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 4-Isopropyltoluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Methylene Chloride | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Naphthalene | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| N-Propylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Styrene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Tetrachloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-EXC-B-5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-5**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Trichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Trichlorofluoromethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Vinyl acetate | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Vinyl chloride | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Xylenes, Total | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| 2,2-Dichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 240 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 00:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *79* | | *45 - 131* | *08/17/12 20:43* | *08/18/12 00:37* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *60 - 140* | *08/17/12 20:43* | *08/18/12 00:37* | *1* |
| *Toluene-d8 (Surr)* | *96* | | *58 - 140* | *08/17/12 20:43* | *08/18/12 00:37* | *1* |

**Client Sample ID: SB11-EXC-W-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-6**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Acetone | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Benzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Dichlorobromomethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Bromobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Chlorobromomethane | ND | | 20 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Bromoform | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Bromomethane | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 2-Butanone (MEK) | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| n-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| sec-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| tert-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Carbon disulfide | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Carbon tetrachloride | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Chlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Chloroethane | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Chloroform | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Chloromethane | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 2-Chlorotoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 4-Chlorotoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Chlorodibromomethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,3-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-EXC-W-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-6**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Ethylene Dibromide | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Dibromomethane | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Dichlorodifluoromethane | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1-Dichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2-Dichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Ethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Hexachlorobutadiene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 2-Hexanone | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Isopropylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 4-Isopropyltoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Methylene Chloride | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Naphthalene | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| N-Propylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Styrene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Tetrachloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Toluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Trichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Trichlorofluoromethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Vinyl acetate | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Vinyl chloride | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Xylenes, Total | ND | | 9.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| 2,2-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 250 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 01:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *69* | | *45 - 131* | *08/17/12 20:43* | *08/18/12 01:06* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *60 - 140* | *08/17/12 20:43* | *08/18/12 01:06* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *58 - 140* | *08/17/12 20:43* | *08/18/12 01:06* | *1* |

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB11-EXC-N-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Acetone | ND | * | 46 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Benzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Dichlorobromomethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Bromobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Chlorobromomethane | ND | | 18 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Bromoform | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Bromomethane | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 2-Butanone (MEK) | ND | * | 46 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| n-Butylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| sec-Butylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| tert-Butylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Carbon disulfide | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Carbon tetrachloride | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Chlorobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Chloroethane | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Chloroform | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Chloromethane | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 2-Chlorotoluene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 4-Chlorotoluene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Chlorodibromomethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,3-Dichloropropane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1-Dichloropropene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Ethylene Dibromide | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Dibromomethane | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Dichlorodifluoromethane | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1-Dichloroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2-Dichloroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1-Dichloroethene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2-Dichloropropane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Ethylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Hexachlorobutadiene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 2-Hexanone | ND | * | 46 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Isopropylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 4-Isopropyltoluene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Methylene Chloride | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | * | 46 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Naphthalene | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| N-Propylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Styrene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Tetrachloroethene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-EXC-N-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Trichloroethene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Trichlorofluoromethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Vinyl acetate | ND | | 46 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Vinyl chloride | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Xylenes, Total | ND | | 9.1 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| 2,2-Dichloropropane | ND | | 4.6 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 230 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 15:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *97* | | *45 - 131* | *08/18/12 08:09* | *08/18/12 15:29* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *60 - 140* | *08/18/12 08:09* | *08/18/12 15:29* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *58 - 140* | *08/18/12 08:09* | *08/18/12 15:29* | *1* |

**Client Sample ID: SB11-EXC-E-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-8**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Acetone | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Benzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Dichlorobromomethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Bromobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Chlorobromomethane | ND | | 19 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Bromoform | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Bromomethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 2-Butanone (MEK) | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| n-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| sec-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| tert-Butylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Carbon disulfide | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Carbon tetrachloride | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Chlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Chloroethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Chloroform | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Chloromethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 2-Chlorotoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 4-Chlorotoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Chlorodibromomethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,3-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-EXC-E-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-8**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Ethylene Dibromide | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Dibromomethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Dichlorodifluoromethane | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1-Dichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2-Dichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Ethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Hexachlorobutadiene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 2-Hexanone | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Isopropylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 4-Isopropyltoluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Methylene Chloride | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Naphthalene | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| N-Propylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Styrene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Tetrachloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Toluene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Trichloroethene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Trichlorofluoromethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Vinyl acetate | ND | | 49 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Vinyl chloride | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Xylenes, Total | ND | | 9.7 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| 2,2-Dichloropropane | ND | | 4.9 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 240 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *89* | | *45 - 131* | *08/17/12 20:43* | *08/18/12 02:05* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *60 - 140* | *08/17/12 20:43* | *08/18/12 02:05* | *1* |
| *Toluene-d8 (Surr)* | *96* | | *58 - 140* | *08/17/12 20:43* | *08/18/12 02:05* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB11-EXC-S-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-9**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Acetone | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Benzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Dichlorobromomethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Bromobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Chlorobromomethane | ND | | 19 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Bromoform | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Bromomethane | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 2-Butanone (MEK) | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| n-Butylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| sec-Butylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| tert-Butylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Carbon disulfide | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Carbon tetrachloride | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Chlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Chloroethane | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Chloroform | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Chloromethane | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 2-Chlorotoluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 4-Chlorotoluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Chlorodibromomethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2-Dichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,3-Dichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,4-Dichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,3-Dichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1-Dichloropropene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Ethylene Dibromide | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Dibromomethane | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Dichlorodifluoromethane | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1-Dichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2-Dichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1-Dichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| cis-1,2-Dichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| trans-1,2-Dichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2-Dichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| cis-1,3-Dichloropropene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Ethylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Hexachlorobutadiene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 2-Hexanone | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Isopropylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 4-Isopropyltoluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Methylene Chloride | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Naphthalene | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| N-Propylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Styrene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Tetrachloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-EXC-S-3.5'**
**Date Collected: 08/17/12 13:30**
**Date Received: 08/17/12 14:55**

**Lab Sample ID: 720-44026-9**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1,1-Trichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1,2-Trichloroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Trichloroethene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Trichlorofluoromethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2,3-Trichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Vinyl acetate | ND | | 48 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Vinyl chloride | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Xylenes, Total | ND | | 9.5 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| 2,2-Dichloropropane | ND | | 4.8 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 240 | | ug/Kg | | 08/17/12 20:43 | 08/18/12 02:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *70* | | *45 - 131* | *08/17/12 20:43* | *08/18/12 02:34* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *110* | | *60 - 140* | *08/17/12 20:43* | *08/18/12 02:34* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *58 - 140* | *08/17/12 20:43* | *08/18/12 02:34* | *1* |

## Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

**Client Sample ID: SB11-EXC-B-5'** — **Lab Sample ID: 720-44026-5**
**Date Collected: 08/17/12 13:30** — **Matrix: Solid**
**Date Received: 08/17/12 14:55**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 1.5 | | 0.99 | | mg/Kg | | 08/17/12 22:12 | 08/18/12 14:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Capric Acid (Surr)* | *0.002* | | *0 - 1* | *08/17/12 22:12* | *08/18/12 14:51* | *1* |
| *p-Terphenyl* | *74* | | *38 - 148* | *08/17/12 22:12* | *08/18/12 14:51* | *1* |

**Client Sample ID: SB11-EXC-W-3.5'** — **Lab Sample ID: 720-44026-6**
**Date Collected: 08/17/12 13:30** — **Matrix: Solid**
**Date Received: 08/17/12 14:55**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 0.99 | | mg/Kg | | 08/17/12 22:12 | 08/18/12 16:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Capric Acid (Surr)* | *0.02* | | *0 - 1* | *08/17/12 22:12* | *08/18/12 16:05* | *1* |
| *p-Terphenyl* | *77* | | *38 - 148* | *08/17/12 22:12* | *08/18/12 16:05* | *1* |

**Client Sample ID: SB11-EXC-N-3.5'** — **Lab Sample ID: 720-44026-7**
**Date Collected: 08/17/12 13:30** — **Matrix: Solid**
**Date Received: 08/17/12 14:55**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 1.0 | | mg/Kg | | 08/17/12 22:12 | 08/18/12 16:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Capric Acid (Surr)* | *0.004* | | *0 - 1* | *08/17/12 22:12* | *08/18/12 16:30* | *1* |
| *p-Terphenyl* | *80* | | *38 - 148* | *08/17/12 22:12* | *08/18/12 16:30* | *1* |

**Client Sample ID: SB11-EXC-E-3.5'** — **Lab Sample ID: 720-44026-8**
**Date Collected: 08/17/12 13:30** — **Matrix: Solid**
**Date Received: 08/17/12 14:55**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 0.98 | | mg/Kg | | 08/17/12 22:12 | 08/18/12 16:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Capric Acid (Surr)* | *0.01* | | *0 - 1* | *08/17/12 22:12* | *08/18/12 16:54* | *1* |
| *p-Terphenyl* | *81* | | *38 - 148* | *08/17/12 22:12* | *08/18/12 16:54* | *1* |

**Client Sample ID: SB11-EXC-S-3.5'** — **Lab Sample ID: 720-44026-9**
**Date Collected: 08/17/12 13:30** — **Matrix: Solid**
**Date Received: 08/17/12 14:55**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 0.99 | | mg/Kg | | 08/17/12 22:12 | 08/18/12 17:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Capric Acid (Surr)* | *0.004* | | *0 - 1* | *08/17/12 22:12* | *08/18/12 17:19* | *1* |
| *p-Terphenyl* | *64* | | *38 - 148* | *08/17/12 22:12* | *08/18/12 17:19* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 720-119340/1-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Acetone | ND | | 50 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Benzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Dichlorobromomethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Bromobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Chlorobromomethane | ND | | 20 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Bromoform | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Bromomethane | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 2-Butanone (MEK) | ND | | 50 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| n-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| sec-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| tert-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Carbon disulfide | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Carbon tetrachloride | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Chlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Chloroethane | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Chloroform | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Chloromethane | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Chlorodibromomethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Ethylene Dibromide | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Dibromomethane | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Dichlorodifluoromethane | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Ethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 2-Hexanone | ND | | 50 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Isopropylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 50 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Naphthalene | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| N-Propylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Styrene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 720-119340/1-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Tetrachloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Toluene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Trichloroethene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Vinyl acetate | ND | | 50 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Vinyl chloride | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Xylenes, Total | ND | | 10 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 250 | | ug/Kg | | 08/17/12 18:00 | 08/17/12 19:17 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *99* | | *45 - 131* | *08/17/12 18:00* | *08/17/12 19:17* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *110* | | *60 - 140* | *08/17/12 18:00* | *08/17/12 19:17* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *58 - 140* | *08/17/12 18:00* | *08/17/12 19:17* | *1* |

**Lab Sample ID: LCS 720-119340/2-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 50.0 | 54.8 | | ug/Kg | | 110 | 70 - 144 |
| Acetone | 250 | 189 | | ug/Kg | | 75 | 30 - 162 |
| Benzene | 50.0 | 54.3 | | ug/Kg | | 109 | 70 - 130 |
| Dichlorobromomethane | 50.0 | 57.7 | | ug/Kg | | 115 | 70 - 131 |
| Bromobenzene | 50.0 | 53.9 | | ug/Kg | | 108 | 70 - 130 |
| Chlorobromomethane | 50.0 | 57.6 | | ug/Kg | | 115 | 70 - 130 |
| Bromoform | 50.0 | 55.8 | | ug/Kg | | 112 | 59 - 158 |
| Bromomethane | 50.0 | 53.0 | | ug/Kg | | 106 | 59 - 132 |
| 2-Butanone (MEK) | 250 | 227 | | ug/Kg | | 91 | 53 - 124 |
| n-Butylbenzene | 50.0 | 60.5 | | ug/Kg | | 121 | 70 - 142 |
| sec-Butylbenzene | 50.0 | 55.4 | | ug/Kg | | 111 | 70 - 136 |
| tert-Butylbenzene | 50.0 | 56.9 | | ug/Kg | | 114 | 70 - 130 |
| Carbon disulfide | 50.0 | 58.0 | | ug/Kg | | 116 | 60 - 140 |
| Carbon tetrachloride | 50.0 | 56.4 | | ug/Kg | | 113 | 70 - 138 |
| Chlorobenzene | 50.0 | 52.3 | | ug/Kg | | 105 | 70 - 130 |
| Chloroethane | 50.0 | 54.7 | | ug/Kg | | 109 | 65 - 130 |
| Chloroform | 50.0 | 53.2 | | ug/Kg | | 106 | 77 - 127 |
| Chloromethane | 50.0 | 46.7 | | ug/Kg | | 93 | 55 - 140 |
| 2-Chlorotoluene | 50.0 | 58.8 | | ug/Kg | | 118 | 70 - 138 |
| 4-Chlorotoluene | 50.0 | 58.8 | | ug/Kg | | 118 | 70 - 136 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 720-119340/2-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Chlorodibromomethane | 50.0 | 55.1 | | ug/Kg | | 110 | 70 - 146 |
| 1,2-Dichlorobenzene | 50.0 | 54.4 | | ug/Kg | | 109 | 70 - 130 |
| 1,3-Dichlorobenzene | 50.0 | 55.4 | | ug/Kg | | 111 | 70 - 131 |
| 1,4-Dichlorobenzene | 50.0 | 54.1 | | ug/Kg | | 108 | 70 - 130 |
| 1,3-Dichloropropane | 50.0 | 54.0 | | ug/Kg | | 108 | 70 - 140 |
| 1,1-Dichloropropene | 50.0 | 61.9 | | ug/Kg | | 124 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 50.0 | 56.1 | | ug/Kg | | 112 | 60 - 145 |
| Ethylene Dibromide | 50.0 | 58.9 | | ug/Kg | | 118 | 70 - 140 |
| Dibromomethane | 50.0 | 54.2 | | ug/Kg | | 108 | 70 - 139 |
| Dichlorodifluoromethane | 50.0 | 39.8 | | ug/Kg | | 80 | 37 - 158 |
| 1,1-Dichloroethane | 50.0 | 53.2 | | ug/Kg | | 106 | 70 - 130 |
| 1,2-Dichloroethane | 50.0 | 53.4 | | ug/Kg | | 107 | 70 - 130 |
| 1,1-Dichloroethene | 50.0 | 56.3 | | ug/Kg | | 113 | 76 - 122 |
| cis-1,2-Dichloroethene | 50.0 | 56.3 | | ug/Kg | | 113 | 70 - 138 |
| trans-1,2-Dichloroethene | 50.0 | 55.8 | | ug/Kg | | 112 | 67 - 130 |
| 1,2-Dichloropropane | 50.0 | 52.9 | | ug/Kg | | 106 | 73 - 127 |
| cis-1,3-Dichloropropene | 50.0 | 56.9 | | ug/Kg | | 114 | 68 - 147 |
| trans-1,3-Dichloropropene | 50.0 | 54.4 | | ug/Kg | | 109 | 70 - 136 |
| Ethylbenzene | 50.0 | 55.3 | | ug/Kg | | 111 | 80 - 137 |
| Hexachlorobutadiene | 50.0 | 58.8 | | ug/Kg | | 118 | 70 - 132 |
| 2-Hexanone | 250 | 218 | | ug/Kg | | 87 | 44 - 133 |
| Isopropylbenzene | 50.0 | 57.7 | | ug/Kg | | 115 | 88 - 128 |
| 4-Isopropyltoluene | 50.0 | 57.5 | | ug/Kg | | 115 | 70 - 133 |
| Methylene Chloride | 50.0 | 53.3 | | ug/Kg | | 107 | 70 - 134 |
| 4-Methyl-2-pentanone (MIBK) | 250 | 248 | | ug/Kg | | 99 | 60 - 160 |
| Naphthalene | 50.0 | 53.7 | | ug/Kg | | 107 | 60 - 147 |
| N-Propylbenzene | 50.0 | 55.8 | | ug/Kg | | 112 | 70 - 130 |
| Styrene | 50.0 | 53.3 | | ug/Kg | | 107 | 70 - 130 |
| 1,1,1,2-Tetrachloroethane | 50.0 | 54.9 | | ug/Kg | | 110 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 50.0 | 54.1 | | ug/Kg | | 108 | 70 - 146 |
| Tetrachloroethene | 50.0 | 56.1 | | ug/Kg | | 112 | 70 - 132 |
| Toluene | 50.0 | 54.3 | | ug/Kg | | 109 | 80 - 128 |
| 1,2,3-Trichlorobenzene | 50.0 | 58.1 | | ug/Kg | | 116 | 60 - 140 |
| 1,2,4-Trichlorobenzene | 50.0 | 58.0 | | ug/Kg | | 116 | 60 - 140 |
| 1,1,1-Trichloroethane | 50.0 | 54.7 | | ug/Kg | | 109 | 70 - 130 |
| 1,1,2-Trichloroethane | 50.0 | 53.7 | | ug/Kg | | 107 | 70 - 130 |
| Trichloroethene | 50.0 | 55.6 | | ug/Kg | | 111 | 70 - 133 |
| Trichlorofluoromethane | 50.0 | 51.1 | | ug/Kg | | 102 | 60 - 140 |
| 1,2,3-Trichloropropane | 50.0 | 53.7 | | ug/Kg | | 107 | 70 - 146 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50.0 | 53.3 | | ug/Kg | | 107 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 50.0 | 54.9 | | ug/Kg | | 110 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 50.0 | 55.7 | | ug/Kg | | 111 | 70 - 131 |
| Vinyl acetate | 50.0 | 52.8 | | ug/Kg | | 106 | 38 - 176 |
| Vinyl chloride | 50.0 | 46.0 | | ug/Kg | | 92 | 58 - 125 |
| m-Xylene & p-Xylene | 100 | 120 | | ug/Kg | | 120 | 70 - 146 |
| o-Xylene | 50.0 | 56.0 | | ug/Kg | | 112 | 70 - 140 |
| 2,2-Dichloropropane | 50.0 | 58.9 | | ug/Kg | | 118 | 70 - 162 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 720-119340/2-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *4-Bromofluorobenzene* | *111* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *107* | | *58 - 140* |

**Lab Sample ID: LCS 720-119340/4-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) -C5-C12 | | | 1000 | 960 | | ug/Kg | | 96 | 61 - 128 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *4-Bromofluorobenzene* | *109* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *111* | | *58 - 140* |

**Lab Sample ID: LCSD 720-119340/3-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | | | 50.0 | 59.5 | | ug/Kg | | 119 | 70 - 144 | 8 | 20 |
| Acetone | | | 250 | 227 | | ug/Kg | | 91 | 30 - 162 | 19 | 30 |
| Benzene | | | 50.0 | 54.9 | | ug/Kg | | 110 | 70 - 130 | 1 | 20 |
| Dichlorobromomethane | | | 50.0 | 59.7 | | ug/Kg | | 119 | 70 - 131 | 3 | 20 |
| Bromobenzene | | | 50.0 | 53.9 | | ug/Kg | | 108 | 70 - 130 | 0 | 20 |
| Chlorobromomethane | | | 50.0 | 60.2 | | ug/Kg | | 120 | 70 - 130 | 4 | 20 |
| Bromoform | | | 50.0 | 60.4 | | ug/Kg | | 121 | 59 - 158 | 8 | 20 |
| Bromomethane | | | 50.0 | 54.2 | | ug/Kg | | 108 | 59 - 132 | 2 | 20 |
| 2-Butanone (MEK) | | | 250 | 252 | | ug/Kg | | 101 | 53 - 124 | 10 | 20 |
| n-Butylbenzene | | | 50.0 | 59.5 | | ug/Kg | | 119 | 70 - 142 | 2 | 20 |
| sec-Butylbenzene | | | 50.0 | 53.9 | | ug/Kg | | 108 | 70 - 136 | 3 | 20 |
| tert-Butylbenzene | | | 50.0 | 55.8 | | ug/Kg | | 112 | 70 - 130 | 2 | 20 |
| Carbon disulfide | | | 50.0 | 56.2 | | ug/Kg | | 112 | 60 - 140 | 3 | 20 |
| Carbon tetrachloride | | | 50.0 | 56.0 | | ug/Kg | | 112 | 70 - 138 | 1 | 20 |
| Chlorobenzene | | | 50.0 | 53.3 | | ug/Kg | | 107 | 70 - 130 | 2 | 20 |
| Chloroethane | | | 50.0 | 53.3 | | ug/Kg | | 107 | 65 - 130 | 3 | 20 |
| Chloroform | | | 50.0 | 54.0 | | ug/Kg | | 108 | 77 - 127 | 1 | 20 |
| Chloromethane | | | 50.0 | 45.6 | | ug/Kg | | 91 | 55 - 140 | 2 | 20 |
| 2-Chlorotoluene | | | 50.0 | 57.7 | | ug/Kg | | 115 | 70 - 138 | 2 | 20 |
| 4-Chlorotoluene | | | 50.0 | 58.6 | | ug/Kg | | 117 | 70 - 136 | 0 | 20 |
| Chlorodibromomethane | | | 50.0 | 58.0 | | ug/Kg | | 116 | 70 - 146 | 5 | 20 |
| 1,2-Dichlorobenzene | | | 50.0 | 55.0 | | ug/Kg | | 110 | 70 - 130 | 1 | 20 |
| 1,3-Dichlorobenzene | | | 50.0 | 55.9 | | ug/Kg | | 112 | 70 - 131 | 1 | 20 |
| 1,4-Dichlorobenzene | | | 50.0 | 54.4 | | ug/Kg | | 109 | 70 - 130 | 0 | 20 |
| 1,3-Dichloropropane | | | 50.0 | 56.6 | | ug/Kg | | 113 | 70 - 140 | 5 | 20 |
| 1,1-Dichloropropene | | | 50.0 | 61.6 | | ug/Kg | | 123 | 70 - 130 | 0 | 20 |
| 1,2-Dibromo-3-Chloropropane | | | 50.0 | 60.6 | | ug/Kg | | 121 | 60 - 145 | 8 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 720-119340/3-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylene Dibromide | | | 50.0 | 62.2 | | ug/Kg | | 124 | 70 - 140 | 6 | 20 |
| Dibromomethane | | | 50.0 | 55.6 | | ug/Kg | | 111 | 70 - 139 | 3 | 20 |
| Dichlorodifluoromethane | | | 50.0 | 39.8 | | ug/Kg | | 80 | 37 - 158 | 0 | 20 |
| 1,1-Dichloroethane | | | 50.0 | 53.9 | | ug/Kg | | 108 | 70 - 130 | 1 | 20 |
| 1,2-Dichloroethane | | | 50.0 | 55.7 | | ug/Kg | | 111 | 70 - 130 | 4 | 20 |
| 1,1-Dichloroethene | | | 50.0 | 55.7 | | ug/Kg | | 111 | 76 - 122 | 1 | 20 |
| cis-1,2-Dichloroethene | | | 50.0 | 57.2 | | ug/Kg | | 114 | 70 - 138 | 2 | 20 |
| trans-1,2-Dichloroethene | | | 50.0 | 57.4 | | ug/Kg | | 115 | 67 - 130 | 3 | 20 |
| 1,2-Dichloropropane | | | 50.0 | 54.6 | | ug/Kg | | 109 | 73 - 127 | 3 | 20 |
| cis-1,3-Dichloropropene | | | 50.0 | 59.2 | | ug/Kg | | 118 | 68 - 147 | 4 | 20 |
| trans-1,3-Dichloropropene | | | 50.0 | 56.9 | | ug/Kg | | 114 | 70 - 136 | 4 | 20 |
| Ethylbenzene | | | 50.0 | 55.6 | | ug/Kg | | 111 | 80 - 137 | 1 | 20 |
| Hexachlorobutadiene | | | 50.0 | 57.1 | | ug/Kg | | 114 | 70 - 132 | 3 | 20 |
| 2-Hexanone | | | 250 | 238 | | ug/Kg | | 95 | 44 - 133 | 9 | 20 |
| Isopropylbenzene | | | 50.0 | 58.4 | | ug/Kg | | 117 | 88 - 128 | 1 | 20 |
| 4-Isopropyltoluene | | | 50.0 | 56.6 | | ug/Kg | | 113 | 70 - 133 | 2 | 20 |
| Methylene Chloride | | | 50.0 | 54.3 | | ug/Kg | | 109 | 70 - 134 | 2 | 20 |
| 4-Methyl-2-pentanone (MIBK) | | | 250 | 271 | | ug/Kg | | 109 | 60 - 160 | 9 | 20 |
| Naphthalene | | | 50.0 | 55.2 | | ug/Kg | | 110 | 60 - 147 | 3 | 20 |
| N-Propylbenzene | | | 50.0 | 54.3 | | ug/Kg | | 109 | 70 - 130 | 3 | 20 |
| Styrene | | | 50.0 | 55.0 | | ug/Kg | | 110 | 70 - 130 | 3 | 20 |
| 1,1,1,2-Tetrachloroethane | | | 50.0 | 56.6 | | ug/Kg | | 113 | 70 - 130 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | | | 50.0 | 56.8 | | ug/Kg | | 114 | 70 - 146 | 5 | 20 |
| Tetrachloroethene | | | 50.0 | 56.7 | | ug/Kg | | 113 | 70 - 132 | 1 | 20 |
| Toluene | | | 50.0 | 54.7 | | ug/Kg | | 109 | 80 - 128 | 1 | 20 |
| 1,2,3-Trichlorobenzene | | | 50.0 | 58.3 | | ug/Kg | | 117 | 60 - 140 | 0 | 20 |
| 1,2,4-Trichlorobenzene | | | 50.0 | 58.2 | | ug/Kg | | 116 | 60 - 140 | 0 | 20 |
| 1,1,1-Trichloroethane | | | 50.0 | 54.5 | | ug/Kg | | 109 | 70 - 130 | 0 | 20 |
| 1,1,2-Trichloroethane | | | 50.0 | 56.7 | | ug/Kg | | 113 | 70 - 130 | 5 | 20 |
| Trichloroethene | | | 50.0 | 56.1 | | ug/Kg | | 112 | 70 - 133 | 1 | 20 |
| Trichlorofluoromethane | | | 50.0 | 54.3 | | ug/Kg | | 109 | 60 - 140 | 6 | 20 |
| 1,2,3-Trichloropropane | | | 50.0 | 56.2 | | ug/Kg | | 112 | 70 - 146 | 4 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | 50.0 | 52.3 | | ug/Kg | | 105 | 60 - 140 | 2 | 20 |
| 1,2,4-Trimethylbenzene | | | 50.0 | 54.4 | | ug/Kg | | 109 | 70 - 130 | 1 | 20 |
| 1,3,5-Trimethylbenzene | | | 50.0 | 54.8 | | ug/Kg | | 110 | 70 - 131 | 2 | 20 |
| Vinyl acetate | | | 50.0 | 57.2 | | ug/Kg | | 114 | 38 - 176 | 8 | 20 |
| Vinyl chloride | | | 50.0 | 46.2 | | ug/Kg | | 92 | 58 - 125 | 0 | 20 |
| m-Xylene & p-Xylene | | | 100 | 120 | | ug/Kg | | 120 | 70 - 146 | 0 | 20 |
| o-Xylene | | | 50.0 | 56.9 | | ug/Kg | | 114 | 70 - 140 | 2 | 20 |
| 2,2-Dichloropropane | | | 50.0 | 55.6 | | ug/Kg | | 111 | 70 - 162 | 6 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *113* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *110* | | *58 - 140* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 720-119340/5-A**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) -C5-C12 | | | 1000 | 928 | | ug/Kg | | 93 | 61 - 128 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *108* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *111* | | *58 - 140* |

**Lab Sample ID: 720-44026-1 MS**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: SB6-EXC-W-10'**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 49.9 | 55.3 | | ug/Kg | | 111 | 69 - 130 |
| Acetone | ND | | 250 | 241 | | ug/Kg | | 97 | 37 - 150 |
| Benzene | ND | | 49.9 | 54.3 | | ug/Kg | | 109 | 70 - 130 |
| Dichlorobromomethane | ND | | 49.9 | 55.8 | | ug/Kg | | 112 | 64 - 135 |
| Bromobenzene | ND | | 49.9 | 58.0 | | ug/Kg | | 116 | 70 - 130 |
| Chlorobromomethane | ND | | 49.9 | 56.6 | | ug/Kg | | 113 | 65 - 130 |
| Bromoform | ND | | 49.9 | 53.2 | | ug/Kg | | 107 | 58 - 132 |
| Bromomethane | ND | | 49.9 | 52.1 | | ug/Kg | | 104 | 56 - 130 |
| 2-Butanone (MEK) | ND | | 250 | 223 | | ug/Kg | | 89 | 41 - 150 |
| n-Butylbenzene | ND | | 49.9 | 58.8 | | ug/Kg | | 118 | 60 - 145 |
| sec-Butylbenzene | ND | | 49.9 | 57.4 | | ug/Kg | | 113 | 64 - 137 |
| tert-Butylbenzene | 8.3 | | 49.9 | 66.0 | | ug/Kg | | 116 | 63 - 134 |
| Carbon disulfide | ND | | 49.9 | 58.7 | | ug/Kg | | 118 | 10 - 150 |
| Carbon tetrachloride | ND | | 49.9 | 55.2 | | ug/Kg | | 111 | 54 - 130 |
| Chlorobenzene | ND | | 49.9 | 52.3 | | ug/Kg | | 105 | 70 - 130 |
| Chloroethane | ND | | 49.9 | 52.2 | | ug/Kg | | 105 | 61 - 130 |
| Chloroform | ND | | 49.9 | 52.6 | | ug/Kg | | 105 | 67 - 130 |
| Chloromethane | ND | | 49.9 | 44.5 | | ug/Kg | | 89 | 50 - 131 |
| 2-Chlorotoluene | ND | | 49.9 | 62.9 | | ug/Kg | | 126 | 70 - 130 |
| 4-Chlorotoluene | ND | | 49.9 | 61.9 | | ug/Kg | | 124 | 70 - 130 |
| Chlorodibromomethane | ND | | 49.9 | 52.5 | | ug/Kg | | 105 | 60 - 141 |
| 1,2-Dichlorobenzene | ND | | 49.9 | 53.0 | | ug/Kg | | 106 | 70 - 130 |
| 1,3-Dichlorobenzene | ND | | 49.9 | 55.1 | | ug/Kg | | 110 | 70 - 130 |
| 1,4-Dichlorobenzene | ND | | 49.9 | 54.0 | | ug/Kg | | 108 | 70 - 130 |
| 1,3-Dichloropropane | ND | | 49.9 | 51.7 | | ug/Kg | | 104 | 70 - 130 |
| 1,1-Dichloropropene | ND | | 49.9 | 61.9 | | ug/Kg | | 124 | 67 - 130 |
| 1,2-Dibromo-3-Chloropropane | ND | | 49.9 | 57.4 | | ug/Kg | | 115 | 57 - 130 |
| Ethylene Dibromide | ND | | 49.9 | 56.0 | | ug/Kg | | 112 | 66 - 135 |
| Dibromomethane | ND | | 49.9 | 51.4 | | ug/Kg | | 103 | 65 - 131 |
| Dichlorodifluoromethane | ND | | 49.9 | 39.7 | | ug/Kg | | 79 | 38 - 130 |
| 1,1-Dichloroethane | ND | | 49.9 | 52.9 | | ug/Kg | | 106 | 67 - 130 |
| 1,2-Dichloroethane | ND | | 49.9 | 52.3 | | ug/Kg | | 105 | 70 - 130 |
| 1,1-Dichloroethene | ND | | 49.9 | 56.3 | | ug/Kg | | 113 | 64 - 130 |
| cis-1,2-Dichloroethene | ND | | 49.9 | 55.6 | | ug/Kg | | 111 | 68 - 131 |
| trans-1,2-Dichloroethene | ND | | 49.9 | 57.4 | | ug/Kg | | 115 | 70 - 130 |
| 1,2-Dichloropropane | ND | | 49.9 | 52.1 | | ug/Kg | | 105 | 65 - 133 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 720-44026-1 MS**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: SB6-EXC-W-10'**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | | 49.9 | 56.4 | | ug/Kg | | 113 | 46 - 139 |
| trans-1,3-Dichloropropene | ND | | 49.9 | 52.9 | | ug/Kg | | 106 | 55 - 131 |
| Ethylbenzene | ND | | 49.9 | 55.5 | | ug/Kg | | 111 | 65 - 130 |
| Hexachlorobutadiene | ND | | 49.9 | 41.3 | | ug/Kg | | 83 | 58 - 132 |
| 2-Hexanone | ND | | 250 | 206 | | ug/Kg | | 83 | 44 - 150 |
| Isopropylbenzene | ND | | 49.9 | 57.6 | | ug/Kg | | 114 | 65 - 130 |
| 4-Isopropyltoluene | ND | | 49.9 | 59.7 | | ug/Kg | | 120 | 69 - 134 |
| Methylene Chloride | ND | | 49.9 | 52.8 | | ug/Kg | | 106 | 63 - 130 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 250 | 236 | | ug/Kg | | 94 | 51 - 140 |
| Naphthalene | ND | | 49.9 | 38.9 | | ug/Kg | | 78 | 45 - 146 |
| N-Propylbenzene | ND | | 49.9 | 60.7 | | ug/Kg | | 119 | 70 - 130 |
| Styrene | ND | | 49.9 | 52.5 | | ug/Kg | | 105 | 58 - 135 |
| 1,1,1,2-Tetrachloroethane | ND | | 49.9 | 56.1 | | ug/Kg | | 112 | 64 - 133 |
| 1,1,2,2-Tetrachloroethane | ND | | 49.9 | 58.7 | | ug/Kg | | 118 | 70 - 131 |
| Tetrachloroethene | ND | | 49.9 | 55.0 | | ug/Kg | | 110 | 67 - 130 |
| Toluene | ND | | 49.9 | 55.3 | | ug/Kg | | 111 | 70 - 130 |
| 1,2,3-Trichlorobenzene | ND | | 49.9 | 38.7 | | ug/Kg | | 78 | 58 - 138 |
| 1,2,4-Trichlorobenzene | ND | | 49.9 | 43.1 | | ug/Kg | | 86 | 49 - 144 |
| 1,1,1-Trichloroethane | ND | | 49.9 | 54.3 | | ug/Kg | | 109 | 57 - 133 |
| 1,1,2-Trichloroethane | ND | | 49.9 | 51.8 | | ug/Kg | | 104 | 68 - 132 |
| Trichloroethene | ND | | 49.9 | 55.1 | | ug/Kg | | 110 | 66 - 130 |
| Trichlorofluoromethane | ND | | 49.9 | 50.4 | | ug/Kg | | 101 | 61 - 130 |
| 1,2,3-Trichloropropane | ND | | 49.9 | 57.8 | | ug/Kg | | 116 | 62 - 150 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 49.9 | 52.0 | | ug/Kg | | 104 | 52 - 130 |
| 1,2,4-Trimethylbenzene | ND | | 49.9 | 58.0 | | ug/Kg | | 116 | 64 - 140 |
| 1,3,5-Trimethylbenzene | ND | | 49.9 | 59.7 | | ug/Kg | | 118 | 67 - 134 |
| Vinyl acetate | ND | | 49.9 | ND | F | ug/Kg | | 50 | 52 - 150 |
| Vinyl chloride | ND | | 49.9 | 47.9 | | ug/Kg | | 96 | 62 - 130 |
| m-Xylene & p-Xylene | ND | | 99.8 | 121 | | ug/Kg | | 121 | 70 - 130 |
| o-Xylene | ND | | 49.9 | 55.9 | | ug/Kg | | 111 | 68 - 130 |
| 2,2-Dichloropropane | ND | | 49.9 | 60.3 | | ug/Kg | | 121 | 63 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *107* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *109* | | *58 - 140* |

**Lab Sample ID: 720-44026-1 MSD**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: SB6-EXC-W-10'**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 48.9 | 53.2 | | ug/Kg | | 109 | 69 - 130 | 4 | 20 |
| Acetone | ND | | 245 | 191 | F | ug/Kg | | 78 | 37 - 150 | 23 | 20 |
| Benzene | ND | | 48.9 | 54.0 | | ug/Kg | | 110 | 70 - 130 | 1 | 20 |
| Dichlorobromomethane | ND | | 48.9 | 55.6 | | ug/Kg | | 114 | 64 - 135 | 0 | 20 |
| Bromobenzene | ND | | 48.9 | 57.9 | | ug/Kg | | 118 | 70 - 130 | 0 | 20 |
| Chlorobromomethane | ND | | 48.9 | 54.8 | | ug/Kg | | 112 | 65 - 130 | 3 | 20 |
| Bromoform | ND | | 48.9 | 52.0 | | ug/Kg | | 106 | 58 - 132 | 2 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 720-44026-1 MSD**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: SB6-EXC-W-10'**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 48.9 | 51.4 | | ug/Kg | | 105 | 56 - 130 | 1 | 20 |
| 2-Butanone (MEK) | ND | | 245 | 215 | | ug/Kg | | 88 | 41 - 150 | 4 | 20 |
| n-Butylbenzene | ND | | 48.9 | 58.0 | | ug/Kg | | 119 | 60 - 145 | 1 | 20 |
| sec-Butylbenzene | ND | | 48.9 | 57.1 | | ug/Kg | | 115 | 64 - 137 | 0 | 20 |
| tert-Butylbenzene | 8.3 | | 48.9 | 68.1 | | ug/Kg | | 122 | 63 - 134 | 3 | 20 |
| Carbon disulfide | ND | | 48.9 | 57.9 | | ug/Kg | | 118 | 10 - 150 | 1 | 20 |
| Carbon tetrachloride | ND | | 48.9 | 54.7 | | ug/Kg | | 112 | 54 - 130 | 1 | 20 |
| Chlorobenzene | ND | | 48.9 | 52.0 | | ug/Kg | | 106 | 70 - 130 | 1 | 20 |
| Chloroethane | ND | | 48.9 | 51.4 | | ug/Kg | | 105 | 61 - 130 | 2 | 20 |
| Chloroform | ND | | 48.9 | 52.0 | | ug/Kg | | 106 | 67 - 130 | 1 | 20 |
| Chloromethane | ND | | 48.9 | 44.0 | | ug/Kg | | 90 | 50 - 131 | 1 | 20 |
| 2-Chlorotoluene | ND | | 48.9 | 63.6 | | ug/Kg | | 130 | 70 - 130 | 1 | 20 |
| 4-Chlorotoluene | ND | | 48.9 | 63.3 | | ug/Kg | | 129 | 70 - 130 | 2 | 20 |
| Chlorodibromomethane | ND | | 48.9 | 51.3 | | ug/Kg | | 105 | 60 - 141 | 2 | 20 |
| 1,2-Dichlorobenzene | ND | | 48.9 | 52.2 | | ug/Kg | | 107 | 70 - 130 | 2 | 20 |
| 1,3-Dichlorobenzene | ND | | 48.9 | 55.3 | | ug/Kg | | 113 | 70 - 130 | 0 | 20 |
| 1,4-Dichlorobenzene | ND | | 48.9 | 53.1 | | ug/Kg | | 109 | 70 - 130 | 2 | 20 |
| 1,3-Dichloropropane | ND | | 48.9 | 49.3 | | ug/Kg | | 101 | 70 - 130 | 5 | 20 |
| 1,1-Dichloropropene | ND | | 48.9 | 61.3 | | ug/Kg | | 125 | 67 - 130 | 1 | 20 |
| 1,2-Dibromo-3-Chloropropane | ND | | 48.9 | 55.7 | | ug/Kg | | 114 | 57 - 130 | 3 | 20 |
| Ethylene Dibromide | ND | | 48.9 | 54.1 | | ug/Kg | | 111 | 66 - 135 | 4 | 20 |
| Dibromomethane | ND | | 48.9 | 49.8 | | ug/Kg | | 102 | 65 - 131 | 3 | 20 |
| Dichlorodifluoromethane | ND | | 48.9 | 38.8 | | ug/Kg | | 79 | 38 - 130 | 2 | 20 |
| 1,1-Dichloroethane | ND | | 48.9 | 52.5 | | ug/Kg | | 107 | 67 - 130 | 1 | 20 |
| 1,2-Dichloroethane | ND | | 48.9 | 50.2 | | ug/Kg | | 103 | 70 - 130 | 4 | 20 |
| 1,1-Dichloroethene | ND | | 48.9 | 56.0 | | ug/Kg | | 115 | 64 - 130 | 0 | 20 |
| cis-1,2-Dichloroethene | ND | | 48.9 | 55.0 | | ug/Kg | | 112 | 68 - 131 | 1 | 20 |
| trans-1,2-Dichloroethene | ND | | 48.9 | 56.6 | | ug/Kg | | 116 | 70 - 130 | 1 | 20 |
| 1,2-Dichloropropane | ND | | 48.9 | 51.5 | | ug/Kg | | 105 | 65 - 133 | 1 | 20 |
| cis-1,3-Dichloropropene | ND | | 48.9 | 55.5 | | ug/Kg | | 113 | 46 - 139 | 2 | 20 |
| trans-1,3-Dichloropropene | ND | | 48.9 | 51.1 | | ug/Kg | | 104 | 55 - 131 | 3 | 20 |
| Ethylbenzene | ND | | 48.9 | 55.1 | | ug/Kg | | 113 | 65 - 130 | 1 | 20 |
| Hexachlorobutadiene | ND | | 48.9 | 40.1 | | ug/Kg | | 82 | 58 - 132 | 3 | 20 |
| 2-Hexanone | ND | | 245 | 195 | | ug/Kg | | 80 | 44 - 150 | 6 | 20 |
| Isopropylbenzene | ND | | 48.9 | 57.4 | | ug/Kg | | 116 | 65 - 130 | 0 | 20 |
| 4-Isopropyltoluene | ND | | 48.9 | 59.0 | | ug/Kg | | 121 | 69 - 134 | 1 | 20 |
| Methylene Chloride | ND | | 48.9 | 52.4 | | ug/Kg | | 107 | 63 - 130 | 1 | 20 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 245 | 221 | | ug/Kg | | 90 | 51 - 140 | 6 | 20 |
| Naphthalene | ND | | 48.9 | 37.0 | | ug/Kg | | 76 | 45 - 146 | 5 | 20 |
| N-Propylbenzene | ND | | 48.9 | 61.5 | | ug/Kg | | 123 | 70 - 130 | 1 | 20 |
| Styrene | ND | | 48.9 | 51.1 | | ug/Kg | | 105 | 58 - 135 | 3 | 20 |
| 1,1,1,2-Tetrachloroethane | ND | | 48.9 | 55.6 | | ug/Kg | | 114 | 64 - 133 | 1 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | | 48.9 | 58.0 | | ug/Kg | | 118 | 70 - 131 | 1 | 20 |
| Tetrachloroethene | ND | | 48.9 | 53.7 | | ug/Kg | | 110 | 67 - 130 | 2 | 20 |
| Toluene | ND | | 48.9 | 55.8 | | ug/Kg | | 114 | 70 - 130 | 1 | 20 |
| 1,2,3-Trichlorobenzene | ND | | 48.9 | 36.0 | | ug/Kg | | 74 | 58 - 138 | 7 | 20 |
| 1,2,4-Trichlorobenzene | ND | | 48.9 | 40.3 | | ug/Kg | | 82 | 49 - 144 | 7 | 20 |
| 1,1,1-Trichloroethane | ND | | 48.9 | 53.6 | | ug/Kg | | 110 | 57 - 133 | 1 | 20 |
| 1,1,2-Trichloroethane | ND | | 48.9 | 50.7 | | ug/Kg | | 104 | 68 - 132 | 2 | 20 |
| Trichloroethene | ND | | 48.9 | 54.7 | | ug/Kg | | 112 | 66 - 130 | 1 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 720-44026-1 MSD**
**Matrix: Solid**
**Analysis Batch: 119325**

**Client Sample ID: SB6-EXC-W-10'**
**Prep Type: Total/NA**
**Prep Batch: 119340**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | 48.9 | 47.1 | | ug/Kg | | 96 | 61 - 130 | 7 | 20 |
| 1,2,3-Trichloropropane | ND | | 48.9 | 56.5 | | ug/Kg | | 116 | 62 - 150 | 2 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 48.9 | 51.7 | | ug/Kg | | 106 | 52 - 130 | 1 | 20 |
| 1,2,4-Trimethylbenzene | ND | | 48.9 | 58.6 | | ug/Kg | | 120 | 64 - 140 | 1 | 20 |
| 1,3,5-Trimethylbenzene | ND | | 48.9 | 60.5 | | ug/Kg | | 122 | 67 - 134 | 1 | 20 |
| Vinyl acetate | ND | | 48.9 | ND | F | ug/Kg | | 38 | 52 - 150 | 29 | 20 |
| Vinyl chloride | ND | | 48.9 | 48.3 | | ug/Kg | | 99 | 62 - 130 | 1 | 20 |
| m-Xylene & p-Xylene | ND | | 97.8 | 120 | | ug/Kg | | 123 | 70 - 130 | 0 | 20 |
| o-Xylene | ND | | 48.9 | 55.5 | | ug/Kg | | 112 | 68 - 130 | 1 | 20 |
| 2,2-Dichloropropane | ND | | 48.9 | 57.6 | | ug/Kg | | 118 | 63 - 130 | 5 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *106* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *107* | | *58 - 140* |

**Lab Sample ID: MB 720-119371/1-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Acetone | ND | | 50 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Benzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Dichlorobromomethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Bromobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Chlorobromomethane | ND | | 20 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Bromoform | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Bromomethane | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 2-Butanone (MEK) | ND | | 50 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| n-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| sec-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| tert-Butylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Carbon disulfide | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Carbon tetrachloride | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Chlorobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Chloroethane | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Chloroform | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Chloromethane | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Chlorodibromomethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Ethylene Dibromide | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 720-119371/1-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibromomethane | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Dichlorodifluoromethane | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Ethylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 2-Hexanone | ND | | 50 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Isopropylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 50 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Naphthalene | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| N-Propylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Styrene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Tetrachloroethene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Toluene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Trichloroethene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Vinyl acetate | ND | | 50 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Vinyl chloride | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Xylenes, Total | ND | | 10 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |
| Gasoline Range Organics (GRO) -C5-C12 | ND | | 250 | | ug/Kg | | 08/18/12 08:09 | 08/18/12 11:17 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *106* | | *45 - 131* | *08/18/12 08:09* | *08/18/12 11:17* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *93* | | *60 - 140* | *08/18/12 08:09* | *08/18/12 11:17* | *1* |
| *Toluene-d8 (Surr)* | *106* | | *58 - 140* | *08/18/12 08:09* | *08/18/12 11:17* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 720-119371/2-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 50.0 | 58.8 | | ug/Kg | | 118 | 70 - 144 |
| Acetone | 250 | 178 | | ug/Kg | | 71 | 30 - 162 |
| Benzene | 50.0 | 54.2 | | ug/Kg | | 108 | 70 - 130 |
| Dichlorobromomethane | 50.0 | 56.3 | | ug/Kg | | 113 | 70 - 131 |
| Bromobenzene | 50.0 | 53.6 | | ug/Kg | | 107 | 70 - 130 |
| Chlorobromomethane | 50.0 | 58.0 | | ug/Kg | | 116 | 70 - 130 |
| Bromoform | 50.0 | 56.9 | | ug/Kg | | 114 | 59 - 158 |
| Bromomethane | 50.0 | 51.4 | | ug/Kg | | 103 | 59 - 132 |
| 2-Butanone (MEK) | 250 | 245 | | ug/Kg | | 98 | 53 - 124 |
| n-Butylbenzene | 50.0 | 60.6 | | ug/Kg | | 121 | 70 - 142 |
| sec-Butylbenzene | 50.0 | 54.5 | | ug/Kg | | 109 | 70 - 136 |
| tert-Butylbenzene | 50.0 | 56.5 | | ug/Kg | | 113 | 70 - 130 |
| Carbon disulfide | 50.0 | 57.7 | | ug/Kg | | 115 | 60 - 140 |
| Carbon tetrachloride | 50.0 | 52.9 | | ug/Kg | | 106 | 70 - 138 |
| Chlorobenzene | 50.0 | 52.6 | | ug/Kg | | 105 | 70 - 130 |
| Chloroethane | 50.0 | 51.9 | | ug/Kg | | 104 | 65 - 130 |
| Chloroform | 50.0 | 52.0 | | ug/Kg | | 104 | 77 - 127 |
| Chloromethane | 50.0 | 41.7 | | ug/Kg | | 83 | 55 - 140 |
| 2-Chlorotoluene | 50.0 | 58.2 | | ug/Kg | | 116 | 70 - 138 |
| 4-Chlorotoluene | 50.0 | 58.7 | | ug/Kg | | 117 | 70 - 136 |
| Chlorodibromomethane | 50.0 | 56.6 | | ug/Kg | | 113 | 70 - 146 |
| 1,2-Dichlorobenzene | 50.0 | 54.3 | | ug/Kg | | 109 | 70 - 130 |
| 1,3-Dichlorobenzene | 50.0 | 54.5 | | ug/Kg | | 109 | 70 - 131 |
| 1,4-Dichlorobenzene | 50.0 | 53.6 | | ug/Kg | | 107 | 70 - 130 |
| 1,3-Dichloropropane | 50.0 | 54.8 | | ug/Kg | | 110 | 70 - 140 |
| 1,1-Dichloropropene | 50.0 | 61.7 | | ug/Kg | | 123 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 50.0 | 56.6 | | ug/Kg | | 113 | 60 - 145 |
| Ethylene Dibromide | 50.0 | 61.2 | | ug/Kg | | 122 | 70 - 140 |
| Dibromomethane | 50.0 | 53.2 | | ug/Kg | | 106 | 70 - 139 |
| Dichlorodifluoromethane | 50.0 | 35.5 | | ug/Kg | | 71 | 37 - 158 |
| 1,1-Dichloroethane | 50.0 | 52.2 | | ug/Kg | | 104 | 70 - 130 |
| 1,2-Dichloroethane | 50.0 | 51.5 | | ug/Kg | | 103 | 70 - 130 |
| 1,1-Dichloroethene | 50.0 | 55.9 | | ug/Kg | | 112 | 76 - 122 |
| cis-1,2-Dichloroethene | 50.0 | 54.6 | | ug/Kg | | 109 | 70 - 138 |
| trans-1,2-Dichloroethene | 50.0 | 57.6 | | ug/Kg | | 115 | 67 - 130 |
| 1,2-Dichloropropane | 50.0 | 53.5 | | ug/Kg | | 107 | 73 - 127 |
| cis-1,3-Dichloropropene | 50.0 | 60.6 | | ug/Kg | | 121 | 68 - 147 |
| trans-1,3-Dichloropropene | 50.0 | 56.7 | | ug/Kg | | 113 | 70 - 136 |
| Ethylbenzene | 50.0 | 54.7 | | ug/Kg | | 109 | 80 - 137 |
| Hexachlorobutadiene | 50.0 | 57.5 | | ug/Kg | | 115 | 70 - 132 |
| 2-Hexanone | 250 | 221 | | ug/Kg | | 88 | 44 - 133 |
| Isopropylbenzene | 50.0 | 56.7 | | ug/Kg | | 113 | 88 - 128 |
| 4-Isopropyltoluene | 50.0 | 57.0 | | ug/Kg | | 114 | 70 - 133 |
| Methylene Chloride | 50.0 | 53.2 | | ug/Kg | | 106 | 70 - 134 |
| 4-Methyl-2-pentanone (MIBK) | 250 | 245 | | ug/Kg | | 98 | 60 - 160 |
| Naphthalene | 50.0 | 53.4 | | ug/Kg | | 107 | 60 - 147 |
| N-Propylbenzene | 50.0 | 55.2 | | ug/Kg | | 110 | 70 - 130 |
| Styrene | 50.0 | 54.4 | | ug/Kg | | 109 | 70 - 130 |
| 1,1,1,2-Tetrachloroethane | 50.0 | 55.8 | | ug/Kg | | 112 | 70 - 130 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 720-119371/2-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 50.0 | 54.0 | | ug/Kg | | 108 | 70 - 146 |
| Tetrachloroethene | 50.0 | 55.2 | | ug/Kg | | 110 | 70 - 132 |
| Toluene | 50.0 | 54.0 | | ug/Kg | | 108 | 80 - 128 |
| 1,2,3-Trichlorobenzene | 50.0 | 57.8 | | ug/Kg | | 116 | 60 - 140 |
| 1,2,4-Trichlorobenzene | 50.0 | 58.7 | | ug/Kg | | 117 | 60 - 140 |
| 1,1,1-Trichloroethane | 50.0 | 52.9 | | ug/Kg | | 106 | 70 - 130 |
| 1,1,2-Trichloroethane | 50.0 | 55.8 | | ug/Kg | | 112 | 70 - 130 |
| Trichloroethene | 50.0 | 54.5 | | ug/Kg | | 109 | 70 - 133 |
| Trichlorofluoromethane | 50.0 | 44.4 | | ug/Kg | | 89 | 60 - 140 |
| 1,2,3-Trichloropropane | 50.0 | 51.9 | | ug/Kg | | 104 | 70 - 146 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50.0 | 50.7 | | ug/Kg | | 101 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 50.0 | 55.1 | | ug/Kg | | 110 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 50.0 | 55.2 | | ug/Kg | | 110 | 70 - 131 |
| Vinyl acetate | 50.0 | 51.7 | | ug/Kg | | 103 | 38 - 176 |
| Vinyl chloride | 50.0 | 48.7 | | ug/Kg | | 97 | 58 - 125 |
| m-Xylene & p-Xylene | 100 | 118 | | ug/Kg | | 118 | 70 - 146 |
| o-Xylene | 50.0 | 55.0 | | ug/Kg | | 110 | 70 - 140 |
| 2,2-Dichloropropane | 50.0 | 56.2 | | ug/Kg | | 112 | 70 - 162 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *111* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *112* | | *58 - 140* |

**Lab Sample ID: LCS 720-119371/4-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) -C5-C12 | 1000 | 942 | | ug/Kg | | 94 | 61 - 128 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *111* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *96* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *112* | | *58 - 140* |

**Lab Sample ID: LCSD 720-119371/3-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 50.0 | 52.2 | | ug/Kg | | 104 | 70 - 144 | 12 | 20 |
| Acetone | 250 | 113 | * | ug/Kg | | 45 | 30 - 162 | 45 | 30 |
| Benzene | 50.0 | 54.4 | | ug/Kg | | 109 | 70 - 130 | 0 | 20 |
| Dichlorobromomethane | 50.0 | 53.6 | | ug/Kg | | 107 | 70 - 131 | 5 | 20 |
| Bromobenzene | 50.0 | 53.4 | | ug/Kg | | 107 | 70 - 130 | 0 | 20 |
| Chlorobromomethane | 50.0 | 53.6 | | ug/Kg | | 107 | 70 - 130 | 8 | 20 |
| Bromoform | 50.0 | 50.4 | | ug/Kg | | 101 | 59 - 158 | 12 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 720-119371/3-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | 50.0 | 53.5 | | ug/Kg | | 107 | 59 - 132 | 4 | 20 |
| 2-Butanone (MEK) | 250 | 194 | * | ug/Kg | | 78 | 53 - 124 | 23 | 20 |
| n-Butylbenzene | 50.0 | 63.2 | | ug/Kg | | 126 | 70 - 142 | 4 | 20 |
| sec-Butylbenzene | 50.0 | 56.9 | | ug/Kg | | 114 | 70 - 136 | 4 | 20 |
| tert-Butylbenzene | 50.0 | 58.9 | | ug/Kg | | 118 | 70 - 130 | 4 | 20 |
| Carbon disulfide | 50.0 | 59.1 | | ug/Kg | | 118 | 60 - 140 | 2 | 20 |
| Carbon tetrachloride | 50.0 | 54.5 | | ug/Kg | | 109 | 70 - 138 | 3 | 20 |
| Chlorobenzene | 50.0 | 52.4 | | ug/Kg | | 105 | 70 - 130 | 0 | 20 |
| Chloroethane | 50.0 | 53.5 | | ug/Kg | | 107 | 65 - 130 | 3 | 20 |
| Chloroform | 50.0 | 51.4 | | ug/Kg | | 103 | 77 - 127 | 1 | 20 |
| Chloromethane | 50.0 | 43.1 | | ug/Kg | | 86 | 55 - 140 | 3 | 20 |
| 2-Chlorotoluene | 50.0 | 59.5 | | ug/Kg | | 119 | 70 - 138 | 2 | 20 |
| 4-Chlorotoluene | 50.0 | 59.8 | | ug/Kg | | 120 | 70 - 136 | 2 | 20 |
| Chlorodibromomethane | 50.0 | 51.8 | | ug/Kg | | 104 | 70 - 146 | 9 | 20 |
| 1,2-Dichlorobenzene | 50.0 | 53.9 | | ug/Kg | | 108 | 70 - 130 | 1 | 20 |
| 1,3-Dichlorobenzene | 50.0 | 55.6 | | ug/Kg | | 111 | 70 - 131 | 2 | 20 |
| 1,4-Dichlorobenzene | 50.0 | 53.8 | | ug/Kg | | 108 | 70 - 130 | 0 | 20 |
| 1,3-Dichloropropane | 50.0 | 49.5 | | ug/Kg | | 99 | 70 - 140 | 10 | 20 |
| 1,1-Dichloropropene | 50.0 | 63.2 | | ug/Kg | | 126 | 70 - 130 | 2 | 20 |
| 1,2-Dibromo-3-Chloropropane | 50.0 | 49.0 | | ug/Kg | | 98 | 60 - 145 | 14 | 20 |
| Ethylene Dibromide | 50.0 | 54.0 | | ug/Kg | | 108 | 70 - 140 | 13 | 20 |
| Dibromomethane | 50.0 | 48.7 | | ug/Kg | | 97 | 70 - 139 | 9 | 20 |
| Dichlorodifluoromethane | 50.0 | 36.7 | | ug/Kg | | 73 | 37 - 158 | 3 | 20 |
| 1,1-Dichloroethane | 50.0 | 52.3 | | ug/Kg | | 105 | 70 - 130 | 0 | 20 |
| 1,2-Dichloroethane | 50.0 | 47.4 | | ug/Kg | | 95 | 70 - 130 | 8 | 20 |
| 1,1-Dichloroethene | 50.0 | 57.7 | | ug/Kg | | 115 | 76 - 122 | 3 | 20 |
| cis-1,2-Dichloroethene | 50.0 | 54.3 | | ug/Kg | | 109 | 70 - 138 | 1 | 20 |
| trans-1,2-Dichloroethene | 50.0 | 57.8 | | ug/Kg | | 116 | 67 - 130 | 0 | 20 |
| 1,2-Dichloropropane | 50.0 | 51.5 | | ug/Kg | | 103 | 73 - 127 | 4 | 20 |
| cis-1,3-Dichloropropene | 50.0 | 56.6 | | ug/Kg | | 113 | 68 - 147 | 7 | 20 |
| trans-1,3-Dichloropropene | 50.0 | 52.1 | | ug/Kg | | 104 | 70 - 136 | 9 | 20 |
| Ethylbenzene | 50.0 | 55.9 | | ug/Kg | | 112 | 80 - 137 | 2 | 20 |
| Hexachlorobutadiene | 50.0 | 62.1 | | ug/Kg | | 124 | 70 - 132 | 8 | 20 |
| 2-Hexanone | 250 | 173 | * | ug/Kg | | 69 | 44 - 133 | 24 | 20 |
| Isopropylbenzene | 50.0 | 58.9 | | ug/Kg | | 118 | 88 - 128 | 4 | 20 |
| 4-Isopropyltoluene | 50.0 | 59.3 | | ug/Kg | | 119 | 70 - 133 | 4 | 20 |
| Methylene Chloride | 50.0 | 52.0 | | ug/Kg | | 104 | 70 - 134 | 2 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 250 | 199 | * | ug/Kg | | 79 | 60 - 160 | 21 | 20 |
| Naphthalene | 50.0 | 48.7 | | ug/Kg | | 97 | 60 - 147 | 9 | 20 |
| N-Propylbenzene | 50.0 | 57.4 | | ug/Kg | | 115 | 70 - 130 | 4 | 20 |
| Styrene | 50.0 | 54.3 | | ug/Kg | | 109 | 70 - 130 | 0 | 20 |
| 1,1,1,2-Tetrachloroethane | 50.0 | 54.2 | | ug/Kg | | 108 | 70 - 130 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | 50.0 | 47.0 | | ug/Kg | | 94 | 70 - 146 | 14 | 20 |
| Tetrachloroethene | 50.0 | 56.5 | | ug/Kg | | 113 | 70 - 132 | 2 | 20 |
| Toluene | 50.0 | 54.1 | | ug/Kg | | 108 | 80 - 128 | 0 | 20 |
| 1,2,3-Trichlorobenzene | 50.0 | 57.0 | | ug/Kg | | 114 | 60 - 140 | 1 | 20 |
| 1,2,4-Trichlorobenzene | 50.0 | 59.6 | | ug/Kg | | 119 | 60 - 140 | 2 | 20 |
| 1,1,1-Trichloroethane | 50.0 | 52.8 | | ug/Kg | | 106 | 70 - 130 | 0 | 20 |
| 1,1,2-Trichloroethane | 50.0 | 50.1 | | ug/Kg | | 100 | 70 - 130 | 11 | 20 |
| Trichloroethene | 50.0 | 55.2 | | ug/Kg | | 110 | 70 - 133 | 1 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 720-119371/3-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | | | 50.0 | 46.2 | | ug/Kg | | 92 | 60 - 140 | 4 | 20 |
| 1,2,3-Trichloropropane | | | 50.0 | 46.4 | | ug/Kg | | 93 | 70 - 146 | 11 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | 50.0 | 52.2 | | ug/Kg | | 104 | 60 - 140 | 3 | 20 |
| 1,2,4-Trimethylbenzene | | | 50.0 | 56.9 | | ug/Kg | | 114 | 70 - 130 | 3 | 20 |
| 1,3,5-Trimethylbenzene | | | 50.0 | 57.1 | | ug/Kg | | 114 | 70 - 131 | 3 | 20 |
| Vinyl acetate | | | 50.0 | ND | | ug/Kg | | 91 | 38 - 176 | 13 | 20 |
| Vinyl chloride | | | 50.0 | 51.7 | | ug/Kg | | 103 | 58 - 125 | 6 | 20 |
| m-Xylene & p-Xylene | | | 100 | 120 | | ug/Kg | | 120 | 70 - 146 | 2 | 20 |
| o-Xylene | | | 50.0 | 56.3 | | ug/Kg | | 113 | 70 - 140 | 2 | 20 |
| 2,2-Dichloropropane | | | 50.0 | 57.1 | | ug/Kg | | 114 | 70 - 162 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *108* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *92* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *111* | | *58 - 140* |

**Lab Sample ID: LCSD 720-119371/5-A**
**Matrix: Solid**
**Analysis Batch: 119354**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 119371**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) -C5-C12 | | | 1000 | 935 | | ug/Kg | | 93 | 61 - 128 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *109* | | *45 - 131* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *60 - 140* |
| *Toluene-d8 (Surr)* | *113* | | *58 - 140* |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 720-119350/1-A**
**Matrix: Solid**
**Analysis Batch: 119362**

**Client Sample ID: Method Blank**
**Prep Type: Silica Gel Cleanup**
**Prep Batch: 119350**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 0.98 | | mg/Kg | | 08/17/12 22:12 | 08/18/12 13:38 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Capric Acid (Surr)* | *0.03* | | *0 - 1* | *08/17/12 22:12* | *08/18/12 13:38* | *1* |
| *p-Terphenyl* | *90* | | *38 - 148* | *08/17/12 22:12* | *08/18/12 13:38* | *1* |

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 720-119350/2-A**
**Matrix: Solid**
**Analysis Batch: 119362**

**Client Sample ID: Lab Control Sample**
**Prep Type: Silica Gel Cleanup**
**Prep Batch: 119350**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 82.0 | 63.4 | | mg/Kg | | 77 | 36 - 112 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *p-Terphenyl* | *87* | | *38 - 148* |

**Lab Sample ID: LCSD 720-119350/3-A**
**Matrix: Solid**
**Analysis Batch: 119362**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Silica Gel Cleanup**
**Prep Batch: 119350**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 82.9 | 55.7 | | mg/Kg | | 67 | 36 - 112 | 13 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *p-Terphenyl* | *77* | | *38 - 148* |

**Lab Sample ID: 720-44026-5 MS**
**Matrix: Solid**
**Analysis Batch: 119362**

**Client Sample ID: SB11-EXC-B-5'**
**Prep Type: Silica Gel Cleanup**
**Prep Batch: 119350**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 1.5 | | 83.0 | 61.8 | | mg/Kg | | 73 | 50 - 150 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *p-Terphenyl* | *78* | | *38 - 148* |

**Lab Sample ID: 720-44026-5 MSD**
**Matrix: Solid**
**Analysis Batch: 119362**

**Client Sample ID: SB11-EXC-B-5'**
**Prep Type: Silica Gel Cleanup**
**Prep Batch: 119350**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 1.5 | | 83.0 | 54.6 | | mg/Kg | | 64 | 50 - 150 | 13 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *p-Terphenyl* | *68* | | *38 - 148* |

## GC/MS VOA

### Analysis Batch: 119325

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 720-44026-1 | SB6-EXC-W-10' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-1 MS | SB6-EXC-W-10' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-1 MSD | SB6-EXC-W-10' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-2 | SB6-EXC-N-10' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-3 | SB6-EXC-S-10' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-4 | SB6-EXC-E-10' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-5 | SB11-EXC-B-5' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-6 | SB11-EXC-W-3.5' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-8 | SB11-EXC-E-3.5' | Total/NA | Solid | 8260B | 119340 |
| 720-44026-9 | SB11-EXC-S-3.5' | Total/NA | Solid | 8260B | 119340 |
| LCS 720-119340/2-A | Lab Control Sample | Total/NA | Solid | 8260B | 119340 |
| LCS 720-119340/4-A | Lab Control Sample | Total/NA | Solid | 8260B | 119340 |
| LCSD 720-119340/3-A | Lab Control Sample Dup | Total/NA | Solid | 8260B | 119340 |
| LCSD 720-119340/5-A | Lab Control Sample Dup | Total/NA | Solid | 8260B | 119340 |
| MB 720-119340/1-A | Method Blank | Total/NA | Solid | 8260B | 119340 |

### Prep Batch: 119340

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 720-44026-1 | SB6-EXC-W-10' | Total/NA | Solid | 5030B | |
| 720-44026-1 MS | SB6-EXC-W-10' | Total/NA | Solid | 5030B | |
| 720-44026-1 MSD | SB6-EXC-W-10' | Total/NA | Solid | 5030B | |
| 720-44026-2 | SB6-EXC-N-10' | Total/NA | Solid | 5030B | |
| 720-44026-3 | SB6-EXC-S-10' | Total/NA | Solid | 5030B | |
| 720-44026-4 | SB6-EXC-E-10' | Total/NA | Solid | 5030B | |
| 720-44026-5 | SB11-EXC-B-5' | Total/NA | Solid | 5030B | |
| 720-44026-6 | SB11-EXC-W-3.5' | Total/NA | Solid | 5030B | |
| 720-44026-8 | SB11-EXC-E-3.5' | Total/NA | Solid | 5030B | |
| 720-44026-9 | SB11-EXC-S-3.5' | Total/NA | Solid | 5030B | |
| LCS 720-119340/2-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCS 720-119340/4-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 720-119340/3-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |
| LCSD 720-119340/5-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |
| MB 720-119340/1-A | Method Blank | Total/NA | Solid | 5030B | |

### Analysis Batch: 119354

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 720-44026-7 | SB11-EXC-N-3.5' | Total/NA | Solid | 8260B | 119371 |
| LCS 720-119371/2-A | Lab Control Sample | Total/NA | Solid | 8260B | 119371 |
| LCS 720-119371/4-A | Lab Control Sample | Total/NA | Solid | 8260B | 119371 |
| LCSD 720-119371/3-A | Lab Control Sample Dup | Total/NA | Solid | 8260B | 119371 |
| LCSD 720-119371/5-A | Lab Control Sample Dup | Total/NA | Solid | 8260B | 119371 |
| MB 720-119371/1-A | Method Blank | Total/NA | Solid | 8260B | 119371 |

### Prep Batch: 119371

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 720-44026-7 | SB11-EXC-N-3.5' | Total/NA | Solid | 5030B | |
| LCS 720-119371/2-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCS 720-119371/4-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 720-119371/3-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |
| LCSD 720-119371/5-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |
| MB 720-119371/1-A | Method Blank | Total/NA | Solid | 5030B | |

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## GC Semi VOA

### Prep Batch: 119350

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 720-44026-5 | SB11-EXC-B-5' | Silica Gel Cleanup | Solid | 3546 | |
| 720-44026-5 MS | SB11-EXC-B-5' | Silica Gel Cleanup | Solid | 3546 | |
| 720-44026-5 MSD | SB11-EXC-B-5' | Silica Gel Cleanup | Solid | 3546 | |
| 720-44026-6 | SB11-EXC-W-3.5' | Silica Gel Cleanup | Solid | 3546 | |
| 720-44026-7 | SB11-EXC-N-3.5' | Silica Gel Cleanup | Solid | 3546 | |
| 720-44026-8 | SB11-EXC-E-3.5' | Silica Gel Cleanup | Solid | 3546 | |
| 720-44026-9 | SB11-EXC-S-3.5' | Silica Gel Cleanup | Solid | 3546 | |
| LCS 720-119350/2-A | Lab Control Sample | Silica Gel Cleanup | Solid | 3546 | |
| LCSD 720-119350/3-A | Lab Control Sample Dup | Silica Gel Cleanup | Solid | 3546 | |
| MB 720-119350/1-A | Method Blank | Silica Gel Cleanup | Solid | 3546 | |

### Analysis Batch: 119362

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 720-44026-5 | SB11-EXC-B-5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| 720-44026-5 MS | SB11-EXC-B-5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| 720-44026-5 MSD | SB11-EXC-B-5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| 720-44026-6 | SB11-EXC-W-3.5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| 720-44026-7 | SB11-EXC-N-3.5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| 720-44026-8 | SB11-EXC-E-3.5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| 720-44026-9 | SB11-EXC-S-3.5' | Silica Gel Cleanup | Solid | 8015B | 119350 |
| LCS 720-119350/2-A | Lab Control Sample | Silica Gel Cleanup | Solid | 8015B | 119350 |
| LCSD 720-119350/3-A | Lab Control Sample Dup | Silica Gel Cleanup | Solid | 8015B | 119350 |
| MB 720-119350/1-A | Method Blank | Silica Gel Cleanup | Solid | 8015B | 119350 |

## Client Sample ID: SB6-EXC-W-10'

**Lab Sample ID: 720-44026-1**

**Date Collected: 08/17/12 11:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/17/12 22:41 | BA | TAL SF |

## Client Sample ID: SB6-EXC-N-10'

**Lab Sample ID: 720-44026-2**

**Date Collected: 08/17/12 11:40**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/17/12 23:10 | BA | TAL SF |

## Client Sample ID: SB6-EXC-S-10'

**Lab Sample ID: 720-44026-3**

**Date Collected: 08/17/12 11:50**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/17/12 23:39 | BA | TAL SF |

## Client Sample ID: SB6-EXC-E-10'

**Lab Sample ID: 720-44026-4**

**Date Collected: 08/17/12 12:00**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/18/12 00:08 | BA | TAL SF |

## Client Sample ID: SB11-EXC-B-5'

**Lab Sample ID: 720-44026-5**

**Date Collected: 08/17/12 13:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/18/12 00:37 | BA | TAL SF |
| Silica Gel Cleanup | Prep | 3546 | | | 119350 | 08/17/12 22:12 | RU | TAL SF |
| Silica Gel Cleanup | Analysis | 8015B | | 1 | 119362 | 08/18/12 14:51 | DH | TAL SF |

## Client Sample ID: SB11-EXC-W-3.5'

**Lab Sample ID: 720-44026-6**

**Date Collected: 08/17/12 13:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/18/12 01:06 | BA | TAL SF |

# Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## Client Sample ID: SB11-EXC-W-3.5'

**Lab Sample ID: 720-44026-6**

**Date Collected: 08/17/12 13:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Silica Gel Cleanup | Prep | 3546 | | | 119350 | 08/17/12 22:12 | RU | TAL SF |
| Silica Gel Cleanup | Analysis | 8015B | | 1 | 119362 | 08/18/12 16:05 | DH | TAL SF |

## Client Sample ID: SB11-EXC-N-3.5'

**Lab Sample ID: 720-44026-7**

**Date Collected: 08/17/12 13:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119371 | 08/18/12 08:09 | BA | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119354 | 08/18/12 15:29 | AC | TAL SF |
| Silica Gel Cleanup | Prep | 3546 | | | 119350 | 08/17/12 22:12 | RU | TAL SF |
| Silica Gel Cleanup | Analysis | 8015B | | 1 | 119362 | 08/18/12 16:30 | DH | TAL SF |

## Client Sample ID: SB11-EXC-E-3.5'

**Lab Sample ID: 720-44026-8**

**Date Collected: 08/17/12 13:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/18/12 02:05 | BA | TAL SF |
| Silica Gel Cleanup | Prep | 3546 | | | 119350 | 08/17/12 22:12 | RU | TAL SF |
| Silica Gel Cleanup | Analysis | 8015B | | 1 | 119362 | 08/18/12 16:54 | DH | TAL SF |

## Client Sample ID: SB11-EXC-S-3.5'

**Lab Sample ID: 720-44026-9**

**Date Collected: 08/17/12 13:30**

**Matrix: Solid**

**Date Received: 08/17/12 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 119340 | 08/17/12 20:43 | LL | TAL SF |
| Total/NA | Analysis | 8260B | | 1 | 119325 | 08/18/12 02:34 | BA | TAL SF |
| Silica Gel Cleanup | Prep | 3546 | | | 119350 | 08/17/12 22:12 | RU | TAL SF |
| Silica Gel Cleanup | Analysis | 8015B | | 1 | 119362 | 08/18/12 17:19 | DH | TAL SF |

**Laboratory References:**

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

# Certification Summary

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

## Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| California | State Program | 9 | 2496 | 01-31-14 |

# Method Summary

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL SF |
| 8015B | Diesel Range Organics (DRO) (GC) | SW846 | TAL SF |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

# Sample Summary

Client: Stantec Consulting Corp.
Project/Site: PGE San Lorenzo

TestAmerica Job ID: 720-44026-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 720-44026-1 | SB6-EXC-W-10' | Solid | 08/17/12 11:30 | 08/17/12 14:55 |
| 720-44026-2 | SB6-EXC-N-10' | Solid | 08/17/12 11:40 | 08/17/12 14:55 |
| 720-44026-3 | SB6-EXC-S-10' | Solid | 08/17/12 11:50 | 08/17/12 14:55 |
| 720-44026-4 | SB6-EXC-E-10' | Solid | 08/17/12 12:00 | 08/17/12 14:55 |
| 720-44026-5 | SB11-EXC-B-5' | Solid | 08/17/12 13:30 | 08/17/12 14:55 |
| 720-44026-6 | SB11-EXC-W-3.5' | Solid | 08/17/12 13:30 | 08/17/12 14:55 |
| 720-44026-7 | SB11-EXC-N-3.5' | Solid | 08/17/12 13:30 | 08/17/12 14:55 |
| 720-44026-8 | SB11-EXC-E-3.5' | Solid | 08/17/12 13:30 | 08/17/12 14:55 |
| 720-44026-9 | SB11-EXC-S-3.5' | Solid | 08/17/12 13:30 | 08/17/12 14:55 |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton, CA 94566-4756
Phone: (925) 484-1919 • Fax (925) 600-6002

720-44026

Reference #: 140248

Date 8/17/12 Page 1 of 1

24-HR TAT

8/20/2012

Page 43 of 44

## Report To

Attn: Greg Hoehn
Company: Stantec
Address: 57 Lafayette
Phone: 925-299-9390 Email: greg.hoehn@stantec.com
Bill To: Lafayette
Sampled By: K CHUAP
Attn: Greg Hoehn Phone:

## Analysis Request

| Sample ID | Date | Time | Mat rix | Preserv | TPH EPA - 8260B ☐ MTBE ☐ BTEX ☐ Gas w/ | TEPH EPA 8015M* Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | (HVOCs) EPA 8021 by 8260B | Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624 | Semivolatiles GC/MS ☐ EPA 8270 ☐ 625 | Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total | Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608 | PNAs by ☐ 8270 ☐ 8310 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Low Level Metals by EPA 200.8/6020 (ICP-MS): | ☐ W.E.T (STLC) ☐ TCLP | ☐ Hex. Chrom.(Specify Method) ☐ pH (24h hold time for $H_2O$) | ☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB6-EXC-W-10' | 8/17/12 | 1130 | soil | ice | X | | | | X | | | | | | | | | | | | 1 |
| SB6-EXC-N-10' | 8/17/12 | 1140 | | | X | | | | X | | | | | | | | | | | | 1 |
| SB6-EXC-S-10' | 8/17/12 | 1150 | | | X | | | | X | | | | | | | | | | | | 1 |
| SB6-EXC-E-10' | 8/17/12 | 1200 | | | X | | | | X | | | | | | | | | | | | 1 |
| SB11-EXC-B-5' | | 1330 | | | X | X | | | X | | | | | | | | | | | | 1 |
| SB11-EXC-W-3.5' | | | | | X | X | | | X | | | | | | | | | | | | 1 |
| SB11-EXC-N-3.5' | | | | | X | X | | | X | | | | | | | | | | | | 1 |
| SB11-EXC-E-3.5' | | | | | X | X | | | X | | | | | | | | | | | | 1 |
| SB11-EXC-S-3.5' | | | | | X | X | | | X | | | | | | | | | | | | 1 |

RUSH

## Project Info.

Project Name: PGE San Lorenzo
Project#: 185702540
PO#:
Credit Card#:

## Sample Receipt

# of Containers:
Head Space:
Temp: 11.8°C
Conforms to record:

TAT: 5 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank
Fund EDF
Special Instructions / Comments: ☐ Global ID _____

One analysis for TPHg & VOCs
**24-HR TAT***

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from $C_9$-$C_{24}$ (industry norm). Default for 8015B is $C_{10}$-$C_{28}$

| 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|
| K CHUAP 1455 | | |
| Signature Time | Signature Time | Signature Time |
| K CHUAP 8/17/12 | | |
| Printed Name Date | Printed Name Date | Printed Name Date |
| Stantec | | |
| Company | Company | Company |

| 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|
| John Mullen 1455 | | |
| Signature Time | Signature Time | Signature Time |
| Mullen 8-17-12 | | |
| Printed Name Date | Printed Name Date | Printed Name Date |
| test America | | |
| Company | Company | Company |

Rev. 09/11

# Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 720-44026-1

**Login Number: 44026**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Mullen, Joan**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | False | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | True | |

# APPENDIX D
# Disposal Documentation

Report of Soil Excavation Activities
Pacific Gas and Electric Company
L105N Property
997 Grant Avenue
San Lorenzo, California
Stantec PN: 185702540.200.0003
September 26, 2012

# REPUBLIC SERVICES SPECIAL WASTE PROFILE

Requested Disposal Facility: 4204 Forward Inc. CA

| Waste Profile # |
|---|
| |

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

Sales Rep #:

## I. Generator Information

| | | | |
|---|---|---|---|
| Generator Name: PG&E SAN LORENZO PHASE II | | | |
| Generator Site Address: 997 Grant | | | |
| City: SAN LORENZO | County: ALAMEDA | State: California | Zip: 94580 |
| State ID/Reg No: | State Approval/Waste Code: (if applicable) | | NAICS # : |
| Generator Mailing Address (if different): ☑ 3401 Crow Canyon Rd, MS 176-C | | | |
| City: SAN RAMON | County: CONTRA COSTA | State: California | Zip: 94583 |
| Generator Contact Name: ANNE CONNER | | Email: APB1@PGE.COM | |
| Phone Number: (925) 415-6381 | Ext: | Fax Number: (925) 415-6852 | |

## IIa. Transporter Information

| | | | |
|---|---|---|---|
| Transporter Name: PSC INDUSTRIAL | | Contact Name: LEE SOARES | |
| Transporter Address: 1802 SHELTON DRIVE | | | |
| City: HOLLISTER | County: SAN BENITO | State: CA | Zip: 95046 |
| Phone: (800) 321-1030 | Fax: | State Transportation Number: | |

## IIb. Billing Information

| | | | |
|---|---|---|---|
| Bill To: PACIFIC GAS & ELECTRIC COMPANY | | Contact Name: ANNE CONNER | |
| Billing Address: 3401 CROW CANYON ROAD | | Email: APB1@PGE.COM | |
| City: SAN RAMON | State: CA | Zip: 94583 | Phone: (925) 415-6381 |

## III. Waste Stream Information

| | |
|---|---|
| Name of Waste: NON-HAZARDOUS SOIL | |
| Process Generating Waste:<br>In order to obtain unrestricted land use clean closure, soil excavation to remove low level TPH in soil at 10 foot depth originally resulting from former UST. | |
| Type of Waste: | ☑ INDUSTRIAL PROCESS WASTE ☐ POLLUTION CONTROL WASTE |
| Physical State: | ☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID |
| Method of Shipment: | ☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER: |
| Estimated Annual Volume: | 20 Tons |
| Frequency: | ☑ ONE TIME ☐ ANNUAL |
| Disposal Consideration: | ☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION |

## IV. Representative Sample Certification

☐ NO SAMPLE TAKEN

| | |
|---|---|
| Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules? | ☑ YES or ☐ NO |
| Sample Date: 5/25/2011 | Type of Sample: ☑ COMPOSITE SAMPLE ☐ GRAB SAMPLE |
| Sample ID Numbers: 11-05-1797 | |

| Waste Profile # |
|---|
| |

## V. Physical Characteristics of Waste

| Characteristic Components | % by Weight (range) |
|---|---|
| 1. SOIL | 100.000 |
| 2. | |
| 3. | |
| 4. | |
| 5. | |

| Color | Odor (describe) | Does Waste Contain Free Liquids? | % Solids | pH: | Flash Point |
|---|---|---|---|---|---|
| BROWN | NONE | ☐ YES or ☑ NO | 100.00 | N/A | N/A °F |

***Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile***

| | |
|---|---|
| Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33? | ☐ Yes or ☑ No |
| Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]? | ☐ Yes or ☑ No |
| Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761? | ☐ Yes or ☑ No |
| Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents? | ☐ Yes or ☑ No |
| Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations? | ☐ Yes or ☑ No |
| Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31? | ☐ Yes or ☑ No |
| Is this a regulated Radioactive Waste as defined by Federal and/or State regulations? | ☐ Yes or ☑ No |
| Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations? | ☐ Yes or ☑ No |
| Is this waste a reactive or heat generating waste? | ☐ Yes or ☑ No |
| Does the waste contain sulfur or sulfur by-products? | ☐ Yes or ☑ No |
| Is this waste generated at a Federal Superfund Clean Up Site? | ☐ Yes or ☑ No |
| Is this waste from a TSD facility, TSD like facility or consolidator? | ☐ Yes or ☑ No |

## VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

| ERICH NOLAN, EH&S MANAGER | PACIFIC GAS & ELECTRIC COMPANY |
|---|---|
| Authorized Representative Name And Title (Type or Print) | Company Name |
| Authorized Representative Signature | 04/26/2012<br>Date |

663910

# FORWARD INCORPORATED

9999 South Austin Road/WEIGHING LOCATION
Manteca, CA 95336
Landfill: (209) 982-4298/WEIGHING LOCATION
Resource Recovery: (209) 982-4298

1145 W. Charterway
Stockton, CA 95206
Main Office: (209) 466-4482
Fax: (209) 465-0631

| SITE | TICKET | GRID |
|---|---|---|
| | Y8 291767 | |

WEIGHMASTER: BB00078 BRIDGETTE B

| DATE IN | TIME IN |
|---|---|
| 24 August 2012 | 1:12 pm |

| DATE OUT | TIME OUT |
|---|---|
| 24 August 2012 | 1:27 pm |

| VEHICLE | ROLL OFF |
|---|---|
| EKAM 1011 | |

| REFERENCE | ORIGIN |
|---|---|
| | SAN LORENZO |

01054I
E R R G
CHRIS MAI
4585 PACHECO BLVD. STE. 200
MARTINEZ, CA 94553
Contract: 4204127211

01 Gross Weight 68,280.00 lb Inbound —
Tare Weight 31,000.00 lb
Net Weight 37,280.00 lb 18.64 TN

| QTY. | UNIT | DESCRIPTION | RATE | EXTENSION | TAX | TOTAL |
|---|---|---|---|---|---|---|
| 18.64 | TN | SW-BENEFICIAL REUSE | | | | |
| 1.00 | LD | ENVIRONMENTAL FEE | | | | |
| 1.00 | LD | FUEL RECOVERY FEE | | | | |
| | | MANIFEST# NOEN | | | | |

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

DRIVER SIGNATURE

ALLIED WASTE SERVICES
A REPUBLIC SERVICES COMPANY

NS-33

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. | 2. Page 1 of

**GENERATOR**

3. Generator's Name and Mailing Address
PG+E
3401 Crow Canyon Rd
San Ramon, CA 94583

4. Generator's Phone (925) 415-6781

5. Transporter 1 Company Name: Ken Beste Transportation | 6. US EPA ID Number | A. Transporter's Phone (707) 838-1407

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address
Allied Waste Co.
9999 S. Austin Rd.
Manteca CA 95336

10. US EPA ID Number | C. Facility's Phone (209) 982-4298

| 11. Waste Shipping Name and Description | 12. Containers No. | 12. Containers Type | 13. Total Quantity | 14. Unit Wt/Vol |
|---|---|---|---|---|
| a. Non-hazardous soil | | | 18 | Y |
| b. Acc# 10391 ERPG | | | | |
| c. | | | | |
| d. | | | | |

D. Additional Descriptions for Materials Listed Above
Profile # 4204 12 7211

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Site Address: 997 Grant Ave
San Lorenzo, CA 94580

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Greg Hoehn (authorized agent for PG&E) | Signature: Greg Hoehn | Month 08 Day 24 Year 12

**TRANSPORTER**

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: VARWIN TANEJA | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

**FACILITY**

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 12/98