

# TANK REMOVAL REPORT

**Warehouse Property  
1647 International Boulevard  
Oakland, Alameda County, California**



**Prepared for:**

**Alameda County Environmental Health  
Attn: Ms. Barbara J. Jakub, P.G.  
1131 Harbor Bay Parkway  
Alameda, CA 94502**

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**Mr. Alan Dimen  
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**Prepared by:**

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**SCS557  
June 15, 2016**



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Project No. SCS557

**Alameda County Environmental Health**

**Attn: Ms. Barbara J. Jakub, P.G.**

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**Reference: Warehouse Property  
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Oakland, Alameda County, California**

**Subject: Report:**  
• **Removal of Two Underground Storage Tanks (USTs)**

Dear Ms. Jakub, Ms. Trimble and Mr. Dimen:

SCHUTZE & Associates, Inc. is pleased to submit this Report regarding environmental field activities performed at 1647 International Boulevard, Oakland, California (subject site). Two underground storage tanks (USTs) were removed from the subject property in March and April of 2016 under work plans approved by Alameda County Environmental Health (ACEH) and the City of Oakland Fire Prevention Bureau.

The field activities were performed under the supervision of Mr. Jan Schutze, a California Professional Geologist (P.G.).

**A. BACKGROUND**

The subject site consists of the following parcel:

Address	APN <sup>1</sup>	Approximate Parcel Size	Location
1647 International Boulevard, Oakland, Alameda County, California	20-113-8	6,705 sq ft	On the western corner of the intersection of International Boulevard and 17th Avenue.

<sup>1</sup> Assessor's Parcel Number

The subject site is currently developed with one warehouse building. Adjacent to the property are: a car dealership to the northwest; International Boulevard to the northeast; an apartment complex to the southeast (across 17th Avenue); and an auto body shop to the southwest (across Solano Way). The property is approximately 1,050 feet northeast of the Oakland Estuary. The subject site and vicinity are depicted on the attached Figure 1 (Site Vicinity Map).

The subject property was occupied by Roto-Rooter, a plumbing company, until 1974. Since then, a metal fabricating company has occupied the site.

SCHUTZE & Associates, Inc. was initially engaged by the property owners to remove one gasoline UST, with an estimated capacity of 1,000 gallons, from the subject property. According to the property owners, the UST was associated with a private gasoline fueling station formerly operated at the site by Roto Rooter and had not been in use for at least 40 years. A second on-site UST was discovered following the removal of the first tank.

## **B. INITIAL UST REMOVAL (MARCH 2016)**

### **B.1 Pre-Field Activities**

SCHUTZE & Associates, Inc. received approval of the UST Closure Plan for the 1,000-gallon gasoline tank from the ACEH on February 10, 2016 and was issued Permit No. SR0029485. An Operational Fire Permit (Ref. No. FP16SKIS-00002) was issued by the City of Oakland Fire Prevention Bureau on February 25, 2016 for the UST removal. SCHUTZE & Associates, Inc. also submitted a Notification Form for the UST removal to the Bay Area Air Quality Management District (BAAQMD) Compliance and Enforcement Division prior to the work. Copies of all permits are presented in Appendix A.

Prior to the field work, SCHUTZE & Associates, Inc. marked the proposed excavation area with white spray paint. Subsequently, Underground Services Alert (USA) was contacted to clear the location for utilities (USA ticket #0041386). Prior to the commencement of removal activities, all field personnel participated in a health and safety meeting.

### **B.2 UST Excavation / Removal of Residual Product**

Removal of one 1,000-gallon gasoline UST at 1647 International Boulevard, Oakland was conducted March 2-4, 2016 by Western Abatement, Inc. of Ignacio, California<sup>2</sup> (Western). SCHUTZE & Associates, Inc. observed the removal activities and performed confirmation sampling. Ms. Barbara Jakub, P.G. with the ACEH and Ms. Sheryl Skillern with the City of Oakland Fire Prevention Bureau also observed the UST removal. The approximate location of the UST is depicted on the attached Figure 2.

The concrete slab above the UST was saw-cut and removed to expose the surface soil. The concrete debris was stockpiled at the site pending disposal.

Western excavated the soil overlying the UST and stockpiled the soil on polyethylene liners pending waste characterization. The first foot of excavated material consisted of

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<sup>2</sup> California Contractor's License #591839; California Department of Occupational Safety and Health (DOSH) Registration #191

clean beach sand fill with sea shells and ballast. From one to eleven feet below ground surface (ft bgs) were alternating layers of native brown sandy clay and olive green sandy clay, with soil staining observed in a layer of olive green sandy clay from 3.5 to 6 ft bgs.

During the soil removal activities, soil samples were collected for visual observation and were screened with a Photo Ionization Detector (PID) for detection of volatile organic compounds (VOCs). The maximum PID reading was 4,404 parts per million (ppm) at 4.5 feet ft bgs at the southwestern side of the tank pit.

The UST, verified to be 1,000 gallons in capacity, contained approximately 60 gallons of (what appeared to be) gasoline. The tank contents were placed into 55-gallon Department of Transportation (DOT) approved drums pending waste characterization.

### **B.3 UST Removal**

Under the supervision of the ACEH inspector, dry ice (50 pounds) was inserted into the tank to expel remaining residual gases before removal. Western measured the oxygen and Lower Explosive Levels (LELs) within the tank with a PID Multi RAE meter and observed that the oxygen levels began at 20% and decreased to below 10%. The LELs were at zero. The tank was certified "safe" by the contractor and was removed from the pit and placed on a plastic liner where the interior of the tank was triple-rinsed. The rinse water was pumped into 55-gallon drums pending waste characterization.

Dry ice was again inserted into the tank to expel remaining residual gases. When the oxygen and LEL values were low enough, the City of Oakland Fire Prevention Bureau inspector gave approval to cut into the tank. The tank and its piping appeared to be in good condition with no visible holes. The tank, along with associated product piping, was hauled to a scrap metal recycling facility (see Section J, Waste Disposal).

Black and green stained soil and hydrocarbon odors were observed in the tank pit on all sides of the UST's former location. Under the supervision of the ACEH inspector, three base samples were collected from the tank pit for laboratory analysis. One four-point composite sample was also collected from the stockpiled soil for waste characterization.

### **B.4 Discovery of Second UST / Backfilling UST Pit**

On March 3, 2016, Western personnel discovered that piping remaining at the edge of the excavation was connected to a second, buried UST that had apparently been positioned beneath and adjacent to the first UST (Figure 2). SCHUTZE & Associates, Inc. returned to the site to document the tank location and collected a sample of oily material from the apparent fill pipe of the second tank.

Due to impending heavy rainfall, the tank pit was backfilled with clean imported soil for the interval until the second UST could be scheduled for removal. The clean fill was separated from stained soil in the pit by a plastic membrane.

Western removed and disposed of the concrete waste stockpiled at the site. Stockpiled soil from the tank pit and drummed liquid waste remained stored on-site to be removed together with the waste that would be generated during the pending second tank

removal. The soil stockpiles were placed on, and covered with, 6 mill polyethylene plastic sheeting.

## **C. REMOVAL OF SECOND UST (APRIL 2016)**

### **C.1 Pre-Field Activities**

As approved by ACEH and the City of Oakland Fire Prevention Bureau, SCHUTZE & Associates, Inc. conducted the removal of the second on-site UST under addendums to the existing tank removal permits for the site (Section B.1). As previously, a Notification Form for the second UST removal was submitted to the BAAQMD. Copies of all permits are presented in Appendix A.

Prior to the field work, SCHUTZE & Associates, Inc. contacted USA and renewed the utility clearance ticket for the removal of the second UST (USA ticket #0155623). Prior to the commencement of the removal activities, all field personnel participated in a health and safety meeting.

### **C.2 UST Excavation / Removal of Residual Product**

Western Abatement, Inc. conducted the removal of the second on-site UST April 6 and 7, 2016. SCHUTZE & Associates, Inc. observed the removal activities and performed confirmation sampling. Ms. Barbara Jakub with the ACEH and Ms. Sheryl Skillern with the City of Oakland Fire Prevention Bureau also observed the UST removal. The approximate location of the UST is depicted on Figure 2.

Western excavated the overlying soil to expose the second UST, removing imported fill placed in the tank pit after the first UST was removed. This soil was placed on a separate liner from the soil stockpile from the first UST removal, so that the soil could be used again as backfill. All other soil excavated from the second tank pit was added to the existing stockpile.

During the soil removal activities, soil samples were collected for visual observation and were screened with a PID for detection of VOCs. The maximum PID reading was 3,967 ppm at 6.5 ft bgs at the southern side of the tank pit.

The second tank was found to have a capacity of 1,400 gallons. The tank contents, consisting of approximately 700 gallons of (what appeared to be) fuel oil, were removed and placed into 55-gallon DOT-approved drums pending waste characterization.

### **C.3 UST Removal**

Under the supervision of the ACEH inspector, the interior of the second UST was triple-rinsed before being removed from the pit. The rinse water was pumped into 55-gallon drums. Subsequent to the rinsing, dry ice (20 pounds) was inserted into the tank to expel remaining residual gases before its removal from the excavation. Western measured the oxygen and LELs within the tank using a PID Multi RAE meter and observed that the oxygen levels and LELs were below 10%. The tank was certified "safe" by the contractor and was removed from the pit and placed on a plastic liner. Dry ice was again inserted into the tank to expel any remaining residual gases. Once the

oxygen and LEL values were low enough, the City of Oakland inspector gave approval to cut into the tank. The tank was observed to have two visible holes located at what would have been its northwestern edge when in its original position (Figure 2). The holes were approximately 5" x 2" in size. The tank, along with associated product piping, was hauled to a scrap metal recycling facility (see Section J, Waste Disposal).

As with the first UST, stained soil and hydrocarbon odors were observed in the pit at the UST's former location. Under the supervision of the ACEH inspector, two sidewall samples were collected from the tank pit at a depth of 10 ft bgs.

In addition, a sample was collected from water observed at the base of the tank pit. While it is possible that this water may have been groundwater entering the pit, it is the opinion of the SCHUTZE & Associates, Inc. field geologist that the water was pooled rinse water that had leaked through holes in the tank during the rinsing process, which had taken place while the tank was still within the pit. A photograph of the pit bottom taken after the removal of the UST shows the water that was sampled visible at the portion of the pit where the UST had formerly rested (see Photograph 12, Site Photographs). Soil at the bottom of the pit had been excavated to a deeper depth adjacent to the former tank location but no water was observed in this area.

SCHUTZE & Associates, Inc. also collected a sample of the tank contents for waste characterization and a two-point composite sample from the imported fill for the tank pit for verification.

#### **C.4 Discovery of Third UST / Backfilling UST Pit**

On April 7, 2016, the tank pit was backfilled using the stockpiled clean fill and additional imported clean fill. The backfill was compacted over the area of the two former USTs in two-foot increments, using the excavator bucket and a compactor wheel (compaction testing was not performed). The area will be asphalted over to match the existing grade following the end of operations at the site.

During the backfill operations, SCHUTZE & Associates, Inc.'s field geologist observed what appeared to be a UST fill pipe within a utility box located on the public sidewalk southeast of the tank pit area. A PID placed at the opening of the fill pipe gave a maximum reading of 156 ppm. A flat tape water level meter with a stainless steel sounding probe detected a liquid surface at 6.5 ft bgs and a PVC pipe inserted down the fill pipe to the apparent bottom of the tank was covered with clear liquid up to 1.5 ft. The approximate diameter of this third UST appears to be 5 ft.

SCHUTZE & Associates, Inc. also observed two additional, similar utility boxes in the sidewalk southwest of the location of this UST fill pipe. The two utility boxes, which had been cemented in and could not be further investigated, may indicate that other USTs exist beneath the sidewalk. SCHUTZE & Associates, Inc. recommends further investigations in this area as well as removal of the third tank.

## **D. SAMPLING METHODOLOGY**

### **D.1 Soil Sampling**

SCHUTZE & Associates, Inc. collected three soil samples from the base of the first UST pit: one sample each at the northwest and southeast ends of the tank at 8.5 ft bgs and one sample in the center at 11.5 ft bgs. During the removal of the second UST, two soil samples were collected from the northwest and southeast sidewalls of the tank pit (samples were not collected from the soil at the base of the second tank pit due to the presence of water in the pit at the former tank location).

Samples were also collected from the stockpiled excavated soil for waste characterization and from the imported fill for the tank pit for verification.

The soil samples were collected in stainless steel tubes with Teflon-sealed caps. Nitrile gloves were worn during sample collection and changed between samples to prevent cross-contamination. The samples were stored on ice in a cooler and transported to McCampbell Analytical, Inc. (CDPH ELAP<sup>3</sup> #1644) following chain-of-custody procedures.

### **D.2 Sampling of Water and Tank Contents**

One water sample was collected from the base of the second UST pit at 10 ft bgs (no water was encountered during the removal of the first UST). The water sample was collected using a clean stainless steel bailer and was placed into 40-mL volatile organic analysis (VOA) containers pre-preserved with HCL. No observable air was present in the VOA containers subsequent to sample collection.

A sample of the contents of the second UST was collected for waste characterization. A sample had also previously been collected from the second UST's fill pipe when the tank was discovered.

Nitrile gloves were worn during sample collection and changed between samples to prevent cross-contamination. The samples were stored on ice in a cooler and transported to McCampbell Analytical, Inc. following chain-of-custody procedures.

## **E. LABORATORY ANALYTICAL RESULTS FOR FIRST UST (MARCH 2016)**

Selected analytical results are presented in the attached Tables 1 through 3 and are shown on the attached Figure 2. The laboratory reports are included as Appendix B. The analytical results were compared to San Francisco Bay Regional Water Quality Control Board (Water Board) Tier 1 Environmental Screening Levels (ESLs).

### **E.1 Analytical Results for Soil**

SCHUTZE & Associates, Inc. collected three soil samples from the base of the first UST pit: one sample each at the northwest and southeast ends of the tank at 8.5 ft bgs (samples B-8.5-NW and B-8.5-SE) and one sample in the center at 11.5 ft bgs (sample B-11.5-M).

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<sup>3</sup> California Department of Public Health Environmental Laboratory Accreditation Program

### **Total Petroleum Hydrocarbons (TPH)**

Samples were analyzed for TPH-g, -ss, -d, -mo, -bo and -ho.<sup>4</sup>

- TPH-g was detected above the Tier 1 ESL of 100 milligrams per kilogram (mg/kg) in all samples collected from the base of the UST pit. The maximum concentration of 610 mg/kg was in sample B-11.5-M.
- TPH-ss was detected above the Tier 1 ESL of 100 mg/kg in all base samples. The maximum concentration of 620 mg/kg was in B-11.5-M.
- TPH-d was detected above the Tier 1 ESL of 230 mg/kg in samples B-8.5-NW (440 mg/kg) and B-11.5-M (3,900 mg/kg). TPH-d was detected below the ESL in B-8.5-SE.
- TPH-mo was detected below the Tier 1 ESL of 5,100 mg/kg in all base samples. The maximum concentration of 2,800 mg/kg was in B-11.5-M.
- TPH-bo was detected in all base samples, with a maximum concentration of 1,600 mg/kg in B-11.5-M (there is currently no corresponding Tier 1 ESL for TPH-bo).
- TPH-ho was detected in all base samples, with a maximum concentration of 3,000 mg/kg in B-11.5-M (there is currently no corresponding Tier 1 ESL for TPH-ho).

The laboratory commented on the patterns of the hydrocarbon chromatograms, stating that the patterns resembled that of Stoddard solvent range hydrocarbons (carbon range C7 to C12).

### **VOCs**

- MBTEX<sup>5</sup> was not detected above the laboratory reporting limits (RLs) in any of the base samples; however the RLs, which ranged from 0.10 to 1.0 mg/kg, were above the Tier 1 ESLs for MTBE (0.023 mg/kg) and benzene (0.044 mg/kg).
- Naphthalene was detected at 5.4 mg/kg in sample B-11.5-M, which is above the Tier 1 ESL of 0.033 mg/kg. Naphthalene was not detected above the laboratory RLs in the other base samples; however the RLs, which ranged from 0.10 to 1.0 mg/kg, were above the ESL.
- Other VOCs were not detected above the RLs, with the exception of n-propyl benzene, detected in B-11.5-M at 2.5 mg/kg (there is currently no corresponding ESL for n-propyl benzene).

### **Semi-Volatile Organic Compounds (SVOCs)**

- 2-methylnaphthalene was detected above the Tier 1 ESL of 0.25 mg/kg in sample B-11.5-M at a concentration of 88 mg/kg. 2-methylbenzene was not detected above the laboratory RLs in the other base samples; however the RLs, which ranged from 2.5 to 5.0 mg/kg, were above the ESL.
- Other SVOCs were not detected above the RLs.

<sup>4</sup> Total petroleum hydrocarbons as gasoline, Stoddard solvent, diesel, motor oil, bunker oil and heating oil

<sup>5</sup> Methyl tert-butyl ether, benzene, toluene, ethylbenzene and xylenes



## **Metals**

- Chromium (total) was detected in all base samples, with a maximum concentration of 90 mg/kg in B-11.5-M (there is currently no corresponding ESL for total chromium in soil). Sample B-11.5-M was re-analyzed for chromium VI, which was not detected above the RL of 4.0 mg/kg in the sample; however the RL of 4.0 mg/kg is above the chromium VI Tier 1 ESL of 0.30 mg/kg.
- Cadmium, lead, nickel and zinc were not detected above the corresponding Tier 1 ESLs in any of the base samples.

### **E.2 Summary: Soil Samples from First UST Pit**

Based on the analytical results for the soil samples collected from the tank pit base during removal of the first UST, soil has been impacted by hydrocarbons, with contaminant concentrations appearing to increase with depth. Detections of naphthalene and 2-methylnaphthalene at levels above Tier 1 ESLs were found in the sample collected at 11.5 ft bgs.

The laboratory commented on the patterns of the hydrocarbon chromatograms, stating that the patterns resembled that of Stoddard solvent range hydrocarbons (carbon range C7 to C12). Based on information provided by Mr. Alan Dimen, historical Sanborn fire insurance maps from 1929 and 1951 depicted the building at the subject site as a “Dyeing & Cleaning” facility (Appendix C). Three small structures which existed at that time behind the main building (southwest portion of the property) were labeled “Dry Cleaning” on the maps. The historical use of Stoddard solvent by dry-cleaning facilities (approximately up to the 1960s) is consistent with the apparent operational time frame of the former on-site laundry.

The high hydrocarbon content in the base soil samples may have affected laboratory RLs, resulting in RLs that were higher than the ESLs for some analyses (laboratory analytical qualifiers indicated that some samples were diluted due to high organic content).

## **F. LABORATORY ANALYTICAL RESULTS FOR SECOND UST (APRIL 2016)**

Selected analytical results are presented in the attached Tables 1 through 3 and are shown on Figure 2. The laboratory reports are included as Appendix B. The analytical results were compared to San Francisco Bay Water Board Tier 1 ESLs.

### **F.1 Analytical Results for Soil**

SCHUTZE & Associates, Inc. collected two soil samples from the second UST pit: one sample at 10 ft bgs from the northwest sidewall (sample SW-10-NW) and one sample at 10 ft bgs from the southeast sidewall (sample SW-10-SE). Samples were not collected from the soil at the base of the second tank pit due to the presence of water in the pit at the former tank location.

## **TPH**

- TPH-g was detected above the Tier 1 ESL of 100 mg/kg in the southeastern sidewall sample (SW-10-SE) at a concentration of 150 mg/kg. TPH-g was detected below the ESL in the northwestern sidewall sample (SW-10-NW).
- TPH-ss was detected above the Tier 1 ESL of 100 mg/kg in SW-10-SE at a concentration of 280 mg/kg. TPH-ss was detected below the ESL in SW-10-NW.
- TPH-d and -mo were detected in both sidewall samples at concentrations below the Tier 1 ESLs. Low concentrations of TPH-bo and -ho were also detected in both sidewall samples (there are currently no corresponding Tier 1 ESLs for TPH-bo and -ho).

## **VOCs**

- MBTEX and naphthalene were not detected above the laboratory RLs in either sidewall sample; however the RLs, which ranged from 0.05 to 2.0 mg/kg, were above the Tier 1 ESLs for MTBE (0.023 mg/kg), benzene (0.044 mg/kg) and naphthalene (0.033 mg/kg).
- Other VOCs were not detected above the RLs.

## **SVOCs**

- SVOCs were not detected in the sidewall samples above the RLs.

## **Metals**

- Chromium (total) was detected in both sidewall samples, with a maximum concentration of 54 mg/kg in SW-10-SE (there is currently no corresponding ESL for total chromium in soil). Sample SW-10-SE was re-analyzed for chromium VI, which was not detected above the RL of 4.0 mg/kg in the sample; however the RL of 4.0 mg/kg is above the chromium VI Tier 1 ESL of 0.30 mg/kg.
- Cadmium, lead, nickel and zinc were not detected above the corresponding Tier 1 ESLs in either sidewall sample.

### **F.2 Analytical Results for Water**

One sample (B-10-W) was collected from water encountered at the base of the second tank pit (10 ft bgs). The water appeared to be rinse water drained from the holes at the bottom of the UST.

## **TPH**

- TPH-g, -ss and -d were detected in the water sample at concentrations well above the Tier 1 ESL of 100 µg/L (8,000 µg/L, 15,000 µg/L and 52,000 µg/L, respectively).
- TPH-mo, -bo and -ho were detected at concentrations of 13,000 µg/L, 61,000 µg/L and 49,000 µg/L, respectively (there are currently no corresponding Tier 1 ESLs for TPH-mo, -bo and -ho).

## **VOCs**

VOCs were detected in B-10-W as follows:

- Benzene was detected above the Tier 1 ESL of 1.0 µg/L at a concentration of 11 µg/L.
- Ethylbenzene was detected above the Tier 1 ESL of 13 µg/L at a concentration of 100 µg/L.
- Xylenes (total) were detected above the Tier 1 ESL of 20 µg/L at a concentration of 360 µg/L.
- MTBE and toluene were not detected above the laboratory RLs; however the RL of 50 µg/L for MTBE was above the Tier 1 ESL of 5.0 µg/L.
- Naphthalene was detected above the Tier 1 ESL of 0.17 µg/L at a concentration of 210 µg/L.
- Other VOCs detected were: n-butyl benzene (51 µg/L); n-propyl benzene (92 µg/L); 1,2,4-trimethylbenzene (470 µg/L); and 1,3,5-trimethylbenzene (94 µg/L). There are currently no corresponding Tier 1 ESLs for these VOCs.

## **Metals**

- Chromium (total) was detected in B-10-W above the Tier 1 ESL of 50 µg/L at a concentration of 66 µg/L.
- Lead was detected above the Tier 1 ESL of 2.5 µg/L at a concentration of 140 µg/L.
- Nickel was detected above the Tier 1 ESL of 8.2 µg/L at a concentration of 120 µg/L.
- Cadmium and zinc were not detected above laboratory RLs; however the RLs of 2.5 µg/L and 150 µg/L, respectively, were above the respective Tier 1 ESLs of 0.25 µg/L and 81 µg/L for these metals.

### **F.3 Summary: Soil and Water Samples from Second UST Pit**

Based on the laboratory analytical results for soil samples collected from the sidewalls of the tank pit during removal of the second on-site UST, soil has been impacted by hydrocarbons. The contaminant concentrations detected during this round of soil sampling were in general lower than those detected in samples collected at the base of the first UST pit. VOCs and SVOCs were not detected above the RLs in the sidewall samples.

TPH-ss was detected in both sidewall samples. Laboratory analytical qualifiers indicated that detections of Stoddard solvent range hydrocarbons (carbon range C7 to C12) were significant in some results. Aged gasoline, diesel and oil range compounds were also indicated as significant in these samples.

The high hydrocarbon content in the soil samples may have affected laboratory RLs, resulting in RLs that were higher than the ESLs for some analyses (laboratory analytical qualifiers listed indicated that some samples were diluted due to high organic content).

The water sample collected at the base of the second UST pit contained concentrations of TPH, VOCs, and metals in excess of Tier 1 ESLs. As previously stated, it is unknown if the water in the pit was groundwater or rinse water that leaked through holes in the tank when the tank was rinsed in place within the tank pit. The hydrocarbon detections for the sample taken from the tank contents (see following section) were similar in composition to those detected in the water sample and also in soil collected at 11.5 ft bgs in the first tank pit.

## **G. WASTE CHARACTERIZATION**

### **Stockpiled Soil**

A 4-pt composite sample (sample SP-1,2,3,4) was collected from the stockpiled excavated soil for waste characterization. The results for this sample are included in Tables 1 through 3 and Appendix B.

The analytical results for SP-1,2,3,4 for hydrocarbons, VOCs and metals were below the Tier 1 ESLs and/or below the laboratory RLs. Chromium (total) was detected at a concentration of 51 mg/kg in SP-1,2,3,4 (there is currently no corresponding ESL for total chromium in soil). The sample was re-analyzed for chromium VI, which was not detected above the RL of 4.0 mg/kg in the sample; however the RL of 4.0 mg/kg is above the chromium VI Tier 1 ESL of 0.30 mg/kg.

The stockpiled soil will be hauled and disposed of as non-hazardous waste (see Section J, Waste Disposal).

### **Tank Contents**

The contents of the second UST, consisting of approximately 700 gallons of (what appeared to be) fuel oil, were removed and placed into 55-gallon DOT-approved drums pending waste characterization.

A sample of the tank contents (sample TC) was collected for waste characterization. A sample of material present in the UST fill pipe (sample Tank II Content) had also been collected previously, at the time the tank was discovered. The results for these samples are included in Tables 1 through 3 and Appendix B.

The soil and groundwater Tier 1 ESLs are not applicable to samples TC (matrix: oil) and Tank II Content (matrix: solid). The analytical results for the samples indicated high concentrations of hydrocarbons in both samples, as would be expected for UST contents. Toluene, ethylbenzene, xylenes and naphthalene were detected in sample TC and naphthalene was detected in sample Tank II Content. Metals were either not detected above the RLs or were detected at relatively low levels in the two samples.

Sample TC was also analyzed for Corrosivity (pH = 6.5, which is not corrosive) and Flash Point (>100 degrees Celsius, which is not ignitable at room temperature).

The drummed tank contents and rinsate water will be hauled and disposed of as non-hazardous waste (see Section J, Waste Disposal).

### **Imported Fill**

A 2-pt composite sample (sample BF-1,2) was collected for verification from the imported fill used to backfill the tank pit. The results for this sample are included in Appendix B.

The analytical results for BF-1,2 for TPH-g, VOCs and metals were below the Tier 1 ESLs and/or below the laboratory RLs.

## **H. QUALITY CONTROL AND CHAIN-OF-CUSTODY**

SCHUTZE & Associates, Inc. performed QA procedures to ensure that data precision, accuracy, completeness and comparability would meet standard data-quality goals.

All field procedures were appropriate to minimize external sample contamination. Nitrile gloves were worn throughout the sampling process and were changed for each sample to minimize cross-contamination. The soil samples were collected using new stainless steel tubes with Teflon-sealed caps. The water samples were collected using a clean stainless steel bailer and placed into VOAs with no head space. The steel tubes and VOAs were provided by McCampbell Analytical, Inc. in good condition. Subsequent to collection, the samples were placed on ice and then delivered to McCampbell Analytical, Inc. in accordance with chain of custody procedures. Holding times were observed; however sample TC (tank contents) was analyzed out of holding time.

McCampbell Analytical, Inc. performed "level II" Quality Control Data Reporting, which consisted of Laboratory Control Samples (LCS) and surrogate recoveries. These recoveries were checked to ensure that they were within the proper control limits. According to the laboratory quality control report (Appendix B), all analyses were completed satisfactorily and all QC samples were found to be within the proper control limits.

## **I. UST SITE UNAUTHORIZED RELEASE/CONTAMINATION REPORT**

On April 25, 2016, SCHUTZE & Associates, Inc. submitted an Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report to Ms. Barbara Jakub with ACEH. The report noted the discovery of a fuel/heating oil release on April 7, 2016 during the removal of a UST from the subject property. A copy of the report is presented as Appendix D.

## **J. WASTE DISPOSAL**

Hazardous Waste Tank Closure Certification forms for both USTs removed from the subject site were completed by Western Abatement, Inc. Copies of the Certification forms are attached as Appendix E.

Both USTs, along with associated piping, were hauled to Alco Iron & Metal Co. (San Leandro, CA), a scrap metal recycling facility, for disposal. Copies of the documentation for receipt of the tanks at that facility are attached as Appendix F.

The stockpiled soil from the UST excavations will be hauled to the Keller Canyon Landfill (Pittsburg, CA). Copies of the soil waste disposal manifests will be provided as an Addendum to this Report when available.

The drummed liquid waste from the UST removals (tank contents and rinsate) will be disposed of at the following facilities:

- Fifteen 55-gallon drums (12 heating oil; 2 oily rinse water; 1 oily sludge) to Filter Recycling Services, Inc. (Bloomington, CA).
- Two 55-gallon drums (water/gasoline rinse) to HazMat Inc. (corporate office in Anaheim, CA; facility is located in Kansas City, MO).

Copies of the liquid waste disposal manifests will be provided as an Addendum to this Report when available.

## **K. CONCLUSIONS AND RECOMMENDATIONS**

On March 2-4 and April 6-7, 2016, SCHUTZE & Associates, Inc. supervised the removal of, respectively, one 1,000-gallon gasoline UST and one 1,400-gallon fuel/heating oil UST from 1647 International Boulevard in Oakland, California.

The first UST appeared to be in good condition with no visible holes. The second UST was observed to have two holes. Based on these observations, petroleum products that have been detected in soil in the tank pits most likely originated from the second UST and/or other unknown USTs which appear to be present at the site.

Based on the laboratory results for the soil samples collected in the tank pits, soil at the site has been impacted by hydrocarbons. Contaminant concentrations appear to increase with depth, with the highest concentrations of TPH, as well as the presence of naphthalene and 2-methynaphthalene, detected at the greatest depth sampled (11.5 ft bgs).

The laboratory commented on the patterns of the hydrocarbon chromatograms, stating that the pattern resembled that of Stoddard solvent range hydrocarbons (carbon range C7 to C12). Based on information provided by Mr. Alan Dimen, historical Sanborn fire insurance maps from 1929 and 1951 depicted the building at the subject site as a "Dyeing & Cleaning" facility. Three small structures which existed at that time behind the main building (southwest portion of the property) were labeled "Dry Cleaning" on the maps. The historical use of Stoddard solvent by dry-cleaning facilities is consistent with the apparent operational time frame of the former on-site laundry.

A water sample collected from the base of the second UST pit at 10 ft bgs contained concentrations of TPH, VOCs, and metals in excess of the Tier 1 ESLs. It is the opinion of the SCHUTZE & Associates, Inc. field geologist that the water was pooled rinse water that had leaked through holes in the tank during the rinsing process, which had taken place while the tank was still within the pit.

During backfill operations after the removal of the second tank, SCHUTZE & Associates, Inc.'s field geologist observed evidence of a third UST, which was a UST fill pipe on the public sidewalk southeast of the tank pit area. A water level meter detected

a liquid surface at 6.5 ft bgs. The approximate diameter of this third UST appears to be 5 ft.

SCHUTZE & Associates, Inc. also observed two additional, similar utility boxes in the sidewalk southwest of the location of the UST fill pipe. These two utility boxes, which had been cemented in and could not be further investigated, may indicate that other USTs exist beneath the sidewalk.

SCHUTZE & Associates, Inc. recommends the following:

- Removal of the third on-site UST, located underneath the sidewalk that borders 17th Avenue at the southeast side of the subject property.
- Further environmental investigation of the southwest portion of the subject property, identified as a dry-cleaners on historical Sanborn maps, to determine if other historical USTs are present. The two cemented utility boxes in the sidewalk area should be included in these investigations.

SCHUTZE & Associates, Inc. believes that the best option may be to dig small exploratory test pits at the site in tandem with the removal of the third UST, when excavation equipment is already present at the site. The area to be explored is relatively small (approximately 900 sq ft) and SCHUTZE & Associates, Inc. estimates that a series of six shallow exploratory excavations, approximately 4' x 4', should be sufficient. This method would produce quick results and would be cost-effective for the property owner.

A geophysical survey using ground penetrating radar (GPR) could also be used to locate potential USTs; however, it is likely that there would be too much interference from piping present beneath the site to obtain clear results. In addition, any subsurface anomalies identified by a geophysical survey would then need to be investigated further by test pitting to determine if USTs are actually present. SCHUTZE & Associates, Inc. therefore recommends test pitting rather than GPR to investigate the presence of additional historical USTs.

- Based on the laboratory results for samples collected during the removal of two USTs from the property, soil at the site has been impacted by petroleum hydrocarbons. The vertical and lateral extent of the detected contamination has not yet been determined, and there exists a potential that additional historical USTs are present at the property and may have leaked. SCHUTZE & Associates, Inc. therefore recommends that the property owners explore admission into the California UST Cleanup Fund.

We have enjoyed working on this project and appreciate the opportunity to be of service. Please call SCHUTZE & Associates, Inc. at (510) 226-9944 with questions or comments about this report.

Respectfully submitted:

**SCHUTZE & ASSOCIATES, INC.**



Jan H. Schutze, P.G., M.Sc.  
President

#### Attachments

- Figure 1 Site Vicinity Map
- Figure 2 Site Map with Selected Analytical Results
  
- Table 1 Selected Analytical Results for TPH
- Table 2 Selected Analytical Results for VOCs
- Table 3 Selected Analytical Results for Metals

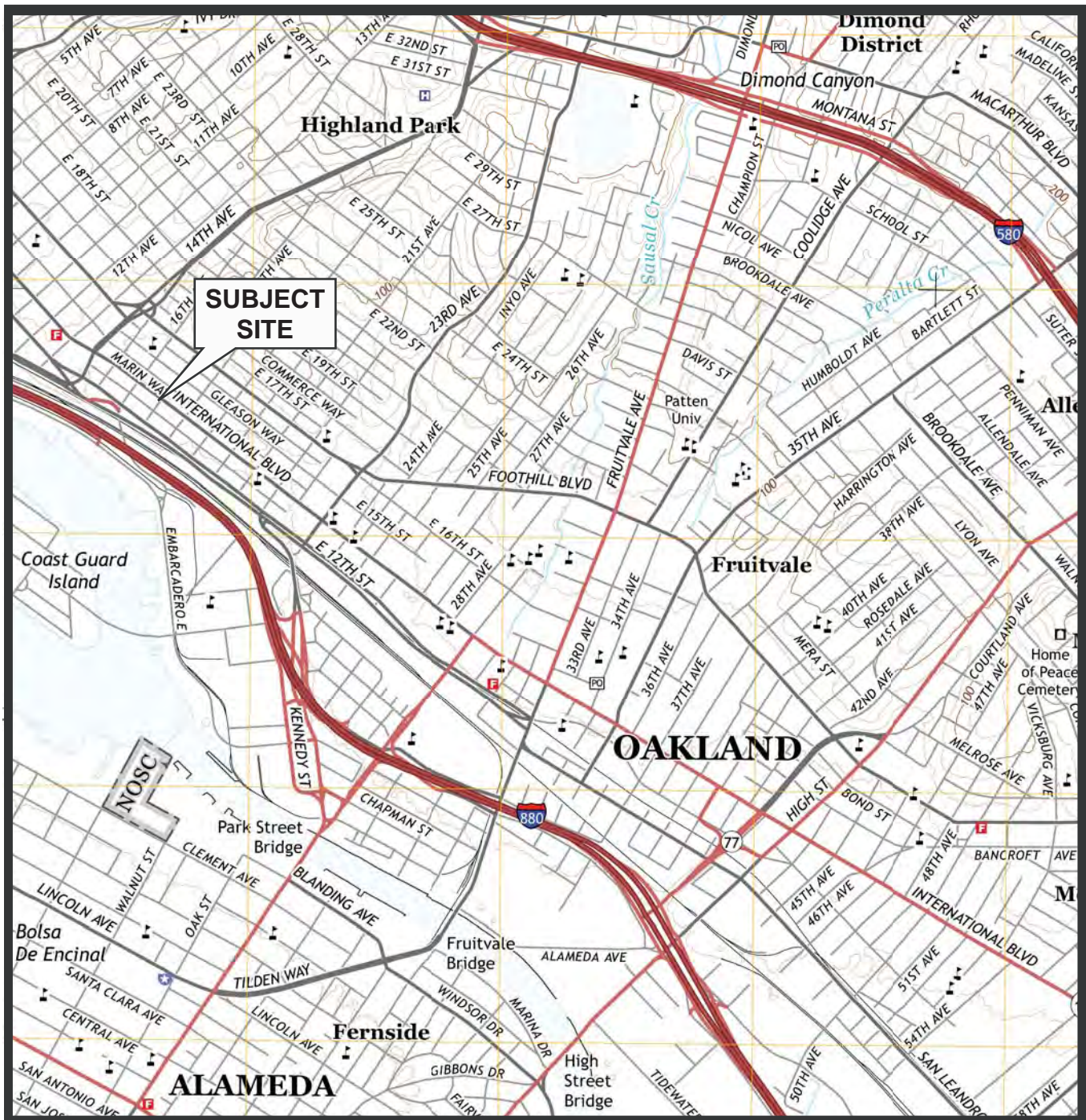
#### Site Photographs

#### Appendices

- Appendix A: Permits
- Appendix B: Laboratory Reports and Chain-of-Custody Forms (March and April 2016)
- Appendix C: Detail from 1951 Sanborn Fire Insurance Map
- Appendix D: UST Unauthorized Release Report (April 7, 2016)
- Appendix E: Hazardous Waste Tank Closure Certification Forms
- Appendix F: Waste Disposal Documentation



# FIGURES



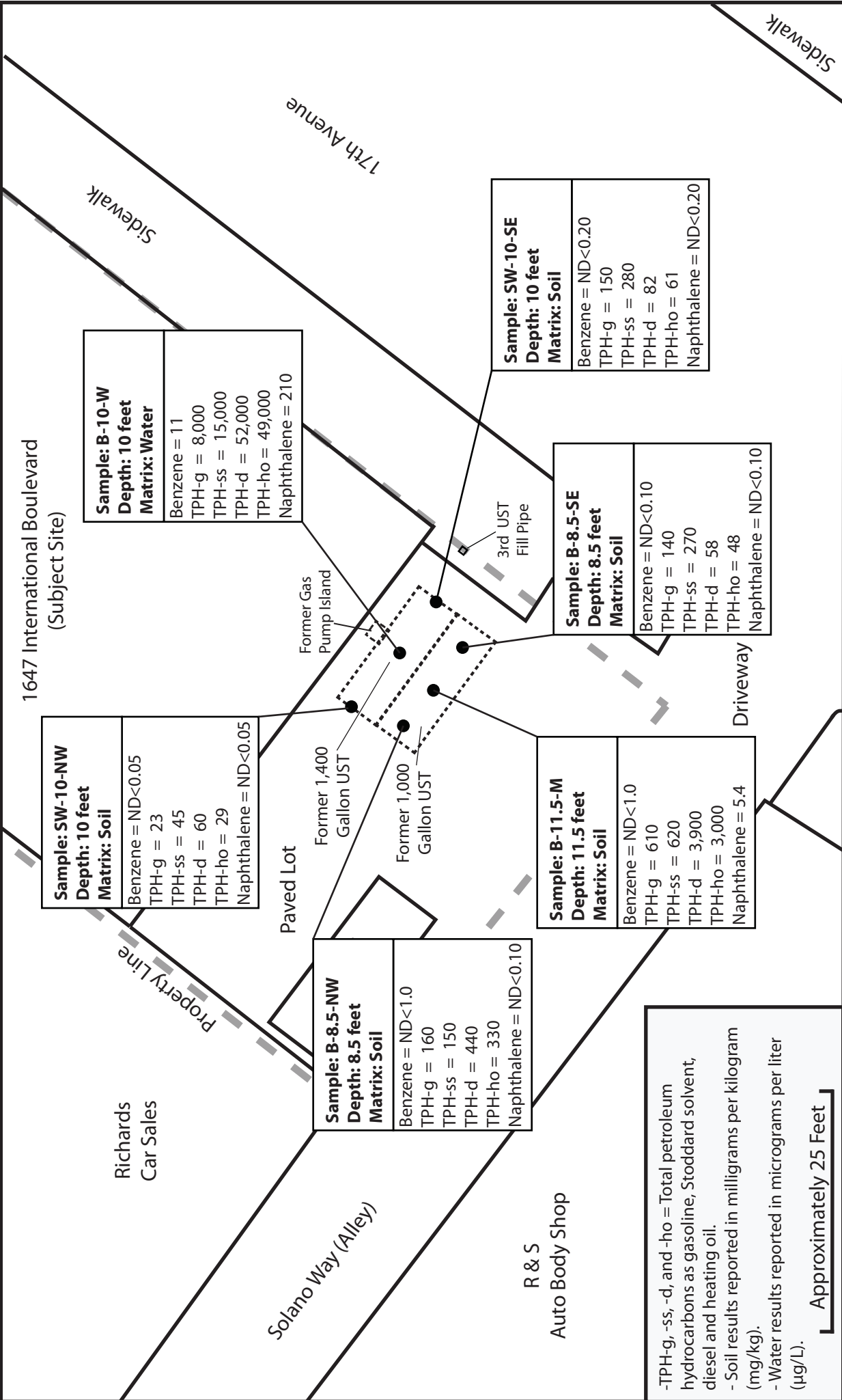
SITE VICINITY MAP  
 1647 International Boulevard  
 Oakland, California



SCHUTZE & Associates, Inc.  
 Project: SCS557  
 June 2016

Source: USGS  
 Oakland East 7.5 Quad  
 2015 (scale 1:24,000)

Figure 1



**SITE MAP WITH SELECTED ANALYTICAL RESULTS**  
**1647 INTERNATIONAL BOULEVARD**  
**OAKLAND, CALIFORNIA**



-TPH-g, -ss, -d, and -ho = Total petroleum hydrocarbons as gasoline, Stoddard solvent, diesel and heating oil.  
 - Soil results reported in milligrams per kilogram (mg/kg).  
 - Water results reported in micrograms per liter (µg/L).  
 [ ] Approximately 25 Feet

**FIGURE 2**  
 June 2016

# **TABLES**

**TABLE 1**  
**Selected Analytical Results for TPH**  
**1647 International Boulevard, Oakland, CA**

Type of Sample	Date Sampled	Sampling Location	Sample ID	Matrix	Unit	TPH					
						TPH-g	TPH-ss	TPH-d	TPH-mo	TPH-bo	TPH-ho
Tank Removal	3/2/2016	1st UST Pit (base)	B-8.5-NW	Soil	mg/kg	160	150	440	270	620	330
					mg/kg	140	270	58	49	92	48
					mg/kg	610	620	3,900	2,800	1,600	3,000
Tank Removal	4/7/2016	2nd UST Pit (sidewalls)	SW-10-NW	Soil	mg/kg	23	45	60	86	120	29
					mg/kg	150	280	82	65	120	61
					µg/L	8,000	15,000	52,000	13,000	61,000	49,000
Waste Characterization	3/2/2016	Stockpiles (excavated soil)	SP-1,2,3,4	Soil	mg/kg	18	36	15	36	12	9.1
					mg/kg	650	1,000	32,000	38,000	59,000	13,000
	4/6/2016	2nd UST (tank contents)	TC (2)	Oil	mg/L	19,000	37,000	480,000	570,000	780,000	220,000
					Tier 1 ESLs for Soil						100
Tier 1 ESLs for Groundwater						100	100	100	N/A	N/A	N/A

Matrix / Unit = soil and solids reported in milligrams per kilogram (mg/kg); water reported in micrograms per liter (µg/L); oil reported in milligrams per liter (mg/L).  
TPH = total petroleum hydrocarbons specified as gasoline range (-g), Stoddard solvent range (-ss), diesel oil range (-d), motor oil range (-mo), bunker oil range (-bo) and heating oil range (-ho).  
ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Soil and Groundwater (February 2016); Tier 1 ESLs based on: groundwater (February 2016); Tier 1 ESLs based on: groundwater is a current or potential drinking water resource.  
N/A = not applicable (no ESL listed). **BOLD** indicates concentrations above the ESL.  
(1) Water sample collected in 2nd UST pit appeared to be rinse water that had leaked from the UST rather than groundwater (see Section C.3).  
(2) Soil and groundwater ESLs listed are not applicable to samples Tank II Content (matrix = solid) and TC (matrix = oil). These samples are discussed in Section G.

**TABLE 2  
Selected Analytical Results for VOCs  
1647 International Boulevard, Oakland, CA**

Type of Sample	Date Sampled	Sampling Location	Sample ID	Matrix	Unit	VOCs					
						MTBE	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Naphthalene
Tank Removal	3/2/2016	1st UST Pit (base)	B-8.5-NW	Soil	mg/kg	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
			B-8.5-SE	Soil	mg/kg	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
			B-11.5-M	Soil	mg/kg	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>5.4</b>
Tank Removal	4/7/2016	2nd UST Pit (sidewalls)	SW-10-NW	Soil	mg/kg	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
			SW-10-SE	Soil	mg/kg	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20
			B-10-W	Water	µg/L	ND<50	11	ND<5.0	100	360	210
Waste Characterization	3/2/2016	Stockpiles (excavated soil)	SP-1,2,3,4	Soil	mg/kg	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
			2nd UST (fill pipe)	Solid	mg/kg	ND<0.40	ND<0.40	ND<0.40	ND<0.40	ND<0.40	5.1
			2nd UST (tank contents)	Oil	mg/L	ND<5.0	ND<5.0	16	11	81	340
<b>Tier 1 ESLs for Soil</b>						<b>0.023</b>	<b>0.044</b>	<b>2.9</b>	<b>1.4</b>	<b>2.3</b>	<b>0.033</b>
<b>Tier 1 ESLs for Groundwater</b>						<b>5.0</b>	<b>1.0</b>	<b>40</b>	<b>13</b>	<b>20</b>	<b>0.17</b>

Matrix / Unit = soil and solids reported in milligrams per kilogram (mg/kg); water reported in micrograms per liter (µg/L); oil reported in milligrams per liter (mg/L).  
VOCs = Volatile organic compounds; MTBE = Methyl tert-butyl ether.  
ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Soil and Groundwater (February 2016); Tier 1 ESLs based on: groundwater is a current or potential drinking water resource.  
**BOLD** indicates concentrations above the ESL.  
(1) Water sample collected in 2nd UST pit appeared to be rinse water that had leaked from the UST rather than groundwater (see Section C.3).  
(2) Soil and groundwater ESLs listed are not applicable to samples Tank II Content (matrix = solid) and TC (matrix = oil). These samples are discussed in Section G.

SCHUTZE & Associates, Inc. / June 2016

**TABLE 3**  
**Selected Analytical Results for Metals**  
**1647 International Boulevard, Oakland, CA**

Type of Sample	Date Sampled	Sampling Location	Sample ID	Matrix	Unit	Metals					
						Cadmium	Chromium (total)	Chromium VI	Lead	Nickel	Zinc
Tank Removal	3/2/2016	1st UST Pit (base)	B-8.5-NW	Soil	mg/kg	0.52	38	--	6.8	95	29
			B-8.5-SE	Soil	mg/kg	0.41	42	--	7.7	68	32
			B-11.5-M	Soil	mg/kg	0.28	90	ND<4.0	13	55	32
	4/7/2016	2nd UST Pit (sidewalls)	SW-10-NW	Soil	mg/kg	ND<0.25	45	--	13	99	40
			SW-10-SE	Soil	mg/kg	ND<0.25	54	ND<4.0	13	72	39
			B-10-W	Water	µg/L	ND<2.5	<b>66</b>	--	<b>140</b>	<b>120</b>	ND<150
Waste Characterization	3/2/2016	Stockpiles (excavated soil)	SP-1,2,3,4	Soil	mg/kg	ND<0.25	51	ND<4.0	9.2	54	35
			Tank II Content <sup>(2)</sup>	Solid	mg/kg	3.5	51	--	72	56	1100
	4/6/2016	2nd UST (tank contents)	TC <sup>(2)</sup>	Oil	mg/L	ND<0.25	ND<0.50	--	0.69	--	--
			<b>Tier 1 ESLs for Soil</b>						<b>39</b>	<b>N/A</b>	<b>80</b>
<b>Tier 1 ESLs for Groundwater</b>						<b>0.25</b>	<b>50</b>	<b>10</b>	<b>2.5</b>	<b>8.2</b>	<b>81</b>

Matrix / Unit = soil and solids reported in milligrams per kilogram (mg/kg); water reported in micrograms per liter (µg/L); oil reported in milligrams per liter (mg/L).  
ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Soil and Groundwater (February 2016); Tier 1 ESLs based on: groundwater is a current or potential drinking water resource.  
-- = not analyzed; N/A = not applicable (no ESL listed). **BOLD** indicates concentrations above the ESL.  
(1) Water sample collected in 2nd UST pit appeared to be rinse water that had leaked from the UST rather than groundwater (see Section C.3).  
(2) Soil and groundwater ESLs listed are not applicable to samples Tank II Content (matrix = solid) and TC (matrix = oil). These samples are discussed in Section G.

# **SITE PHOTOGRAPHS**





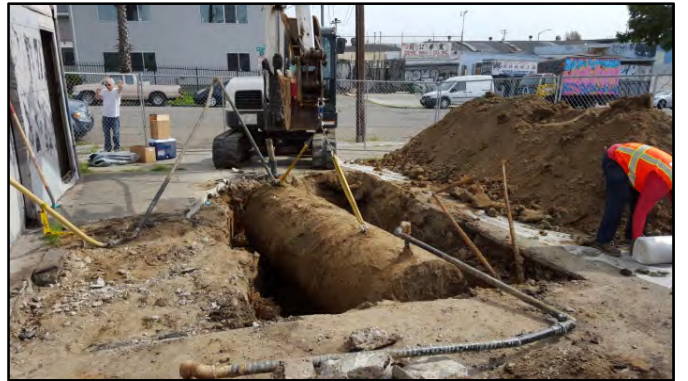
**Photograph 1:** A saw was used to cut the concrete slab above the first UST. The excavation area had previously been cleared for utilities by USA.



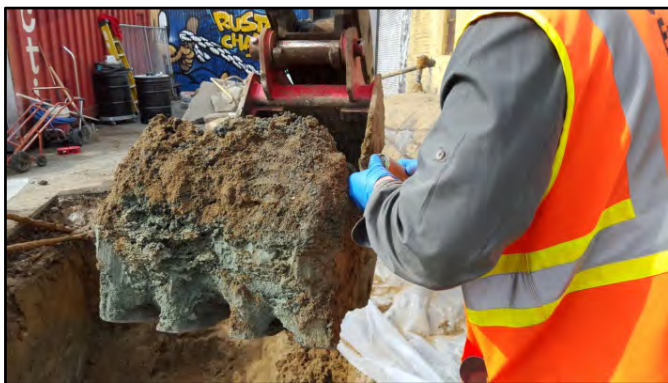
**Photograph 2:** Dry ice was added to the tank to lower the oxygen level and Lower Explosive Levels (LELs).



**Photograph 3:** Excavated soil was stockpiled on a plastic liner. Black hydrocarbon staining is visible in the stockpiled soil.



**Photograph 4:** The first UST was removed by attaching the excavator to hooks on the UST.



**Photograph 5:** The excavator bucket was used to collect soil samples. Soil with olive green staining was encountered in the tank pit.



**Photograph 6:** A hole was cut into the side of the UST before it was hauled to Alco Iron & Metal Co. for disposal.



**Photograph 7:** A second UST was discovered beneath and adjacent to the first UST. The UST fill pipe can be seen above the rusty brown area of the tank.



**Photograph 8:** A PVC pipe was used to determine the thickness of the fuel oil present in the second tank before pumping out the contents.



**Photograph 9:** The tank contents were pumped into 55-gallon drums. The drums were stored on-site pending waste characterization.



**Photograph 10:** The second UST in the tank pit just prior to removal. Olive green soil staining is visible at the base of the pit.



**Photograph 11:** Two holes were observed along the edge of the second tank.



**Photograph 12:** Water encountered at the base of the UST pit was sampled. The water, located at the portion of the pit where the UST had rested, may have been rinsate that leaked from the tank. No water was observed in areas of the pit that had been excavated to a deeper depth.



**Photograph 13:** The excavator bucket was used to compact the backfill in the tank pit in 2 ft increments.



**Photograph 14:** Clean imported soil was used for backfill.



**Photograph 15:** A compactor wheel was used to compact the surface of the backfill.



**Photograph 16:** A third tank was discovered under the sidewalk southeast of the former tank pit. A PID meter was used to measure VOCs at the fill pipe of the third tank.

# **APPENDIX A**

## **Permits**

ALAMEDA COUNTY  
 DEPARTMENT OF ENVIRONMENTAL HEALTH  
 1131 HARBOR BAY PARKWAY  
 ALAMEDA, CA 94502-6577  
 PHONE (510) 567-6700

**ACCEPTED**

**Underground Storage Tank Closure Permit Application**  
 Alameda County Division of Hazardous Materials  
 1131 Harbor Bay Parkway, Suite 250  
 Alameda, CA 94502-6577

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction/destruction.

One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.


Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspections Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 72 hours prior to the following required inspections:

- Removal of Tank(s) and Piping
- Sampling
- Final Inspection

Issuance of a) permit to operate, b) permanent site closure, is dependent on compliance with accepted plans and all applicable laws and regulations.

**\*THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:**

Contact Specialist:

  
 Barbara Jakub  
 barbara.jakub@acgov.org  
 510-567-6737  
 Approved 2/10/2016

**UNDERGROUND STORAGE TANK CLOSURE PLAN**

\*\*\* Complete closure plan according to instructions \*\*\*

1. Name of Business Warehouse  
 Business Owner or Contact Person (PRINT) Alan Dimen
2. Site Address 1647 International Boulevard  
 City, State Oakland, CA Zip 94606 Phone 510-536-1500
3. Mailing Address 1647 International Boulevard  
 City, State Oakland, CA Zip 94606 Phone 510-536-1500
4. Property Owner (1) Irene Trimble  
 Business Name (if applicable) N/A  
 Address 2101 Sunset Drive West  
 City, State University Place, WA Zip 98466 Phone 253-404-0241  
 Property Owner (2) Alan Dimen  
 Business Name (if applicable) N/A  
 Address 2907 Pine Avenue

City, State Berkeley, CA Zip 94705 Phone 510-206-0075

5. Generator name under which tank will be manifested

Warehouse at 1647 International Boulevard

EPA I.D. No. under which tank(s) will be manifested CAC002847381

6. Contractor Western Abatement

Address 448 Ignacio Boulevard, #234

City, State Ignacio, CA Zip 94949 Phone 707-795-9770

License Type ASB, A, C21, HAZ, C22 ID# 591839

7. Consultant (if applicable) Schutze & Associates, Inc.

Address 44358 South Grimmer Boulevard

City, State Fremont, CA Zip 94538 Phone 510-226-9944

8. Main Contact Person for Investigation (if applicable)

Name Jan Schutze Title President / P.G.

Company Schutze & Associates, Inc.

Phone 510-226-9944

9. Number of underground tanks being closed with this plan 1 (one)

Length of piping being removed under this plan Unknown

Total number underground tanks at this facility (\*\*confirmed with owner or operator) 1

10. State Registered Hazardous Waste Transporters/Facilities (See Instructions).

- a) Product/Residual Sludge/Rinsate Transporter

Name ECI EPA I.D. No. CAD 982030173

Hauler License No. 0293 License Exp. Date N/A

Address 255 Parr Boulevard

City, State Richmond, CA Zip 94801

- b) Product/Residual Sludge/Rinsate Disposal Site

Name ECI EPA I.D. No. CAD 982030173

Address 255 Parr Boulevard

City, State Richmond, CA Zip 94801

- c) Tank and Piping Transporter

Name ECI EPA I.D. No. CAD 982030173

Hauler License No. 0293 License Exp. Date N/A

d) Tank and Piping Disposal Site

Name ECI EPA I.D. No. CAD 982030173

Address 255 Parr Blvd

City, State Richmond, CA Zip \_\_\_\_\_

11. Sample Collector

Name Kevin Loeb

Company Schutze & Associates, Inc

Address 44358 South Grimmer Boulevard

City, State Fremont, CA Zip 94538 Phone 510-226-9944

12. Laboratory

Name McCampbell Analytical, Inc.

Company same

Address 1534 Willow Pass Road

City, State Pittsburg, CA Zip 94565

State Certification No. 1644

13. Have tank(s) or piping leaked in the past? Yes [ ] No [ ] Unknown [ x ]

If yes, describe: N/A

14. Describe method(s) to be used for rendering tank(s) inert:

Any material remaining in the tank will be removed. The tank will then be triple-rinsed to remove residual material. Dry ice will be added to the tank to achieve either less than 10% oxygen or less than 20% LEL. See permit conditions (attached)



**Before tank(s) are pumped out and inerted, all associated piping must be flushed back into the tank(s). All accessible piping must then be removed. Inaccessible piping must be permanently plugged using grout.**

The Bay Area Air Quality Management District, (415) 771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. **It is the contractor's responsibility to have a functional combustible gas indicator on-site to verify that the tank(s) is inerted.**

15. Tank History and Sampling Information **\*\*\* (See Instructions) \*\*\***

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Sample(s)
Capacity (gallons)	Use History include date last used (estimated)		
Estimated at 1,200.	Unknown: Last used before 1974 (tank pre-dated current owners purchase of property; tank was never used by current owners).	Soil; groundwater if present.	Samples will be collected from the following: -At each end of the tank (at a depth of 2 feet into native soil). -From the side walls (as required: depth based on field observations). -Under the piping (as required: length of piping at site is unknown).

**One soil sample must be collected for every 20 linear feet of underground piping that is removed. A groundwater sample must be collected if any groundwater is present in the excavation.**

Excavated/Stockpiled Soil	
<p style="text-align: center;">Stockpiled Soil Volume (estimated)</p> <p>Approximately 17 cubic yards.</p>	<p style="text-align: center;">Sampling Plan</p> <p>Two samples will be collected at each end of the stockpile.</p>

**Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.**

Will the excavated soil be returned to the excavation immediately after tank removal?  
 yes    no    unknown

If yes, explain reasoning \_\_\_\_\_  
 \_\_\_\_\_

If unknown at this point in time, please be aware that **excavated soil may not be returned to the excavation without prior approval from this office. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling activities.**

16. Chemical methods and associated detection limits to be used for analyzing sample(s):

**The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits shall be followed.**

See Table 2, Recommended Minimum Verification Analyses for Underground Tank Leaks.

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
TPH-g, -d, -mo	SW5030B	8015B	0.74-50
VOCs	SW5030B	8260B	0.0008-0.005
SVOCs	SW3550B	8270C	0.12-0.64
Lead	SW3050B	6010C	1.4
Luft 5 Metals	SW3050B	200.8/6020A	0.005-1.4
PAHs	SW3550B	8270C	0.12-0.64
<i>see attached</i>			(units = mg/kg)

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy

Name of Insurer RJM Specialty Insurance SV, LLC

19. Submit Plot Plan **\*\*\* (See Instructions) \*\*\***

20. Enclose Deposit (See Instructions)

21. **Report all leaks or contamination to this office within 5 days of discovery.**  
The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (URL) form.

22. **Submit a closure report to this office within 60 days of the tank removal. The closure report must contain all information listed in item 22 of the instructions.**

23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one-B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner). I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

**Subject: Conditions for Approval of Closure Plan**

**The following items are included in the Conditions of Approval by Item #:**

14. No liquid is to be introduced into the tank while the tank is in the ground. Remove the tank, place it on bermed plastic sheeting before introducing liquids and cleaning the tank. Ensure that all liquids are captured within the bermed area and appropriately disposed.
  
16. Tank was reported as an unknown contents, use the recommended minimum verification analysis for unknown oil (see attached).

## MINIMUM VERIFICATION ANALYSES FOR UNDERGROUND STORAGE TANK SITES

### Alameda County Department of Environmental Health

#### Certified Unified Program Agency (CUPA) and Local Oversight Program (LOP)

1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577

(510) 567-6700

<http://www.acgov.org/aceh/>

This document describes required laboratory analyses for soil and groundwater samples collected for underground storage tank (UST) sites. These requirements replace those previously described in the Unidocs guidance document entitled, "Recommended Minimum Verification Analyses for Underground Storage Tank Leaks" (UN-078). Analytes may be added or deleted during site characterization and remediation with approval from ACDEH.

Material Stored	Analytes	Analytical Method	
		Soil	Groundwater
Gasoline Leaded or Unleaded	TPH as gasoline C5-C12	EPA 8260B/C	EPA 8260B/C
	BTEX, MTBE, TBA, naphthalene, EDB, EDC, and ethanol <sup>2</sup>	EPA 8260B/C	EPA 8260B/C
	Lead <sup>3</sup>	EPA 6010	No analysis <sup>4</sup>
Unknown Fuel	Same analytes as for gasoline	As above	As above
	TPH as diesel C12-C22	EPA 8015	EPA 8015
Diesel, Jet Fuel, Kerosene, or Fuel Oil	TPH specific to fuel (e.g. TPH as kerosene)	EPA 8015	EPA 8015
	BTEX, MTBE, and naphthalene	EPA 8260B/C	EPA 8260B/C
Chlorinated Solvents	Volatile Organic Compounds (full scan including BTEX, naphthalene, and chlorinated hydrocarbons)	EPA 8260B/C full scan	EPA 8260B/C full scan
	TPH as Stoddard-Solvent C7-C12	EPA 8015	EPA 8015
Waste Oil, Used Oil, Unknown Oil, or Bunker Fuel	TPH as gasoline C5-C12	EPA 8260B/C	EPA 8260B/C
	TPH as diesel C12-C22	EPA 8015	EPA 8015
	TPH as motor oil C23-C32 <sup>5</sup>	EPA 8015	No analysis <sup>4</sup>
	Volatile Organic Compounds (full scan including BTEX, MTBE, TBA, naphthalene, and chlorinated hydrocarbons)	EPA 8260B/C full scan	EPA 8260B/C full scan
	Metals: Cd, Cr, Pb, Ni, Zn	EPA 6010	No analysis <sup>4</sup>
	PCBs	EPA 8082A	EPA 8082A
	Semi Volatile Organic Compounds (including PAHs <sup>6</sup> , pentachlorophenol, and creosote)	EPA 8270	EPA 8270

Notes:

- Silica gel cleanup is not to be performed for any of the above analyses.
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Methyl tertiary Butyl Ether (MTBE), Tert Butyl Alcohol (TBA), lead scavengers Ethylene Dibromide (EDB) and Ethylene Dichloride (EDC), and ethanol. Additional fuel oxygenates Tert amyl ether (TAME), di-isopropyl ether (DIPE), and Ethyl t-butyl ether (ETBE) may be added as optional analytes.
- Organic lead may be added as an optional analyte at fuel leak sites where lead is an analyte.
- No groundwater sample for metals or TPH as motor oil is required unless requested by ACEH.
- For USTs that potentially contained oils that are not petroleum-based, analysis for hexane extractable materials using EPA Method 9071B for soil and EPA Method 1664 for water is required.
- Polycyclic aromatic hydrocarbon (PAH) analysis must include naphthalene, acenaphthene, acenaphthylene, anthracene, chrysene, fluorine, fluoranthene, phenanthrene, pyrene, benzo(b)fluoranthene, benzo(a)pyrene, benzo(k)fluoranthene, benzo(a)anthracene, indeno(1,2,3-c,d)pyrene, dibenz(a,b)anthracene, and benzo(g,h,i)perylene.

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan has been approved.

I understand that any changes in design, materials, or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

CONTRACTOR INFORMATION

Name of Business \_\_\_\_\_

Name of Individual \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

PROPERTY OWNER OR  MOST RECENT TANK OPERATOR (Check one)

Name of Business \_\_\_\_\_

Name of Individual Alan C. Dimen

Signature [Handwritten Signature] Date 2-9-16

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan has been approved.

I understand that any changes in design, materials, or equipment will void this plan if prior approval is not obtained.


I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

**Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.**

CONTRACTOR INFORMATION

Name of Business Western Abatement


Name of Individual Todd Hurley

Signature  Date 2/3/16

PROPERTY OWNERS OR  MOST RECENT TANK OPERATOR (Check one)

Name of Business Warehouse

Name of Individuals Alan Dimen and Irene Trimble

Signature  -Agent for the owners Date 2/3/16

**UNIFIED PROGRAM CONSOLIDATED FORM  
UNDERGROUND STORAGE TANK  
OPERATING PERMIT APPLICATION – FACILITY INFORMATION**  
(One form per facility)

TYPE OF ACTION (Check one item only)  1. NEW PERMIT  5. CHANGE OF INFORMATION  7. PERMANENT FACILITY CLOSURE  
 3. RENEWAL PERMIT  6. TEMPORARY FACILITY CLOSURE  9. TRANSFER PERMIT 400.

**I. FACILITY INFORMATION**

TOTAL NUMBER OF USTs AT FACILITY 404. **1** FACILITY ID # 1.  
(Agency Use Only)

BUSINESS NAME (Same as Facility Name or DBA – Doing Business As) 3.  
**Warehouse**

BUSINESS SITE ADDRESS 103. **1647 International Boulevard** CITY 104.  
**Oakland**

FACILITY TYPE  1. MOTOR VEHICLE FUELING  2. FUEL DISTRIBUTION 403. Is the facility located on Indian Reservation or 405.  
 3. FARM  4. PROCESSOR  6. OTHER Trust lands?  1. Yes  2. No

**II. PROPERTY OWNER INFORMATION**

PROPERTY OWNER NAME 407. **Irene Trimble and Alan Dimen** PHONE 408.  
**(253) 404-0241**

MAILING ADDRESS 409.  
**2101 Sunset Drive West**

CITY 410. **University Place** STATE 411. **WA** ZIP CODE 412.  
**98466**

**III. TANK OPERATOR INFORMATION**

TANK OPERATOR NAME 428-1. **Warehouse** PHONE 428-2.  
**(510) 536-1500**

MAILING ADDRESS 428-3.  
**1647 International Boulevard**

CITY 428-4. **Oakland** STATE 428-5. **CA** ZIP CODE 428-6.  
**94606**

**IV. TANK OWNER INFORMATION**

TANK OWNER NAME 414. **Warehouse** PHONE 415.  
**(510) 536-1500**

MAILING ADDRESS 416.  
**1647 International Boulevard**

CITY 417. **Oakland** STATE 418. **CA** ZIP CODE 419.  
**94606**

OWNER TYPE:  4. LOCAL AGENCY/DISTRICT  5. COUNTY AGENCY  6. STATE AGENCY 420.  
 7. FEDERAL AGENCY  8. NON-GOVERNMENT

**V. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER**

TY (TK) HQ 44- 421. Call the State Board of Equalization, Fuel Tax Division, if there are questions.


**VI. PERMIT HOLDER INFORMATION**

Issue permit and send legal notifications and mailings to:  1. FACILITY OWNER  4. TANK OPERATOR 423.  
 3. TANK OWNER  5. FACILITY OPERATOR

SUPERVISOR OF DIVISION, SECTION, OR OFFICE (Required for Public Agencies Only) 406.

**VII. APPLICANT SIGNATURE**

**CERTIFICATION: I certify that the information provided herein is true, accurate, and in full compliance with legal requirements.**

APPLICANT SIGNATURE  DATE 424. **2/3/16** PHONE 425.  
**(510) 226-9944**

APPLICANT NAME (print) 426. **-Agent for the owner** APPLICANT TITLE 427.  
**Consultant**



**UNIFIED PROGRAM CONSOLIDATED FORM**  
**UNDERGROUND STORAGE TANK**  
**OPERATING PERMIT APPLICATION – TANK INFORMATION** (One form per UST)

TYPE OF ACTION <small>(Check one item only. For a UST closure or removal, complete only this section and Sections I, II, III, IV, and IX below)</small> <span style="float: right;">430.</span>		
<input type="checkbox"/> 1. NEW PERMIT	<input type="checkbox"/> 3. RENEWAL PERMIT	<input type="checkbox"/> 5. CHANGE OF INFORMATION
<input type="checkbox"/> 6. TEMPORARY UST CLOSURE	<input type="checkbox"/> 7. UST PERMANENT CLOSURE ON SITE	<input checked="" type="checkbox"/> 8. UST REMOVAL
DATE UST PERMANENTLY CLOSED: <b>Unknown</b> <span style="float: right;">430a.</span>	DATE EXISTING UST DISCOVERED: <b>Unknown</b> <span style="float: right;">430b.</span>	

**I. FACILITY INFORMATION**

FACILITY ID # <small>(Agency Use Only)</small>	1.
BUSINESS NAME <small>(Same as Facility Name or DBA – Doing Business As)</small> <b>Warehouse</b>	3.
BUSINESS SITE ADDRESS <span style="float: right;">103.</span> <b>1647 International Boulevard</b>	CITY <span style="float: right;">104.</span> <b>Oakland</b>

**II. TANK DESCRIPTION**

TANK ID # <span style="float: right;">432.</span> <b>Unknown</b>	TANK MANUFACTURER <span style="float: right;">433.</span> <b>Unknown</b>	TANK CONFIGURATION: THIS TANK IS <span style="float: right;">434.</span> <input checked="" type="checkbox"/> 1. A STAND-ALONE TANK <input type="checkbox"/> 2. ONE IN A COMPARTMENTED UNIT <small>Complete one page for each compartment in the unit.</small>
DATE UST SYSTEM INSTALLED <span style="float: right;">435.</span> <b>Unknown</b>	TANK CAPACITY IN GALLONS <span style="float: right;">436.</span> <b>1,200</b>	NUMBER OF COMPARTMENTS IN THE UNIT <span style="float: right;">437.</span> <b>0</b>

**III. TANK USE AND CONTENTS**

TANK USE	<input checked="" type="checkbox"/> 1a. MOTOR VEHICLE FUELING	<input type="checkbox"/> 1b. MARINA FUELING	<input type="checkbox"/> 1c. AVIATION FUELING	439.
	<input type="checkbox"/> 3. CHEMICAL PRODUCT STORAGE	<input type="checkbox"/> 4. HAZARDOUS WASTE (Includes Used Oil)	<input type="checkbox"/> 5. EMERGENCY GENERATOR FUEL [HSC §25281.5(c)]	439a.
	<input type="checkbox"/> 6. OTHER GENERATOR FUEL	<input type="checkbox"/> 95. UNKNOWN	<input type="checkbox"/> 99. OTHER (Specify):	439a.
CONTENTS	PETROLEUM: <input type="checkbox"/> 1a. REGULAR UNLEADED	<input type="checkbox"/> 1c. MIDGRADE UNLEADED	<input type="checkbox"/> 1b. PREMIUM UNLEADED	440.
	<input type="checkbox"/> 3. DIESEL	<input type="checkbox"/> 5. JET FUEL	<input type="checkbox"/> 6. AVIATION GAS	440a.
	<input type="checkbox"/> 8. PETROLEUM BLEND FUEL	<input checked="" type="checkbox"/> 9. OTHER PETROLEUM (Specify): <b>Regular leaded gasoline</b>		440a.
	NON-PETROLEUM: <input type="checkbox"/> 7. USED OIL	<input type="checkbox"/> 10. ETHANOL		440b.
	<input type="checkbox"/> 11. OTHER NON-PETROLEUM (Specify):			440b.

**IV. TANK CONSTRUCTION**

TYPE OF TANK	<input type="checkbox"/> 1. SINGLE WALL	<input type="checkbox"/> 2. DOUBLE WALL	<input checked="" type="checkbox"/> 95. UNKNOWN	443.
PRIMARY CONTAINMENT	<input checked="" type="checkbox"/> 1. STEEL	<input type="checkbox"/> 3. FIBERGLASS	<input type="checkbox"/> 6. INTERNAL BLADDER	444.
	<input type="checkbox"/> 7. STEEL + INTERNAL LINING	<input type="checkbox"/> 95. UNKNOWN	<input type="checkbox"/> 99. OTHER (Specify):	444a.
SECONDARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 3. FIBERGLASS	<input type="checkbox"/> 6. EXTERIOR MEMBRANE LINER	445.
	<input checked="" type="checkbox"/> 90. NONE	<input type="checkbox"/> 95. UNKNOWN	<input type="checkbox"/> 7. JACKETED	445a.
OVERFILL PREVENTION	<input type="checkbox"/> 1. AUDIBLE & VISUAL ALARMS	<input type="checkbox"/> 2. BALL FLOAT	<input type="checkbox"/> 3. FILL TUBE SHUT-OFF VALVE	452.
	<input type="checkbox"/> 4. TANK MEETS REQUIREMENTS FOR EXEMPTION FROM OVERFILL PREVENTION EQUIPMENT			452.

**V. PRODUCT / WASTE PIPING CONSTRUCTION**

PIPING CONSTRUCTION	<input type="checkbox"/> 1. SINGLE WALL	<input type="checkbox"/> 2. DOUBLE WALL	<input type="checkbox"/> 99. OTHER	460.
SYSTEM TYPE	<input type="checkbox"/> 1. PRESSURE	<input type="checkbox"/> 2. GRAVITY	<input type="checkbox"/> 3. CONVENTIONAL SUCTION	458.
PRIMARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 8. FLEXIBLE	464.
	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 95. UNKNOWN	<input type="checkbox"/> 10. RIGID PLASTIC	464a.
SECONDARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 8. FLEXIBLE	464b.
	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 95. UNKNOWN	<input type="checkbox"/> 99. OTHER (Specify):	464c.
PIPING/TURBINE CONTAINMENT SUMP TYPE	<input type="checkbox"/> 1. SINGLE WALL	<input type="checkbox"/> 2. DOUBLE WALL	<input type="checkbox"/> 90. NONE	464d.

**VI. VENT, VAPOR RECOVERY (VR) AND RISER / FILL PIPE PIPING CONSTRUCTION**

VENT PRIMARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 99. OTHER (Specify):	464e.
VENT SECONDARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 99. OTHER (Specify):	464f.
VR PRIMARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 99. OTHER (Specify):	464g.
VR SECONDARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 99. OTHER (Specify):	464h.
VENT PIPING TRANSITION SUMP TYPE	<input type="checkbox"/> 1. SINGLE WALL	<input type="checkbox"/> 2. DOUBLE WALL	<input type="checkbox"/> 90. NONE			464i.
RISER PRIMARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 99. OTHER (Specify):	464j.
RISER SECONDARY CONTAINMENT	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 90. NONE	<input type="checkbox"/> 99. OTHER (Specify):	464k.
FILL COMPONENTS INSTALLED	<input type="checkbox"/> 1. SPILL BUCKET	<input type="checkbox"/> 3. STRIKER PLATE/BOTTOM PROTECTOR	<input type="checkbox"/> 4. CONTAINMENT SUMP			451a-c.

**VII. UNDER DISPENSER CONTAINMENT (UDC)**

CONSTRUCTION TYPE	<input type="checkbox"/> 1. SINGLE WALL	<input type="checkbox"/> 2. DOUBLE WALL	<input type="checkbox"/> 3. NO DISPENSERS	<input type="checkbox"/> 90. NONE	469a.
CONSTRUCTION MATERIAL	<input type="checkbox"/> 1. STEEL	<input type="checkbox"/> 4. FIBERGLASS	<input type="checkbox"/> 10. RIGID PLASTIC	<input type="checkbox"/> 99. OTHER (Specify):	469b.
					469c.

**VIII. CORROSION PROTECTION**

STEEL COMPONENT PROTECTION	<input type="checkbox"/> 2. SACRIFICIAL ANODE(S)	<input type="checkbox"/> 4. IMPRESSED CURRENT	<input type="checkbox"/> 6. ISOLATION	448.
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**IX. APPLICANT SIGNATURE**

CERTIFICATION: I certify that this UST system is compatible with the hazardous substance stored and that the information provided herein is true, accurate, and in full compliance with legal requirements.			
APPLICANT SIGNATURE		DATE <b>2/3/16</b>	470.
APPLICANT NAME (print)	<b>-Agent for the owner</b>	APPLICANT TITLE <b>Consultant</b>	472.



Oakland Fire Department, Fire Prevention Bureau  
 250 Frank H. Ogawa Plaza, Ste. 3341  
 Oakland, CA 94612-2032



(510) 238-3851  
 TTY (510) 238-6884

# Operational Fire Permit

Post Permit in Conspicuous Location

<b>Occupancy Mailing Address</b>	
Schutze & Associates	
44358 S. Grimmer Blvd.	
Fremont, CA	94538

Effective 2/25/2016 Expires  
 Inspection Ref # 2016-28815  
 Permit Ref # FP16SKIS-00002

**Facility Address**

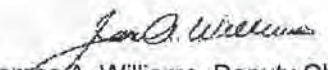
1647 INTERNATIONAL BLVD OAKLAND CA 94606

This operational **Underground Tank Removal** permit is here by granted and is effective 2/25/2016  
 The holder of this permit agrees to maintain the **site** compliant with City, State, and Federal standards associated with the business operations. Failure to do so will result in the termination of this fire permit. At the time this permit was issued, the facility was in compliance with the City of Oakland Fire Code.

Not Valid If Permit Fees Not Paid

<u>Code</u>	<u>Requirements</u>
	<u>Specifics</u>

  
 Skillern, Sheryl Haz-Mat Inspector  
 Oakland Fire Prevention Bureau

  
 James A. Williams, Deputy Chief Fire Marshal  
 Office of the Fire Marshal



CITY OF OAKLAND  
FIRE PREVENTION BUREAU  
250 Frank Ogawa Plaza, Suite 3341  
Oakland, California 94612-2032  
(510) 238-3851

REVIEWED AND APPROVED  
OAKLAND FIRE DEPARTMENT  
BY: [Signature]  
TITLE: 4772 MAINT ENSP  
DATE: 2/25/16  
ALL INSTALLATIONS REQUIRE  
48 HOURS NOTICE

APPLICATION for PERMIT to INSTALL, REMOVE or REPAIR TANKS  
In the CITY OF OAKLAND

Request Submittal Date: 2/3/2016

PLEASE CIRCLE APPROPRIATE ACTIONS: Application is hereby made for permit to:

- (a) Remove (b) Install (c) Repair (d) Modify (e) Abandon/Close in Place A  
(a) Gasoline (b) Fuel oil (c) Diesel (d) \_\_\_\_\_ tank(s) and excavate, commencing:  
(a) four feet inside the curb line\*; (b) inside the property line; (c) aboveground; (d) underground tank(s)  
\*inside curb line, please attach copy of sidewalk/excavation permit from PLANNING AND BUILDING

on the Northwest side of 17th Avenue St.Ave.          feet of          St./Ave.

Site Address: 1647 International Blvd. Present storage         

Owner: Irene Trimble & Alan Dimen Address 2101 Sunset Dr. west University Place, WA Phone 253-404-0241

Applicant: Schutze & Associates, Inc Address 44358 S. Grimmer Blvd. Fremont Phone 510-226-9944

Sidewalk surface to be disturbed No X Number of Tanks One Capacity 1,200 Gallons ea.

Remarks         

Signature [Signature]

PLEASE ATTACH/SUBMIT: (All applicants must have a City Business License Permit)

- (2) Copies of Closure Plans for underground tank removal (s)
- (2) Sets of plans and (1) copy of specifications for above ground tank removal
- (2) Sets of plans and (2) sets of application packets for underground tank installation/modifications
- (2) Sets of plans for aboveground tank installation and specifications
- copy or prepare to show Planning and Building approval for aboveground tank removal and tank repair

NOTE: FOR TANK INSTALLATION PLEASE SUBMIT THIS APPLICATION FORM ALONG WITH A APPLICATION FOR PERMIT TO OPERATE, MAINTAIN OR STORE

FOR OFFICE USE ONLY

Permit No.          Amt. Recv'd          Date Issued:         

Copies to: Electrical Inspection ck#          Cash         

Receipt#          Recv'd by:



REVIEWED AND APPROVED OAKLAND FIRE DEPARTMENT BY: <i>[Signature]</i> TITLE: <i>HAZ MAT FNS</i> DATE: <i>2/25/16</i> ALL INSPECTIONS REQUIRE 48 HOURS NOTICE
---

44358 S. GRIMMER BOULEVARD, FREMONT, CA 94538 ♦ TELEPHONE: (510) 226-9944 ♦ FAX: (510) 226-9946

February 25, 2016  
Project No. SCS557R

**City of Oakland Fire Prevention Bureau**  
**Attn: Ms. Sheryl S. Skillern, Senior Hazardous Material Inspector**  
**Hazardous Materials Unit**  
250 Frank H. Ogawa Plaza, Suite 3341  
Oakland, CA 94612

**Reference: Warehouse Property**  
**1647 International Boulevard**  
**Oakland, Alameda County, California**

**Subject: Work Plan for:**  
• **Underground Storage Tank (UST) Removal**

Dear Ms. Skillern:

SCHUTZE & Associates, Inc. is pleased to submit this Work Plan regarding environmental services at the property located at 1647 International Boulevard, Oakland, California (subject site). The purpose of the work is to remove an approximately 1,200-gallon gasoline UST according to existing regulations.

The work will be supervised by Mr. Jan Schutze, a California Professional Geologist (P.G. #5771).

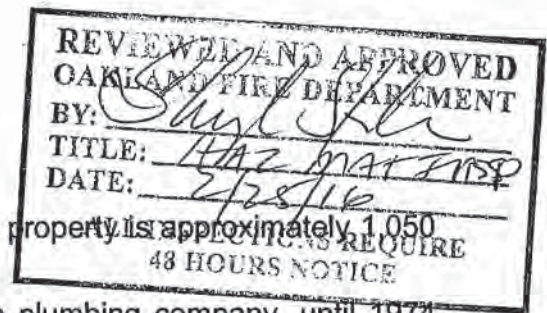
#### **A. BACKGROUND**

The subject site consists of the following parcel:

Address	APN <sup>1</sup>	Approximate Parcel Size	Location
1647 International Boulevard, Oakland, Alameda County, California	20-113-8	6,705 sq ft	On the western corner of the intersection of International Boulevard and 17th Avenue.

The subject site is currently developed with one warehouse building. Adjacent to the property are: a small car dealership to the northwest; International Boulevard to the northeast; an apartment complex to the southeast, across 17th Avenue; and an auto

<sup>1</sup> Assessor's Parcel Number



body shop to the southwest, across Solano Way. The property is approximately 1,050 feet northeast of the Oakland estuary.

The subject property was occupied by Roto-Rooter, a plumbing company, until 1974 when it was purchased by Mr. Don Kent Trimble. In 1985, Mr. Alan Dimen acquired 50% ownership of the property. A metal fabricating company occupied the site after Roto-Rooter.

Roto-Rooter had operated a private single-tank gasoline fueling station at the site, with an approximately 1,200-gallon gasoline UST that still exists. According to Mr. Alan Dimen, the tank has not been in use for at least 40 years.

## B. SCOPE OF SERVICES

SCHUTZE & Associates, Inc. will remove an approximately 1,200-gallon gasoline UST from the subject site according to existing regulations. Confirmation soil testing based on agency requirements will be conducted to determine if the tank may have impacted the surrounding soil. The UST location is depicted on the attached Figure 1.

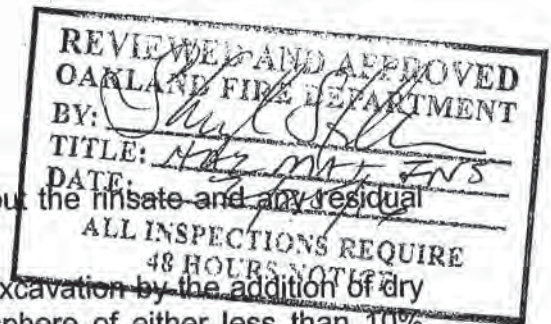
SCHUTZE & Associates, Inc. will perform the following:

### B.1 Permitting

1. Submit documents as required to the City of Oakland Fire Prevention Bureau, Alameda County Department of Environmental Health (ACDEH) and Bay Area Air Quality Management District (BAAQMD) to obtain permits and agency oversight for the UST removal.

### B.2 Removal of Gasoline UST

1. Provide notification of the scheduled field work as required to the City of Oakland Fire Prevention Bureau, ACDEH and BAAQMD.
2. Mark the proposed UST excavation area. Contact Underground Services Alert (USA) to clear the location for underground utilities.
3. Remove the UST, as follows:
  - Saw cut and remove the cement slab above the UST. The concrete will be cut with a circular diamond saw; during the cutting, the blade is cooled with water to eliminate sparks. The UST will also still be covered with a layer of dirt underneath the slab, which prevents sparks from reaching the tank.
  - Excavate soil from around the tank, the associated product piping and the footing of the former gasoline pump.
  - Stockpile the excavated soil on 6mm polyethylene liners with berms. The stockpiles will be covered. One four-point composite sample will be collected from the stockpiled soil for waste characterization.



- Triple-rinse the inside of the tank; pump out the rinsate and any residual product remaining in the tank.
  - Make the tank safe for removal from the excavation by the addition of dry ice (carbon dioxide) to achieve an atmosphere of either less than 10% oxygen or less than 10% LEL<sup>2</sup>.
  - Remove the tank when (1) measured vapor and oxygen levels are at acceptable levels and (2) approval for removal has been given by the agency inspector. Remove the associated piping and the former gasoline pump footing.
  - Haul and dispose of the tank/piping and other waste materials (rinsate; concrete waste; stockpiled soil) at appropriate facilities following applicable regulations. Waste manifesting procedures will be followed to properly document the disposal all waste materials.
    - The tank shall be manifested and hauled by a licensed hazardous waste transporter to a permitted facility, unless cleaned in accordance with Title 22 CCR<sup>3</sup>, Division 4.5, Chapter 32.
    - The stockpiled soil will remain on-site (covered and on bermed plastic) until waste characterization has been completed.
4. Collect soil samples as required by the agency inspector from the bottom and sidewalls of the tank pit and from under the piping. Should groundwater be encountered in the tank pit during the removal activities, a water sample will also be collected.
5. Field-screen the soil samples for VOCs using a portable photo ionization detector (PID). Additional soil samples may be collected based on the PID readings, the condition of the tank and/or field observations (such as hydrocarbon odors or visible soil staining).
6. Store the samples in an ice-filled cooler to be transported following chain-of-custody procedures.
7. Submit the samples to McCampbell Analytical, Inc. of Pittsburg, California (CDPH ELAP<sup>4</sup> #1644) to be analyzed. Based on waste characterization requirements and agency tank closure requirements, the analyses requested may include the following:
- VOCs with TPH-g<sup>5</sup>, including BTEX, MTBE, TBA, EDB, EDC<sup>6</sup>, naphthalene and ethanol (EPA<sup>7</sup> analytical method 8260B);
  - Lead (EPA analytical method 6010C);

<sup>2</sup> Lower explosive limit

<sup>3</sup> California Code of Regulations

<sup>4</sup> California Department of Public Health Environmental Laboratory Accreditation Program

<sup>5</sup> Total petroleum hydrocarbons as gasoline

<sup>6</sup> BTEX = Benzene, toluene, ethylbenzene and xylenes; MTBE = Methyl tert-butyl ether; TBA = Tert-butyl alcohol; EDB = Ethylene dibromide; EDC = Ethylene dichloride

<sup>7</sup> U.S. Environmental Protection Agency

- TPH-d and TPH-mo<sup>8</sup> (EPA analytical method 8015B);
- SVOCs (EPA analytical method 8270C);
- PAHs (EPA analytical method 8270C) and
- LUFT 5 metals<sup>9</sup> (EPA analytical methods 200.8/6020A).

Sample selection and analyses requested will be based on field conditions and on the requirements of the agency inspector. Any samples not submitted will be placed on hold for future analyses, if needed.

8. Backfill the tank pit with clean, imported fill material (no compaction certificate). Replace the former concrete slab with asphalt to match the existing grade.

### B.3 Reporting

SCHUTZE & Associates, Inc. will prepare a Tank Closure Report, to include: descriptions of the work performed; a site map showing sampling locations and results; analytical results presented in table form; copies of all laboratory reports and chain-of-custody forms; and copies of all waste disposal manifests.

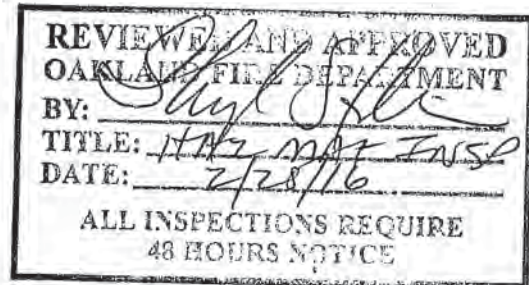
We look forward to working with you on this project.

Cordially,

**SCHUTZE & ASSOCIATES, INC.**



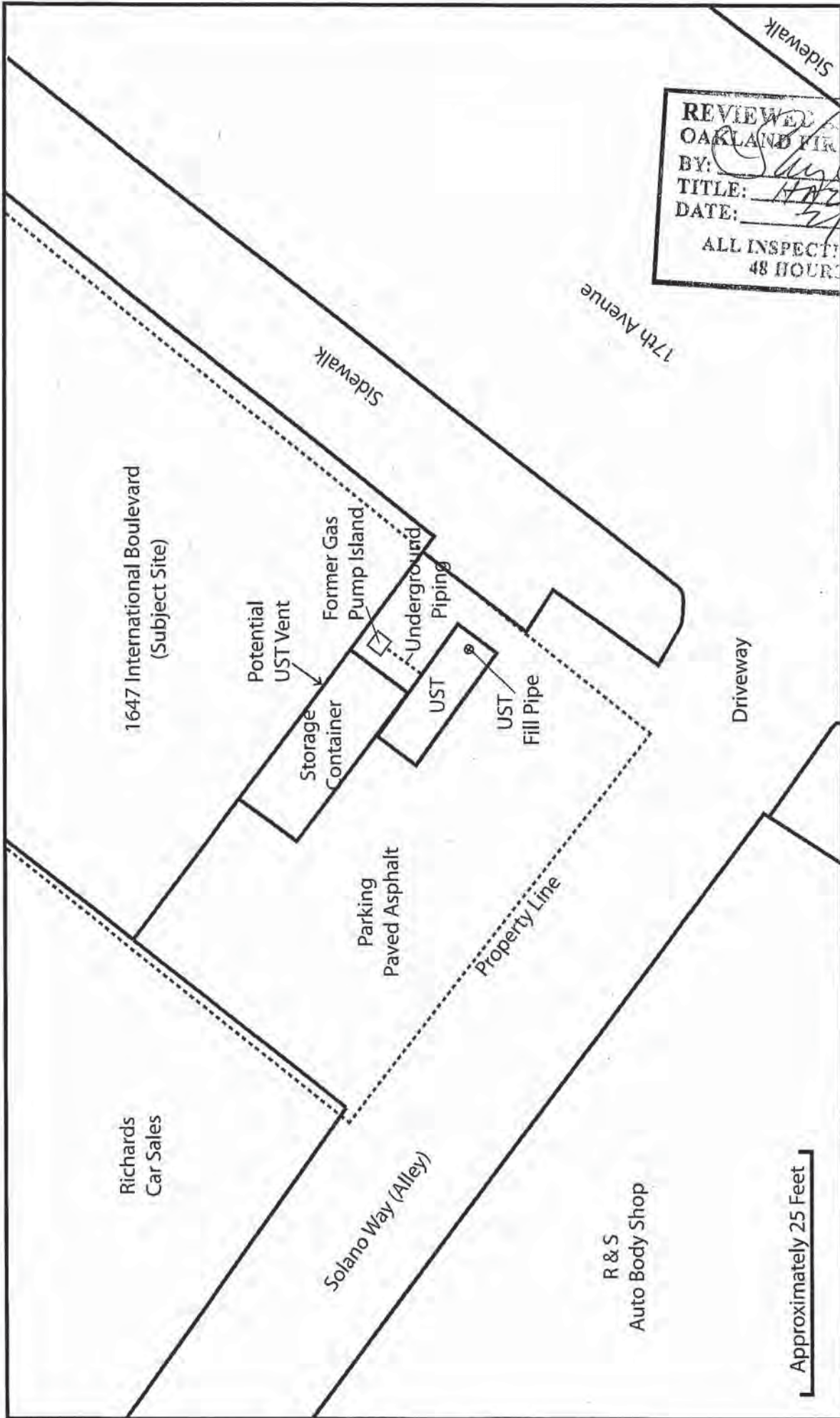
Jan H. Schutze, P.G., M.Sc.  
President



Attachment: Figure 1 – Site Map with UST Location

<sup>8</sup> Total petroleum hydrocarbons as diesel and motor oil

<sup>9</sup> Leaking Underground Fuel Tank 5 metals (Cd, Cr, Ni, Pb, Zn)



REVIEWED AND APPROVED  
 OAKLAND FIRE DEPARTMENT  
 BY: *[Signature]*  
 TITLE: *HAZ MAT FWS*  
 DATE: *2/25/16*  
 ALL INSPECTIONS REQUIRE  
 48 HOUR NOTICE

**FIGURE 1**  
January 2016

**SITE MAP WITH UST LOCATION**  
**1647 INTERNATIONAL BOULEVARD**  
**OAKLAND, CALIFORNIA**

Approximately 25 Feet



**SCHUTZE & Associates, Inc.**  
 Project No. SCS557





REVIEWED AND APPROVED  
 OAKLAND FIRE DEPARTMENT  
 BY: [Signature]  
 TITLE: 1402 MAFNSP  
 DATE: 2/28/16  
 ALL INSPECTIONS REQUIRE  
 48 HOURS FAX (510) 226-9948

44358 S. GRIMMER BOULEVARD, FREMONT, CA 94538 ♦ TELEPHONE: (510) 226-9944 ♦ FAX: (510) 226-9948

## SITE HEALTH AND SAFETY PLAN

### I. GENERAL SITE INFORMATION

Site Name: Trimble  
 Site Address: 1647 International Blvd, Oakland, CA 94606  
 Contact Person: Mr. Jan Schutze Phone: 510-226 9944  
 Site Identification No.: SCS557 Proposed Date of Work: February 3, 2016

### II. DESCRIPTION OF ACTIVITY

- | <u>Purpose of Activity</u>                              | <u>Type of Site</u>                            |
|---|--|
| <input type="checkbox"/> Monitoring Well Installation   | <input checked="" type="checkbox"/> Industrial |
| <input type="checkbox"/> Geoprobe Drilling              | <input type="checkbox"/> Gas Station           |
| <input type="checkbox"/> Domestic Well Installation     | <input type="checkbox"/> Dry-Cleaners          |
| <input type="checkbox"/> Agricultural Well Installation | <input type="checkbox"/> Landfill              |
| <input checked="" type="checkbox"/> Other               | <input type="checkbox"/> Other                 |

**Provide a brief description of the proposed activities:**  
Remove 1,200 gallon UST and backfill.

**Investigation-derived material disposal:**

Soil: Excavated soil will be stored on site and hauled after lab analyses are completed.  
 Water: \_\_\_\_\_  
 Other: UST will be hauled as hazardous waste.

### III. POTENTIAL HEALTH AND SAFETY HAZARDS

**Anticipated Physical Hazards:**

- |   |  |
|---|--|
| <input type="checkbox"/> Heat (high ambient temperature)  | <input checked="" type="checkbox"/> Heavy equipment  |
| <input type="checkbox"/> Cold                             | <input checked="" type="checkbox"/> Physical injury / trauma resulting from moving machinery |
| <input checked="" type="checkbox"/> Noise                 | <input checked="" type="checkbox"/> General construction                                     |
| <input type="checkbox"/> Oxygen depletion                 | <input checked="" type="checkbox"/> Physical injury / trauma                                 |
| <input type="checkbox"/> Asphyxiation                     | <input type="checkbox"/> Electrical hazards  |
| <input checked="" type="checkbox"/> Excavation            | <input checked="" type="checkbox"/> Falls, trip, slipping                                    |
| <input checked="" type="checkbox"/> Cave-ins              | <input checked="" type="checkbox"/> Potential fire or explosion                              |
| <input checked="" type="checkbox"/> Falls, trip, slipping |  |
| <input type="checkbox"/> Other (specify): _____           |  |

**APPENDIX B**

**Laboratory Reports**

**(March and April 2016)**

**March 2016**



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1603149 **Amended:** 04/27/2016

**Report Created for:** Schutze & Associates, Inc.

44358 South Grimmer Blvd  
Fremont, CA 94538

**Project Contact:** Kevin Loeb

**Project P.O.:**

**Project Name:** SCS557; Trimble Tank Pull

**Project Received:** 03/03/2016

Analytical Report reviewed & approved for release on 03/15/2016 by:

Angela Rydelius,  
Laboratory Manager

*The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.*





## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1603149

### Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1603149

### Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits
a3	sample diluted due to high organic content.
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
c7	Surrogate value diluted out of range
d5	TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?)
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e4/e11	gasoline range compounds are significant.; and/or stoddard solvent/mineral spirit (?)
e7	oil range compounds are significant
e8	kerosene/kerosene range/jet fuel range
e11/e4	stoddard solvent/mineral spirit (?); and/or gasoline range compounds are significant.
e11	stoddard solvent/mineral spirit (?)

### Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validated the prep batch.
F2	LCS recovery for this compound is outside of acceptance limits.
F3	the surrogate standard recovery and/or RPD is outside of acceptance limits.
F8	MS/MSD recovery and/or RPD was out of acceptance criteria; PDS validated the prep batch. If PDS recovery was out of acceptance criteria, DLT validated the prep batch.



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3060A  
**Analytical Method:** SW7199  
**Unit:** mg/Kg

## Hexachrome by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	IC2	117940

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	4.0	1	03/12/2016 05:36

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	IC2	117940

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	4.0	1	03/12/2016 05:55

Analyst(s): AO



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		2.0	20	03/08/2016 11:50
tert-Amyl methyl ether (TAME)	ND		0.10	20	03/08/2016 11:50
Benzene	ND		0.10	20	03/08/2016 11:50
Bromobenzene	ND		0.10	20	03/08/2016 11:50
Bromochloromethane	ND		0.10	20	03/08/2016 11:50
Bromodichloromethane	ND		0.10	20	03/08/2016 11:50
Bromoform	ND		0.10	20	03/08/2016 11:50
Bromomethane	ND		0.10	20	03/08/2016 11:50
2-Butanone (MEK)	ND		0.40	20	03/08/2016 11:50
t-Butyl alcohol (TBA)	ND		1.0	20	03/08/2016 11:50
n-Butyl benzene	ND		0.10	20	03/08/2016 11:50
sec-Butyl benzene	ND		0.10	20	03/08/2016 11:50
tert-Butyl benzene	ND		0.10	20	03/08/2016 11:50
Carbon Disulfide	ND		0.10	20	03/08/2016 11:50
Carbon Tetrachloride	ND		0.10	20	03/08/2016 11:50
Chlorobenzene	ND		0.10	20	03/08/2016 11:50
Chloroethane	ND		0.10	20	03/08/2016 11:50
Chloroform	ND		0.10	20	03/08/2016 11:50
Chloromethane	ND		0.10	20	03/08/2016 11:50
2-Chlorotoluene	ND		0.10	20	03/08/2016 11:50
4-Chlorotoluene	ND		0.10	20	03/08/2016 11:50
Dibromochloromethane	ND		0.10	20	03/08/2016 11:50
1,2-Dibromo-3-chloropropane	ND		0.080	20	03/08/2016 11:50
1,2-Dibromoethane (EDB)	ND		0.080	20	03/08/2016 11:50
Dibromomethane	ND		0.10	20	03/08/2016 11:50
1,2-Dichlorobenzene	ND		0.10	20	03/08/2016 11:50
1,3-Dichlorobenzene	ND		0.10	20	03/08/2016 11:50
1,4-Dichlorobenzene	ND		0.10	20	03/08/2016 11:50
Dichlorodifluoromethane	ND		0.10	20	03/08/2016 11:50
1,1-Dichloroethane	ND		0.10	20	03/08/2016 11:50
1,2-Dichloroethane (1,2-DCA)	ND		0.080	20	03/08/2016 11:50
1,1-Dichloroethene	ND		0.10	20	03/08/2016 11:50
cis-1,2-Dichloroethene	ND		0.10	20	03/08/2016 11:50
trans-1,2-Dichloroethene	ND		0.10	20	03/08/2016 11:50
1,2-Dichloropropane	ND		0.10	20	03/08/2016 11:50
1,3-Dichloropropane	ND		0.10	20	03/08/2016 11:50
2,2-Dichloropropane	ND		0.10	20	03/08/2016 11:50

(Cont.)





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.10	20	03/08/2016 11:50
cis-1,3-Dichloropropene	ND		0.10	20	03/08/2016 11:50
trans-1,3-Dichloropropene	ND		0.10	20	03/08/2016 11:50
Diisopropyl ether (DIPE)	ND		0.10	20	03/08/2016 11:50
Ethylbenzene	ND		0.10	20	03/08/2016 11:50
Ethyl tert-butyl ether (ETBE)	ND		0.10	20	03/08/2016 11:50
Freon 113	ND		0.10	20	03/08/2016 11:50
Hexachlorobutadiene	ND		0.10	20	03/08/2016 11:50
Hexachloroethane	ND		0.10	20	03/08/2016 11:50
2-Hexanone	ND		0.10	20	03/08/2016 11:50
Isopropylbenzene	ND		0.10	20	03/08/2016 11:50
4-Isopropyl toluene	ND		0.10	20	03/08/2016 11:50
Methyl-t-butyl ether (MTBE)	ND		0.10	20	03/08/2016 11:50
Methylene chloride	ND		0.10	20	03/08/2016 11:50
4-Methyl-2-pentanone (MIBK)	ND		0.10	20	03/08/2016 11:50
Naphthalene	ND		0.10	20	03/08/2016 11:50
n-Propyl benzene	ND		0.10	20	03/08/2016 11:50
Styrene	ND		0.10	20	03/08/2016 11:50
1,1,1,2-Tetrachloroethane	ND		0.10	20	03/08/2016 11:50
1,1,2,2-Tetrachloroethane	ND		0.10	20	03/08/2016 11:50
Tetrachloroethene	ND		0.10	20	03/08/2016 11:50
Toluene	ND		0.10	20	03/08/2016 11:50
1,2,3-Trichlorobenzene	ND		0.10	20	03/08/2016 11:50
1,2,4-Trichlorobenzene	ND		0.10	20	03/08/2016 11:50
1,1,1-Trichloroethane	ND		0.10	20	03/08/2016 11:50
1,1,2-Trichloroethane	ND		0.10	20	03/08/2016 11:50
Trichloroethene	ND		0.10	20	03/08/2016 11:50
Trichlorofluoromethane	ND		0.10	20	03/08/2016 11:50
1,2,3-Trichloropropane	ND		0.10	20	03/08/2016 11:50
1,2,4-Trimethylbenzene	ND		0.10	20	03/08/2016 11:50
1,3,5-Trimethylbenzene	ND		0.10	20	03/08/2016 11:50
Vinyl Chloride	ND		0.10	20	03/08/2016 11:50
Xylenes, Total	ND		0.10	20	03/08/2016 11:50

(Cont.)



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC16	117484

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	90		70-130		03/08/2016 11:50
Toluene-d8	81		70-130		03/08/2016 11:50
4-BFB	106		70-130		03/08/2016 11:50
Benzene-d6	125		60-140		03/08/2016 11:50
Ethylbenzene-d10	141	S	60-140		03/08/2016 11:50
1,2-DCB-d4	91		60-140		03/08/2016 11:50

Analyst(s): KF

Analytical Comments: c7,a3



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC16	117484
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	20	200	03/07/2016 13:28	
tert-Amyl methyl ether (TAME)	ND	1.0	200	03/07/2016 13:28	
Benzene	ND	1.0	200	03/07/2016 13:28	
Bromobenzene	ND	1.0	200	03/07/2016 13:28	
Bromochloromethane	ND	1.0	200	03/07/2016 13:28	
Bromodichloromethane	ND	1.0	200	03/07/2016 13:28	
Bromoform	ND	1.0	200	03/07/2016 13:28	
Bromomethane	ND	1.0	200	03/07/2016 13:28	
2-Butanone (MEK)	ND	4.0	200	03/07/2016 13:28	
t-Butyl alcohol (TBA)	ND	10	200	03/07/2016 13:28	
n-Butyl benzene	ND	1.0	200	03/07/2016 13:28	
sec-Butyl benzene	ND	1.0	200	03/07/2016 13:28	
tert-Butyl benzene	ND	1.0	200	03/07/2016 13:28	
Carbon Disulfide	ND	1.0	200	03/07/2016 13:28	
Carbon Tetrachloride	ND	1.0	200	03/07/2016 13:28	
Chlorobenzene	ND	1.0	200	03/07/2016 13:28	
Chloroethane	ND	1.0	200	03/07/2016 13:28	
Chloroform	ND	1.0	200	03/07/2016 13:28	
Chloromethane	ND	1.0	200	03/07/2016 13:28	
2-Chlorotoluene	ND	1.0	200	03/07/2016 13:28	
4-Chlorotoluene	ND	1.0	200	03/07/2016 13:28	
Dibromochloromethane	ND	1.0	200	03/07/2016 13:28	
1,2-Dibromo-3-chloropropane	ND	0.80	200	03/07/2016 13:28	
1,2-Dibromoethane (EDB)	ND	0.80	200	03/07/2016 13:28	
Dibromomethane	ND	1.0	200	03/07/2016 13:28	
1,2-Dichlorobenzene	ND	1.0	200	03/07/2016 13:28	
1,3-Dichlorobenzene	ND	1.0	200	03/07/2016 13:28	
1,4-Dichlorobenzene	ND	1.0	200	03/07/2016 13:28	
Dichlorodifluoromethane	ND	1.0	200	03/07/2016 13:28	
1,1-Dichloroethane	ND	1.0	200	03/07/2016 13:28	
1,2-Dichloroethane (1,2-DCA)	ND	0.80	200	03/07/2016 13:28	
1,1-Dichloroethene	ND	1.0	200	03/07/2016 13:28	
cis-1,2-Dichloroethene	ND	1.0	200	03/07/2016 13:28	
trans-1,2-Dichloroethene	ND	1.0	200	03/07/2016 13:28	
1,2-Dichloropropane	ND	1.0	200	03/07/2016 13:28	
1,3-Dichloropropane	ND	1.0	200	03/07/2016 13:28	
2,2-Dichloropropane	ND	1.0	200	03/07/2016 13:28	

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		1.0	200	03/07/2016 13:28
cis-1,3-Dichloropropene	ND		1.0	200	03/07/2016 13:28
trans-1,3-Dichloropropene	ND		1.0	200	03/07/2016 13:28
Diisopropyl ether (DIPE)	ND		1.0	200	03/07/2016 13:28
Ethylbenzene	ND		1.0	200	03/07/2016 13:28
Ethyl tert-butyl ether (ETBE)	ND		1.0	200	03/07/2016 13:28
Freon 113	ND		1.0	200	03/07/2016 13:28
Hexachlorobutadiene	ND		1.0	200	03/07/2016 13:28
Hexachloroethane	ND		1.0	200	03/07/2016 13:28
2-Hexanone	ND		1.0	200	03/07/2016 13:28
Isopropylbenzene	ND		1.0	200	03/07/2016 13:28
4-Isopropyl toluene	ND		1.0	200	03/07/2016 13:28
Methyl-t-butyl ether (MTBE)	ND		1.0	200	03/07/2016 13:28
Methylene chloride	ND		1.0	200	03/07/2016 13:28
4-Methyl-2-pentanone (MIBK)	ND		1.0	200	03/07/2016 13:28
Naphthalene	ND		1.0	200	03/07/2016 13:28
n-Propyl benzene	ND		1.0	200	03/07/2016 13:28
Styrene	ND		1.0	200	03/07/2016 13:28
1,1,1,2-Tetrachloroethane	ND		1.0	200	03/07/2016 13:28
1,1,2,2-Tetrachloroethane	ND		1.0	200	03/07/2016 13:28
Tetrachloroethene	ND		1.0	200	03/07/2016 13:28
Toluene	ND		1.0	200	03/07/2016 13:28
1,2,3-Trichlorobenzene	ND		1.0	200	03/07/2016 13:28
1,2,4-Trichlorobenzene	ND		1.0	200	03/07/2016 13:28
1,1,1-Trichloroethane	ND		1.0	200	03/07/2016 13:28
1,1,2-Trichloroethane	ND		1.0	200	03/07/2016 13:28
Trichloroethene	ND		1.0	200	03/07/2016 13:28
Trichlorofluoromethane	ND		1.0	200	03/07/2016 13:28
1,2,3-Trichloropropane	ND		1.0	200	03/07/2016 13:28
1,2,4-Trimethylbenzene	ND		1.0	200	03/07/2016 13:28
1,3,5-Trimethylbenzene	ND		1.0	200	03/07/2016 13:28
Vinyl Chloride	ND		1.0	200	03/07/2016 13:28
Xylenes, Total	ND		1.0	200	03/07/2016 13:28

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC16	117484

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
Dibromofluoromethane	91		70-130	03/07/2016 13:28
Toluene-d8	84		70-130	03/07/2016 13:28
4-BFB	96		70-130	03/07/2016 13:28
Benzene-d6	596	S	60-140	03/07/2016 13:28
Ethylbenzene-d10	584	S	60-140	03/07/2016 13:28
1,2-DCB-d4	108		60-140	03/07/2016 13:28

**Analyst(s):** KF

**Analytical Comments:** a3,c7



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC16	117484
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	20	200	03/08/2016 13:55	
tert-Amyl methyl ether (TAME)	ND	1.0	200	03/08/2016 13:55	
Benzene	ND	1.0	200	03/08/2016 13:55	
Bromobenzene	ND	1.0	200	03/08/2016 13:55	
Bromochloromethane	ND	1.0	200	03/08/2016 13:55	
Bromodichloromethane	ND	1.0	200	03/08/2016 13:55	
Bromoform	ND	1.0	200	03/08/2016 13:55	
Bromomethane	ND	1.0	200	03/08/2016 13:55	
2-Butanone (MEK)	ND	4.0	200	03/08/2016 13:55	
t-Butyl alcohol (TBA)	ND	10	200	03/08/2016 13:55	
n-Butyl benzene	ND	1.0	200	03/08/2016 13:55	
sec-Butyl benzene	ND	1.0	200	03/08/2016 13:55	
tert-Butyl benzene	ND	1.0	200	03/08/2016 13:55	
Carbon Disulfide	ND	1.0	200	03/08/2016 13:55	
Carbon Tetrachloride	ND	1.0	200	03/08/2016 13:55	
Chlorobenzene	ND	1.0	200	03/08/2016 13:55	
Chloroethane	ND	1.0	200	03/08/2016 13:55	
Chloroform	ND	1.0	200	03/08/2016 13:55	
Chloromethane	ND	1.0	200	03/08/2016 13:55	
2-Chlorotoluene	ND	1.0	200	03/08/2016 13:55	
4-Chlorotoluene	ND	1.0	200	03/08/2016 13:55	
Dibromochloromethane	ND	1.0	200	03/08/2016 13:55	
1,2-Dibromo-3-chloropropane	ND	0.80	200	03/08/2016 13:55	
1,2-Dibromoethane (EDB)	ND	0.80	200	03/08/2016 13:55	
Dibromomethane	ND	1.0	200	03/08/2016 13:55	
1,2-Dichlorobenzene	ND	1.0	200	03/08/2016 13:55	
1,3-Dichlorobenzene	ND	1.0	200	03/08/2016 13:55	
1,4-Dichlorobenzene	ND	1.0	200	03/08/2016 13:55	
Dichlorodifluoromethane	ND	1.0	200	03/08/2016 13:55	
1,1-Dichloroethane	ND	1.0	200	03/08/2016 13:55	
1,2-Dichloroethane (1,2-DCA)	ND	0.80	200	03/08/2016 13:55	
1,1-Dichloroethene	ND	1.0	200	03/08/2016 13:55	
cis-1,2-Dichloroethene	ND	1.0	200	03/08/2016 13:55	
trans-1,2-Dichloroethene	ND	1.0	200	03/08/2016 13:55	
1,2-Dichloropropane	ND	1.0	200	03/08/2016 13:55	
1,3-Dichloropropane	ND	1.0	200	03/08/2016 13:55	
2,2-Dichloropropane	ND	1.0	200	03/08/2016 13:55	

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC16	117484
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	1.0	200	03/08/2016 13:55	
cis-1,3-Dichloropropene	ND	1.0	200	03/08/2016 13:55	
trans-1,3-Dichloropropene	ND	1.0	200	03/08/2016 13:55	
Diisopropyl ether (DIPE)	ND	1.0	200	03/08/2016 13:55	
Ethylbenzene	ND	1.0	200	03/08/2016 13:55	
Ethyl tert-butyl ether (ETBE)	ND	1.0	200	03/08/2016 13:55	
Freon 113	ND	1.0	200	03/08/2016 13:55	
Hexachlorobutadiene	ND	1.0	200	03/08/2016 13:55	
Hexachloroethane	ND	1.0	200	03/08/2016 13:55	
2-Hexanone	ND	1.0	200	03/08/2016 13:55	
Isopropylbenzene	ND	1.0	200	03/08/2016 13:55	
4-Isopropyl toluene	ND	1.0	200	03/08/2016 13:55	
Methyl-t-butyl ether (MTBE)	ND	1.0	200	03/08/2016 13:55	
Methylene chloride	ND	1.0	200	03/08/2016 13:55	
4-Methyl-2-pentanone (MIBK)	ND	1.0	200	03/08/2016 13:55	
Naphthalene	<b>5.4</b>	1.0	200	03/08/2016 13:55	
n-Propyl benzene	<b>2.5</b>	1.0	200	03/08/2016 13:55	
Styrene	ND	1.0	200	03/08/2016 13:55	
1,1,1,2-Tetrachloroethane	ND	1.0	200	03/08/2016 13:55	
1,1,2,2-Tetrachloroethane	ND	1.0	200	03/08/2016 13:55	
Tetrachloroethene	ND	1.0	200	03/08/2016 13:55	
Toluene	ND	1.0	200	03/08/2016 13:55	
1,2,3-Trichlorobenzene	ND	1.0	200	03/08/2016 13:55	
1,2,4-Trichlorobenzene	ND	1.0	200	03/08/2016 13:55	
1,1,1-Trichloroethane	ND	1.0	200	03/08/2016 13:55	
1,1,2-Trichloroethane	ND	1.0	200	03/08/2016 13:55	
Trichloroethene	ND	1.0	200	03/08/2016 13:55	
Trichlorofluoromethane	ND	1.0	200	03/08/2016 13:55	
1,2,3-Trichloropropane	ND	1.0	200	03/08/2016 13:55	
1,2,4-Trimethylbenzene	ND	1.0	200	03/08/2016 13:55	
1,3,5-Trimethylbenzene	ND	1.0	200	03/08/2016 13:55	
Vinyl Chloride	ND	1.0	200	03/08/2016 13:55	
Xylenes, Total	ND	1.0	200	03/08/2016 13:55	

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC16	117484

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	93		70-130		03/08/2016 13:55
Toluene-d8	85		70-130		03/08/2016 13:55
4-BFB	93		70-130		03/08/2016 13:55
Benzene-d6	604	S	60-140		03/08/2016 13:55
Ethylbenzene-d10	572	S	60-140		03/08/2016 13:55
1,2-DCB-d4	87		60-140		03/08/2016 13:55

**Analyst(s):** KF

**Analytical Comments:** c7





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	GC16	117484

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	03/07/2016 14:47
tert-Amyl methyl ether (TAME)	ND	0.0050	1	03/07/2016 14:47
Benzene	ND	0.0050	1	03/07/2016 14:47
Bromobenzene	ND	0.0050	1	03/07/2016 14:47
Bromochloromethane	ND	0.0050	1	03/07/2016 14:47
Bromodichloromethane	ND	0.0050	1	03/07/2016 14:47
Bromoform	ND	0.0050	1	03/07/2016 14:47
Bromomethane	ND	0.0050	1	03/07/2016 14:47
2-Butanone (MEK)	ND	0.020	1	03/07/2016 14:47
t-Butyl alcohol (TBA)	ND	0.050	1	03/07/2016 14:47
n-Butyl benzene	ND	0.0050	1	03/07/2016 14:47
sec-Butyl benzene	ND	0.0050	1	03/07/2016 14:47
tert-Butyl benzene	ND	0.0050	1	03/07/2016 14:47
Carbon Disulfide	ND	0.0050	1	03/07/2016 14:47
Carbon Tetrachloride	ND	0.0050	1	03/07/2016 14:47
Chlorobenzene	ND	0.0050	1	03/07/2016 14:47
Chloroethane	ND	0.0050	1	03/07/2016 14:47
Chloroform	ND	0.0050	1	03/07/2016 14:47
Chloromethane	ND	0.0050	1	03/07/2016 14:47
2-Chlorotoluene	ND	0.0050	1	03/07/2016 14:47
4-Chlorotoluene	ND	0.0050	1	03/07/2016 14:47
Dibromochloromethane	ND	0.0050	1	03/07/2016 14:47
1,2-Dibromo-3-chloropropane	ND	0.0040	1	03/07/2016 14:47
1,2-Dibromoethane (EDB)	ND	0.0040	1	03/07/2016 14:47
Dibromomethane	ND	0.0050	1	03/07/2016 14:47
1,2-Dichlorobenzene	ND	0.0050	1	03/07/2016 14:47
1,3-Dichlorobenzene	ND	0.0050	1	03/07/2016 14:47
1,4-Dichlorobenzene	ND	0.0050	1	03/07/2016 14:47
Dichlorodifluoromethane	ND	0.0050	1	03/07/2016 14:47
1,1-Dichloroethane	ND	0.0050	1	03/07/2016 14:47
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	03/07/2016 14:47
1,1-Dichloroethene	ND	0.0050	1	03/07/2016 14:47
cis-1,2-Dichloroethene	ND	0.0050	1	03/07/2016 14:47
trans-1,2-Dichloroethene	ND	0.0050	1	03/07/2016 14:47
1,2-Dichloropropane	ND	0.0050	1	03/07/2016 14:47
1,3-Dichloropropane	ND	0.0050	1	03/07/2016 14:47
2,2-Dichloropropane	ND	0.0050	1	03/07/2016 14:47

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	GC16	117484

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	03/07/2016 14:47
cis-1,3-Dichloropropene	ND	0.0050	1	03/07/2016 14:47
trans-1,3-Dichloropropene	ND	0.0050	1	03/07/2016 14:47
Diisopropyl ether (DIPE)	ND	0.0050	1	03/07/2016 14:47
Ethylbenzene	ND	0.0050	1	03/07/2016 14:47
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	03/07/2016 14:47
Freon 113	ND	0.0050	1	03/07/2016 14:47
Hexachlorobutadiene	ND	0.0050	1	03/07/2016 14:47
Hexachloroethane	ND	0.0050	1	03/07/2016 14:47
2-Hexanone	ND	0.0050	1	03/07/2016 14:47
Isopropylbenzene	ND	0.0050	1	03/07/2016 14:47
4-Isopropyl toluene	ND	0.0050	1	03/07/2016 14:47
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	03/07/2016 14:47
Methylene chloride	ND	0.0050	1	03/07/2016 14:47
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	03/07/2016 14:47
Naphthalene	ND	0.0050	1	03/07/2016 14:47
n-Propyl benzene	ND	0.0050	1	03/07/2016 14:47
Styrene	ND	0.0050	1	03/07/2016 14:47
1,1,1,2-Tetrachloroethane	ND	0.0050	1	03/07/2016 14:47
1,1,2,2-Tetrachloroethane	ND	0.0050	1	03/07/2016 14:47
Tetrachloroethene	ND	0.0050	1	03/07/2016 14:47
Toluene	ND	0.0050	1	03/07/2016 14:47
1,2,3-Trichlorobenzene	ND	0.0050	1	03/07/2016 14:47
1,2,4-Trichlorobenzene	ND	0.0050	1	03/07/2016 14:47
1,1,1-Trichloroethane	ND	0.0050	1	03/07/2016 14:47
1,1,2-Trichloroethane	ND	0.0050	1	03/07/2016 14:47
Trichloroethene	ND	0.0050	1	03/07/2016 14:47
Trichlorofluoromethane	ND	0.0050	1	03/07/2016 14:47
1,2,3-Trichloropropane	ND	0.0050	1	03/07/2016 14:47
1,2,4-Trimethylbenzene	ND	0.0050	1	03/07/2016 14:47
1,3,5-Trimethylbenzene	ND	0.0050	1	03/07/2016 14:47
Vinyl Chloride	ND	0.0050	1	03/07/2016 14:47
Xylenes, Total	ND	0.0050	1	03/07/2016 14:47

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	GC16	117484

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	89	70-130		03/07/2016 14:47
Toluene-d8	93	70-130		03/07/2016 14:47
4-BFB	122	70-130		03/07/2016 14:47
Benzene-d6	85	60-140		03/07/2016 14:47
Ethylbenzene-d10	99	60-140		03/07/2016 14:47
1,2-DCB-d4	66	60-140		03/07/2016 14:47

Analyst(s): KF



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	140		50	200	03/07/2016 12:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	101		70-130		03/07/2016 12:47
<u>Analyst(s):</u> KF					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	160		50	200	03/07/2016 13:28
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	101		70-130		03/07/2016 13:28
<u>Analyst(s):</u> KF					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	330		50	200	03/08/2016 13:55
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	103		70-130		03/08/2016 13:55
<u>Analyst(s):</u> KF					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	GC16	117484
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	3.7		0.25	1	03/07/2016 14:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	98		70-130		03/07/2016 14:47
<u>Analyst(s):</u> KF					



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC17	117493
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	2.5	10	03/04/2016 16:25	
Acenaphthylene	ND	2.5	10	03/04/2016 16:25	
Acetochlor	ND	2.5	10	03/04/2016 16:25	
Anthracene	ND	2.5	10	03/04/2016 16:25	
Benzydine	ND	13	10	03/04/2016 16:25	
Benzo (a) anthracene	ND	2.5	10	03/04/2016 16:25	
Benzo (a) pyrene	ND	2.5	10	03/04/2016 16:25	
Benzo (b) fluoranthene	ND	2.5	10	03/04/2016 16:25	
Benzo (g,h,i) perylene	ND	2.5	10	03/04/2016 16:25	
Benzo (k) fluoranthene	ND	2.5	10	03/04/2016 16:25	
Benzyl Alcohol	ND	13	10	03/04/2016 16:25	
1,1-Biphenyl	ND	2.5	10	03/04/2016 16:25	
Bis (2-chloroethoxy) Methane	ND	2.5	10	03/04/2016 16:25	
Bis (2-chloroethyl) Ether	ND	2.5	10	03/04/2016 16:25	
Bis (2-chloroisopropyl) Ether	ND	2.5	10	03/04/2016 16:25	
Bis (2-ethylhexyl) Adipate	ND	2.5	10	03/04/2016 16:25	
Bis (2-ethylhexyl) Phthalate	ND	2.5	10	03/04/2016 16:25	
4-Bromophenyl Phenyl Ether	ND	2.5	10	03/04/2016 16:25	
Butylbenzyl Phthalate	ND	2.5	10	03/04/2016 16:25	
4-Chloroaniline	ND	5.0	10	03/04/2016 16:25	
4-Chloro-3-methylphenol	ND	2.5	10	03/04/2016 16:25	
2-Chloronaphthalene	ND	2.5	10	03/04/2016 16:25	
2-Chlorophenol	ND	2.5	10	03/04/2016 16:25	
4-Chlorophenyl Phenyl Ether	ND	2.5	10	03/04/2016 16:25	
Chrysene	ND	2.5	10	03/04/2016 16:25	
Dibenzo (a,h) anthracene	ND	2.5	10	03/04/2016 16:25	
Dibenzofuran	ND	2.5	10	03/04/2016 16:25	
Di-n-butyl Phthalate	ND	2.5	10	03/04/2016 16:25	
1,2-Dichlorobenzene	ND	2.5	10	03/04/2016 16:25	
1,3-Dichlorobenzene	ND	2.5	10	03/04/2016 16:25	
1,4-Dichlorobenzene	ND	2.5	10	03/04/2016 16:25	
3,3-Dichlorobenzidine	ND	5.0	10	03/04/2016 16:25	
2,4-Dichlorophenol	ND	2.5	10	03/04/2016 16:25	
Diethyl Phthalate	ND	2.5	10	03/04/2016 16:25	
2,4-Dimethylphenol	ND	2.5	10	03/04/2016 16:25	
Dimethyl Phthalate	ND	2.5	10	03/04/2016 16:25	
4,6-Dinitro-2-methylphenol	ND	13	10	03/04/2016 16:25	

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC17	117493
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	63	10	03/04/2016 16:25	
2,4-Dinitrotoluene	ND	2.5	10	03/04/2016 16:25	
2,6-Dinitrotoluene	ND	2.5	10	03/04/2016 16:25	
Di-n-octyl Phthalate	ND	5.0	10	03/04/2016 16:25	
1,2-Diphenylhydrazine	ND	2.5	10	03/04/2016 16:25	
Fluoranthene	ND	2.5	10	03/04/2016 16:25	
Fluorene	ND	2.5	10	03/04/2016 16:25	
Hexachlorobenzene	ND	2.5	10	03/04/2016 16:25	
Hexachlorobutadiene	ND	2.5	10	03/04/2016 16:25	
Hexachlorocyclopentadiene	ND	13	10	03/04/2016 16:25	
Hexachloroethane	ND	2.5	10	03/04/2016 16:25	
Indeno (1,2,3-cd) pyrene	ND	2.5	10	03/04/2016 16:25	
Isophorone	ND	2.5	10	03/04/2016 16:25	
2-Methylnaphthalene	ND	2.5	10	03/04/2016 16:25	
2-Methylphenol (o-Cresol)	ND	2.5	10	03/04/2016 16:25	
3 & 4-Methylphenol (m,p-Cresol)	ND	2.5	10	03/04/2016 16:25	
Naphthalene	ND	2.5	10	03/04/2016 16:25	
2-Nitroaniline	ND	13	10	03/04/2016 16:25	
3-Nitroaniline	ND	13	10	03/04/2016 16:25	
4-Nitroaniline	ND	13	10	03/04/2016 16:25	
Nitrobenzene	ND	2.5	10	03/04/2016 16:25	
2-Nitrophenol	ND	13	10	03/04/2016 16:25	
4-Nitrophenol	ND	13	10	03/04/2016 16:25	
N-Nitrosodiphenylamine	ND	2.5	10	03/04/2016 16:25	
N-Nitrosodi-n-propylamine	ND	2.5	10	03/04/2016 16:25	
Pentachlorophenol	ND	13	10	03/04/2016 16:25	
Phenanthrene	ND	2.5	10	03/04/2016 16:25	
Phenol	ND	2.5	10	03/04/2016 16:25	
Pyrene	ND	2.5	10	03/04/2016 16:25	
1,2,4-Trichlorobenzene	ND	2.5	10	03/04/2016 16:25	
2,4,5-Trichlorophenol	ND	2.5	10	03/04/2016 16:25	
2,4,6-Trichlorophenol	ND	2.5	10	03/04/2016 16:25	

(Cont.)



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC17	117493

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	85	30-130		03/04/2016 16:25
Phenol-d5	81	30-130		03/04/2016 16:25
Nitrobenzene-d5	67	30-130		03/04/2016 16:25
2-Fluorobiphenyl	65	30-130		03/04/2016 16:25
2,4,6-Tribromophenol	53	16-130		03/04/2016 16:25
4-Terphenyl-d14	74	30-130		03/04/2016 16:25

Analyst(s): HK

Analytical Comments: a3



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC17	117493
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	5.0	20	03/04/2016 16:54	
Acenaphthylene	ND	5.0	20	03/04/2016 16:54	
Acetochlor	ND	5.0	20	03/04/2016 16:54	
Anthracene	ND	5.0	20	03/04/2016 16:54	
Benzydine	ND	26	20	03/04/2016 16:54	
Benzo (a) anthracene	ND	5.0	20	03/04/2016 16:54	
Benzo (a) pyrene	ND	5.0	20	03/04/2016 16:54	
Benzo (b) fluoranthene	ND	5.0	20	03/04/2016 16:54	
Benzo (g,h,i) perylene	ND	5.0	20	03/04/2016 16:54	
Benzo (k) fluoranthene	ND	5.0	20	03/04/2016 16:54	
Benzyl Alcohol	ND	26	20	03/04/2016 16:54	
1,1-Biphenyl	ND	5.0	20	03/04/2016 16:54	
Bis (2-chloroethoxy) Methane	ND	5.0	20	03/04/2016 16:54	
Bis (2-chloroethyl) Ether	ND	5.0	20	03/04/2016 16:54	
Bis (2-chloroisopropyl) Ether	ND	5.0	20	03/04/2016 16:54	
Bis (2-ethylhexyl) Adipate	ND	5.0	20	03/04/2016 16:54	
Bis (2-ethylhexyl) Phthalate	ND	5.0	20	03/04/2016 16:54	
4-Bromophenyl Phenyl Ether	ND	5.0	20	03/04/2016 16:54	
Butylbenzyl Phthalate	ND	5.0	20	03/04/2016 16:54	
4-Chloroaniline	ND	10	20	03/04/2016 16:54	
4-Chloro-3-methylphenol	ND	5.0	20	03/04/2016 16:54	
2-Chloronaphthalene	ND	5.0	20	03/04/2016 16:54	
2-Chlorophenol	ND	5.0	20	03/04/2016 16:54	
4-Chlorophenyl Phenyl Ether	ND	5.0	20	03/04/2016 16:54	
Chrysene	ND	5.0	20	03/04/2016 16:54	
Dibenzo (a,h) anthracene	ND	5.0	20	03/04/2016 16:54	
Dibenzofuran	ND	5.0	20	03/04/2016 16:54	
Di-n-butyl Phthalate	ND	5.0	20	03/04/2016 16:54	
1,2-Dichlorobenzene	ND	5.0	20	03/04/2016 16:54	
1,3-Dichlorobenzene	ND	5.0	20	03/04/2016 16:54	
1,4-Dichlorobenzene	ND	5.0	20	03/04/2016 16:54	
3,3-Dichlorobenzidine	ND	10	20	03/04/2016 16:54	
2,4-Dichlorophenol	ND	5.0	20	03/04/2016 16:54	
Diethyl Phthalate	ND	5.0	20	03/04/2016 16:54	
2,4-Dimethylphenol	ND	5.0	20	03/04/2016 16:54	
Dimethyl Phthalate	ND	5.0	20	03/04/2016 16:54	
4,6-Dinitro-2-methylphenol	ND	26	20	03/04/2016 16:54	

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC17	117493
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	130	20	03/04/2016 16:54	
2,4-Dinitrotoluene	ND	5.0	20	03/04/2016 16:54	
2,6-Dinitrotoluene	ND	5.0	20	03/04/2016 16:54	
Di-n-octyl Phthalate	ND	10	20	03/04/2016 16:54	
1,2-Diphenylhydrazine	ND	5.0	20	03/04/2016 16:54	
Fluoranthene	ND	5.0	20	03/04/2016 16:54	
Fluorene	ND	5.0	20	03/04/2016 16:54	
Hexachlorobenzene	ND	5.0	20	03/04/2016 16:54	
Hexachlorobutadiene	ND	5.0	20	03/04/2016 16:54	
Hexachlorocyclopentadiene	ND	26	20	03/04/2016 16:54	
Hexachloroethane	ND	5.0	20	03/04/2016 16:54	
Indeno (1,2,3-cd) pyrene	ND	5.0	20	03/04/2016 16:54	
Isophorone	ND	5.0	20	03/04/2016 16:54	
2-Methylnaphthalene	ND	5.0	20	03/04/2016 16:54	
2-Methylphenol (o-Cresol)	ND	5.0	20	03/04/2016 16:54	
3 & 4-Methylphenol (m,p-Cresol)	ND	5.0	20	03/04/2016 16:54	
Naphthalene	ND	5.0	20	03/04/2016 16:54	
2-Nitroaniline	ND	26	20	03/04/2016 16:54	
3-Nitroaniline	ND	26	20	03/04/2016 16:54	
4-Nitroaniline	ND	26	20	03/04/2016 16:54	
Nitrobenzene	ND	5.0	20	03/04/2016 16:54	
2-Nitrophenol	ND	26	20	03/04/2016 16:54	
4-Nitrophenol	ND	26	20	03/04/2016 16:54	
N-Nitrosodiphenylamine	ND	5.0	20	03/04/2016 16:54	
N-Nitrosodi-n-propylamine	ND	5.0	20	03/04/2016 16:54	
Pentachlorophenol	ND	26	20	03/04/2016 16:54	
Phenanthrene	ND	5.0	20	03/04/2016 16:54	
Phenol	ND	5.0	20	03/04/2016 16:54	
Pyrene	ND	5.0	20	03/04/2016 16:54	
1,2,4-Trichlorobenzene	ND	5.0	20	03/04/2016 16:54	
2,4,5-Trichlorophenol	ND	5.0	20	03/04/2016 16:54	
2,4,6-Trichlorophenol	ND	5.0	20	03/04/2016 16:54	

(Cont.)



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC17	117493

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	104	30-130		03/04/2016 16:54
Phenol-d5	99	30-130		03/04/2016 16:54
Nitrobenzene-d5	78	30-130		03/04/2016 16:54
2-Fluorobiphenyl	77	30-130		03/04/2016 16:54
2,4,6-Tribromophenol	58	16-130		03/04/2016 16:54
4-Terphenyl-d14	78	30-130		03/04/2016 16:54

Analyst(s): HK

Analytical Comments: a3



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC17	117493
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	12	50	03/07/2016 13:18	
Acenaphthylene	ND	12	50	03/07/2016 13:18	
Acetochlor	ND	12	50	03/07/2016 13:18	
Anthracene	ND	12	50	03/07/2016 13:18	
Benidine	ND	65	50	03/07/2016 13:18	
Benzo (a) anthracene	ND	12	50	03/07/2016 13:18	
Benzo (a) pyrene	ND	12	50	03/07/2016 13:18	
Benzo (b) fluoranthene	ND	12	50	03/07/2016 13:18	
Benzo (g,h,i) perylene	ND	12	50	03/07/2016 13:18	
Benzo (k) fluoranthene	ND	12	50	03/07/2016 13:18	
Benzyl Alcohol	ND	65	50	03/07/2016 13:18	
1,1-Biphenyl	ND	12	50	03/07/2016 13:18	
Bis (2-chloroethoxy) Methane	ND	12	50	03/07/2016 13:18	
Bis (2-chloroethyl) Ether	ND	12	50	03/07/2016 13:18	
Bis (2-chloroisopropyl) Ether	ND	12	50	03/07/2016 13:18	
Bis (2-ethylhexyl) Adipate	ND	12	50	03/07/2016 13:18	
Bis (2-ethylhexyl) Phthalate	ND	12	50	03/07/2016 13:18	
4-Bromophenyl Phenyl Ether	ND	12	50	03/07/2016 13:18	
Butylbenzyl Phthalate	ND	12	50	03/07/2016 13:18	
4-Chloroaniline	ND	25	50	03/07/2016 13:18	
4-Chloro-3-methylphenol	ND	12	50	03/07/2016 13:18	
2-Chloronaphthalene	ND	12	50	03/07/2016 13:18	
2-Chlorophenol	ND	12	50	03/07/2016 13:18	
4-Chlorophenyl Phenyl Ether	ND	12	50	03/07/2016 13:18	
Chrysene	ND	12	50	03/07/2016 13:18	
Dibenzo (a,h) anthracene	ND	12	50	03/07/2016 13:18	
Dibenzofuran	ND	12	50	03/07/2016 13:18	
Di-n-butyl Phthalate	ND	12	50	03/07/2016 13:18	
1,2-Dichlorobenzene	ND	12	50	03/07/2016 13:18	
1,3-Dichlorobenzene	ND	12	50	03/07/2016 13:18	
1,4-Dichlorobenzene	ND	12	50	03/07/2016 13:18	
3,3-Dichlorobenzidine	ND	25	50	03/07/2016 13:18	
2,4-Dichlorophenol	ND	12	50	03/07/2016 13:18	
Diethyl Phthalate	ND	12	50	03/07/2016 13:18	
2,4-Dimethylphenol	ND	12	50	03/07/2016 13:18	
Dimethyl Phthalate	ND	12	50	03/07/2016 13:18	
4,6-Dinitro-2-methylphenol	ND	65	50	03/07/2016 13:18	

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC17	117493
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	320	50	03/07/2016 13:18	
2,4-Dinitrotoluene	ND	12	50	03/07/2016 13:18	
2,6-Dinitrotoluene	ND	12	50	03/07/2016 13:18	
Di-n-octyl Phthalate	ND	25	50	03/07/2016 13:18	
1,2-Diphenylhydrazine	ND	12	50	03/07/2016 13:18	
Fluoranthene	ND	12	50	03/07/2016 13:18	
Fluorene	ND	12	50	03/07/2016 13:18	
Hexachlorobenzene	ND	12	50	03/07/2016 13:18	
Hexachlorobutadiene	ND	12	50	03/07/2016 13:18	
Hexachlorocyclopentadiene	ND	65	50	03/07/2016 13:18	
Hexachloroethane	ND	12	50	03/07/2016 13:18	
Indeno (1,2,3-cd) pyrene	ND	12	50	03/07/2016 13:18	
Isophorone	ND	12	50	03/07/2016 13:18	
2-Methylnaphthalene	<b>88</b>	12	50	03/07/2016 13:18	
2-Methylphenol (o-Cresol)	ND	12	50	03/07/2016 13:18	
3 & 4-Methylphenol (m,p-Cresol)	ND	12	50	03/07/2016 13:18	
Naphthalene	ND	12	50	03/07/2016 13:18	
2-Nitroaniline	ND	65	50	03/07/2016 13:18	
3-Nitroaniline	ND	65	50	03/07/2016 13:18	
4-Nitroaniline	ND	65	50	03/07/2016 13:18	
Nitrobenzene	ND	12	50	03/07/2016 13:18	
2-Nitrophenol	ND	65	50	03/07/2016 13:18	
4-Nitrophenol	ND	65	50	03/07/2016 13:18	
N-Nitrosodiphenylamine	ND	12	50	03/07/2016 13:18	
N-Nitrosodi-n-propylamine	ND	12	50	03/07/2016 13:18	
Pentachlorophenol	ND	65	50	03/07/2016 13:18	
Phenanthrene	ND	12	50	03/07/2016 13:18	
Phenol	ND	12	50	03/07/2016 13:18	
Pyrene	ND	12	50	03/07/2016 13:18	
1,2,4-Trichlorobenzene	ND	12	50	03/07/2016 13:18	
2,4,5-Trichlorophenol	ND	12	50	03/07/2016 13:18	
2,4,6-Trichlorophenol	ND	12	50	03/07/2016 13:18	

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC17	117493

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	64	30-130		03/07/2016 13:18
Phenol-d5	62	30-130		03/07/2016 13:18
Nitrobenzene-d5	63	30-130		03/07/2016 13:18
2-Fluorobiphenyl	56	30-130		03/07/2016 13:18
2,4,6-Tribromophenol	54	16-130		03/07/2016 13:18
4-Terphenyl-d14	57	30-130		03/07/2016 13:18

Analyst(s): REB



## Analytical Report

<b>Client:</b> Schutze & Associates, Inc.	<b>WorkOrder:</b> 1603149
<b>Date Received:</b> 3/3/16 16:04	<b>Extraction Method:</b> SW5030B
<b>Date Prepared:</b> 3/3/16	<b>Analytical Method:</b> SW8021B/8015Bm
<b>Project:</b> SCS557; Trimble Tank Pull	<b>Unit:</b> mg/Kg

### Gasoline Range(C6-C12) & Stoddard Solvent Range(C9-C12) Volatile Hydrocarbons W/ BTEX & MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC19	117485

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	140	10	10	03/07/2016 14:09
MTBE	---	0.50	10	03/07/2016 14:09
Benzene	---	0.050	10	03/07/2016 14:09
Toluene	---	0.050	10	03/07/2016 14:09
Ethylbenzene	---	0.050	10	03/07/2016 14:09
TPH(ss)	270	10	10	03/07/2016 14:09
Xylenes	---	0.15	10	03/07/2016 14:09

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	106	70-130	03/07/2016 14:09

Analyst(s): IA

Analytical Comments: d5,d9

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC19	117485

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	100	20	20	03/05/2016 00:45
MTBE	---	1.0	20	03/05/2016 00:45
Benzene	---	0.10	20	03/05/2016 00:45
Toluene	---	0.10	20	03/05/2016 00:45
Ethylbenzene	---	0.10	20	03/05/2016 00:45
TPH(ss)	150	20	20	03/05/2016 00:45
Xylenes	---	0.30	20	03/05/2016 00:45

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	116	70-130	03/05/2016 00:45

Analyst(s): IA

Analytical Comments: d5,d9

(Cont.)



## Analytical Report

<b>Client:</b> Schutze & Associates, Inc.	<b>WorkOrder:</b> 1603149
<b>Date Received:</b> 3/3/16 16:04	<b>Extraction Method:</b> SW5030B
<b>Date Prepared:</b> 3/3/16	<b>Analytical Method:</b> SW8021B/8015Bm
<b>Project:</b> SCS557; Trimble Tank Pull	<b>Unit:</b> mg/Kg

### Gasoline Range(C6-C12) & Stoddard Solvent Range(C9-C12) Volatile Hydrocarbons W/ BTEX & MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC19	117485

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	<b>610</b>	200	200	03/05/2016 01:15
MTBE	---	10	200	03/05/2016 01:15
Benzene	---	1.0	200	03/05/2016 01:15
Toluene	---	1.0	200	03/05/2016 01:15
Ethylbenzene	---	1.0	200	03/05/2016 01:15
TPH(ss)	<b>620</b>	200	200	03/05/2016 01:15
Xylenes	---	3.0	200	03/05/2016 01:15

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	423	S	70-130	03/05/2016 01:15

Analyst(s): IA Analytical Comments: d5,d9,c4

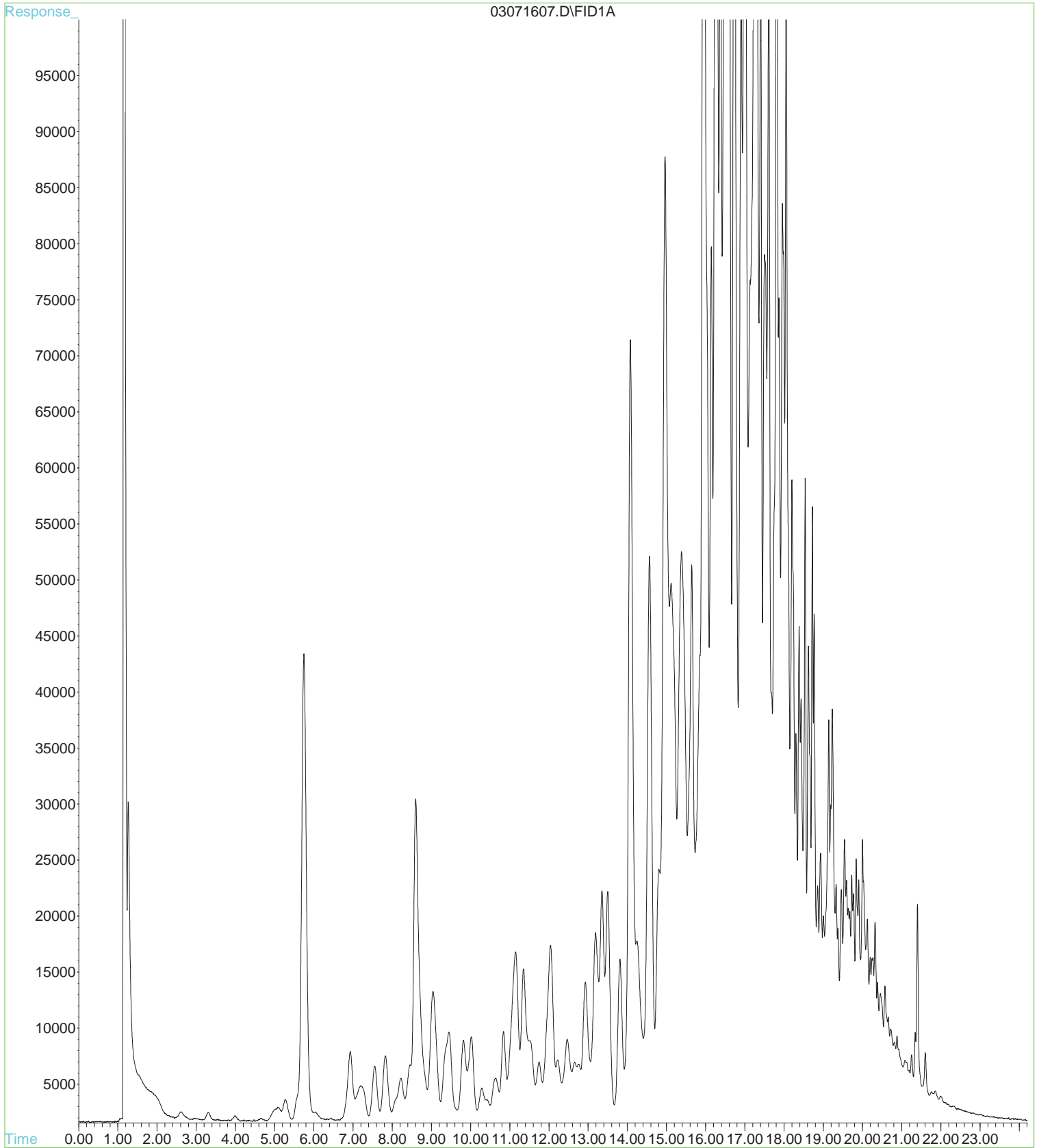
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	GC19	117485

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	<b>18</b>	1.0	1	03/04/2016 22:11
MTBE	---	0.050	1	03/04/2016 22:11
Benzene	---	0.0050	1	03/04/2016 22:11
Toluene	---	0.0050	1	03/04/2016 22:11
Ethylbenzene	---	0.0050	1	03/04/2016 22:11
TPH(ss)	<b>36</b>	1.0	1	03/04/2016 22:11
Xylenes	---	0.015	1	03/04/2016 22:11

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	78	70-130	03/04/2016 22:11

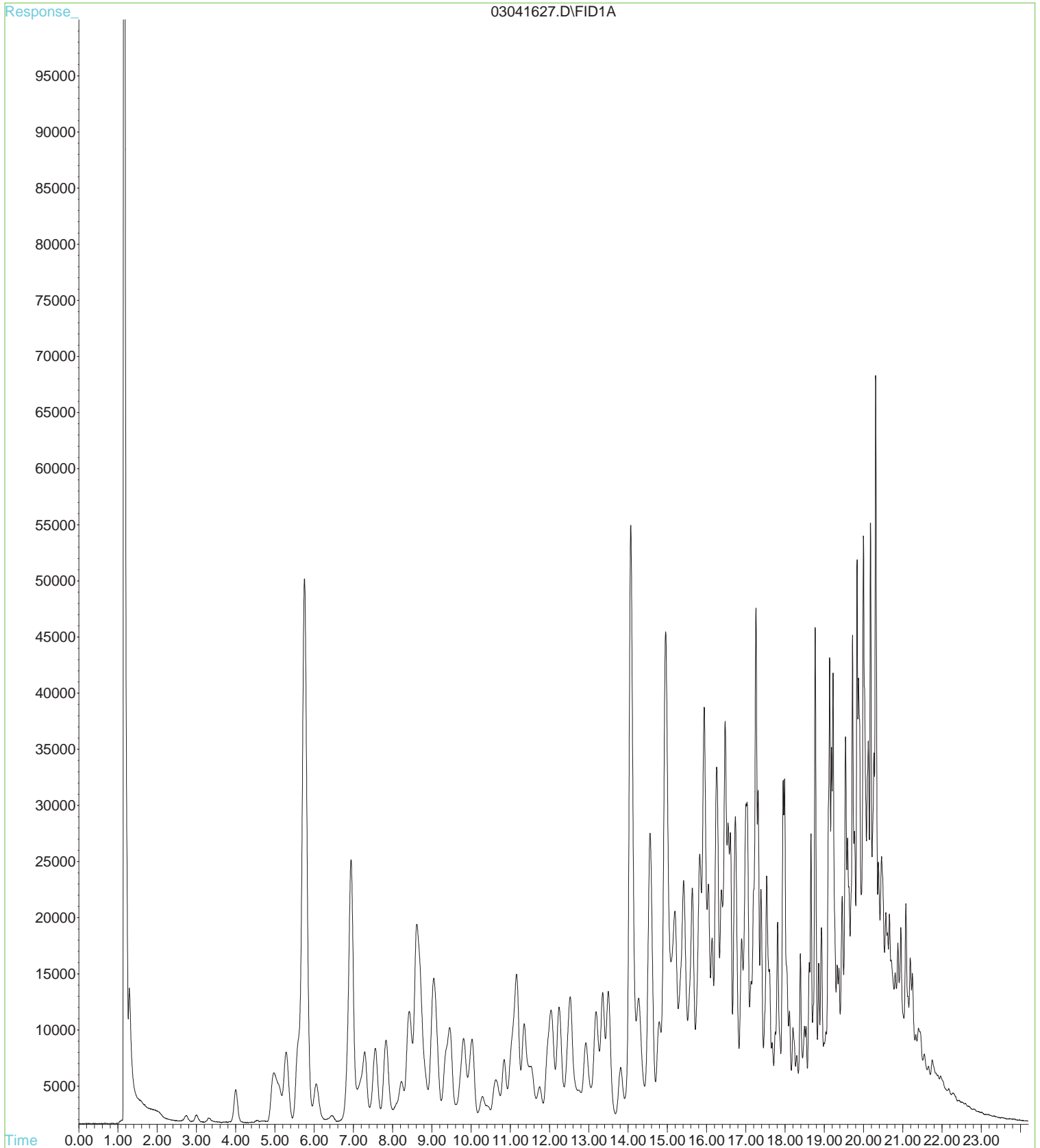
Analyst(s): IA Analytical Comments: d5

File : D:\HPCHEM\GC19\DATA\03071607.D  
Operator : IRINA  
Acquired : 7 Mar 2016 2:09 pm using AcqMethod GC19P2.M  
Instrument : GC-19  
Sample Name: 1603149-001A S rr  
Misc Info : G-MBTX\_S  
Vial Number: 7

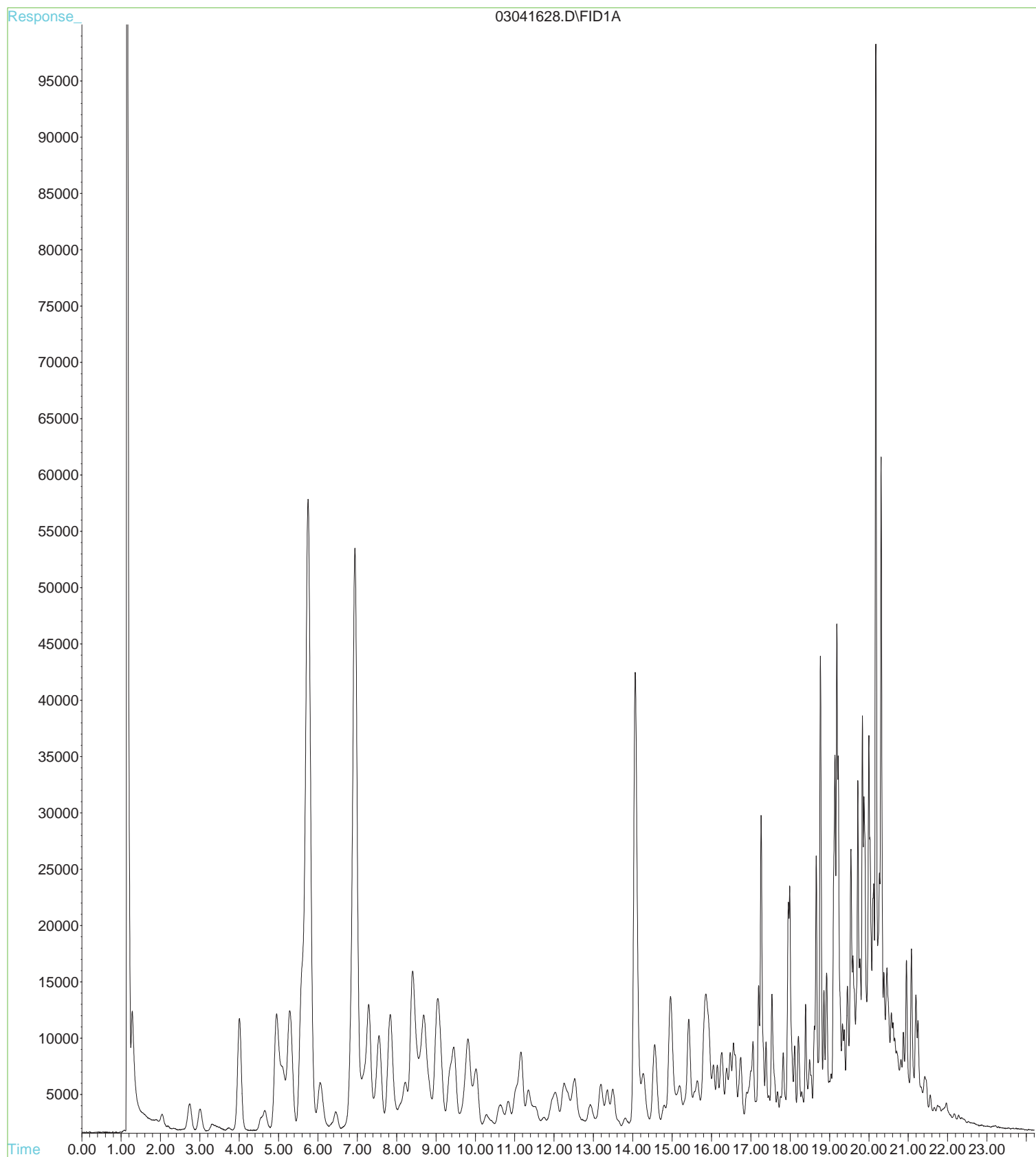




File : D:\HPCHEM\GC19\DATA\03041627.D  
Operator : IRINA  
Acquired : 5 Mar 2016 12:45 am using AcqMethod GC19P2.M  
Instrument : GC-19  
Sample Name: 1603149-002A S  
Misc Info : G-MBTXEX\_S  
Vial Number: 27



File : D:\HPCHEM\GC19\DATA\03041628.D  
Operator : IRINA  
Acquired : 5 Mar 2016 1:15 am using AcqMethod GC19P2.M  
Instrument : GC-19  
Sample Name: 1603149-003A S  
Misc Info : G-MBTX\_S  
Vial Number: 28





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	ICP-MS1	117536

Analytes	Result	RL	DF	Date Analyzed
Cadmium	0.41	0.25	1	03/04/2016 12:24
Chromium	42	0.50	1	03/04/2016 12:24
Lead	7.7	0.50	1	03/04/2016 12:24
Nickel	68	0.50	1	03/04/2016 12:24
Zinc	32	5.0	1	03/04/2016 12:24

Surrogates	REC (%)	Limits
Terbium	107	70-130

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	ICP-MS2	117536

Analytes	Result	RL	DF	Date Analyzed
Cadmium	0.52	0.25	1	03/04/2016 17:56
Chromium	38	0.50	1	03/04/2016 17:56
Lead	6.8	0.50	1	03/04/2016 17:56
Nickel	95	0.50	1	03/04/2016 17:56
Zinc	29	5.0	1	03/04/2016 17:56

Surrogates	REC (%)	Limits
Terbium	99	70-130

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	ICP-MS2	117536

Analytes	Result	RL	DF	Date Analyzed
Cadmium	0.28	0.25	1	03/04/2016 18:02
Chromium	90	0.50	1	03/04/2016 18:02
Lead	13	0.50	1	03/04/2016 18:02
Nickel	55	0.50	1	03/04/2016 18:02
Zinc	32	5.0	1	03/04/2016 18:02

Surrogates	REC (%)	Limits
Terbium	92	70-130

Analyst(s): DVH

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 16:04  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	ICP-MS2	117536
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Cadmium	ND		0.25	1	03/07/2016 19:17
Chromium	51		0.50	1	03/07/2016 19:17
Lead	9.2		0.50	1	03/07/2016 19:17
Nickel	54		0.50	1	03/07/2016 19:17
Zinc	35		5.0	1	03/07/2016 19:17
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	99		70-130		03/07/2016 19:17
<u>Analyst(s):</u> DVH					



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 14:30  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-SE	1603149-001A	Soil	03/02/2016 14:00	GC9b	117525

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	58	1.0	1	03/04/2016 11:24
TPH-Motor Oil (C18-C36)	49	5.0	1	03/04/2016 11:24
TPH-Bunker Oil (C10-C36)	92	5.0	1	03/04/2016 11:24
TPH-Heating Oil (C9-C18)	48	1.0	1	03/04/2016 11:24
Surrogates	REC (%)	Limits		Date Analyzed
C9	98	70-130		03/04/2016 11:24

Analyst(s): TK Analytical Comments: e7,e2,e11

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8.5-NW	1603149-002A	Soil	03/02/2016 14:00	GC9a	117525

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	440	1.0	1	03/04/2016 10:07
TPH-Motor Oil (C18-C36)	270	5.0	1	03/04/2016 10:07
TPH-Bunker Oil (C10-C36)	620	5.0	1	03/04/2016 10:07
TPH-Heating Oil (C9-C18)	330	1.0	1	03/04/2016 10:07
Surrogates	REC (%)	Limits		Date Analyzed
C9	96	70-130		03/04/2016 10:07

Analyst(s): TK Analytical Comments: e7,e8,e11/e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11.5-M	1603149-003A	Soil	03/02/2016 14:00	GC39B	117525

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	3900	50	50	03/05/2016 02:08
TPH-Motor Oil (C18-C36)	2800	250	50	03/05/2016 02:08
TPH-Bunker Oil (C10-C36)	1600	250	50	03/05/2016 02:08
TPH-Heating Oil (C9-C18)	3000	50	50	03/05/2016 02:08
Surrogates	REC (%)	Limits		Date Analyzed
C9	116	70-130		03/05/2016 02:08

Analyst(s): TK Analytical Comments: e7,e2,e4/e11

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/3/16 14:30  
**Date Prepared:** 3/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP-1,2,3,4	1603149-004A	Soil	03/02/2016 15:00	GC39B	117525

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	15	1.0	1	03/05/2016 08:38
TPH-Motor Oil (C18-C36)	36	5.0	1	03/05/2016 08:38
TPH-Bunker Oil (C10-C36)	12	5.0	1	03/05/2016 08:38
TPH-Heating Oil (C9-C18)	9.1	1.0	1	03/05/2016 08:38

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	03/05/2016 08:38

Analyst(s): TK

Analytical Comments: e7,e2,e11



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/2/16 - 3/3/16  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117484  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-117484  
 1603087-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0371	0.0050	0.050	-	74	53-116
Benzene	ND	0.0437	0.0050	0.050	-	87	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.190	0.050	0.20	-	95	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0436	0.0050	0.050	-	87	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0437	0.0040	0.050	-	87	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0442	0.0040	0.050	-	88	58-135
1,1-Dichloroethene	ND	0.0422	0.0050	0.050	-	84	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/2/16 - 3/3/16  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117484  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-117484  
 1603087-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0425	0.0050	0.050	-	85	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0408	0.0050	0.050	-	82	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0399	0.0050	0.050	-	80	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0434	0.0050	0.050	-	87	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0449	0.0050	0.050	-	90	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

(Cont.)





## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/2/16 - 3/3/16  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117484  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-117484  
 1603087-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	0.128	0.128		0.12	102	102	70-130
Toluene-d8	0.149	0.138		0.12	119	111	70-130
4-BFB	0.0138	0.0137		0.012	111	110	70-130
Benzene-d6	0.111	0.0985		0.10	111	99	60-140
Ethylbenzene-d10	0.131	0.111		0.10	131	111	60-140
1,2-DCB-d4	0.0781	0.0763		0.10	78	76	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0316	0.0339	0.050	ND	63	68	56-94	7.04	20
Benzene	0.0359	0.0372	0.050	ND	72	74	60-106	3.55	20
t-Butyl alcohol (TBA)	0.161	0.174	0.20	ND	81	87	56-140	7.53	20
Chlorobenzene	0.0377	0.0385	0.050	ND	75	77	61-108	2.13	20
1,2-Dibromoethane (EDB)	0.0371	0.0395	0.050	ND	74	79	54-119	6.14	20
1,2-Dichloroethane (1,2-DCA)	0.0367	0.0397	0.050	ND	73	79	48-115	7.72	20
1,1-Dichloroethene	0.0339	0.0355	0.050	ND	68	71	46-111	4.61	20
Diisopropyl ether (DIPE)	0.0359	0.0368	0.050	ND	72	74	53-111	2.52	20
Ethyl tert-butyl ether (ETBE)	0.0348	0.0371	0.050	ND	70	74	61-104	6.37	20
Methyl-t-butyl ether (MTBE)	0.0334	0.0361	0.050	ND	67	72	58-107	7.64	20
Toluene	0.0372	0.0383	0.050	ND	74	77	64-114	2.77	20
Trichloroethene	0.0358	0.0367	0.050	ND	71	73	60-116	2.51	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.108	0.112	0.12		86	89	70-130	3.25	20
Toluene-d8	0.115	0.119	0.12		92	95	70-130	3.17	20
4-BFB	0.0137	0.0152	0.012		110	122	88-121	10.4	20
Benzene-d6	0.0724	0.0744	0.10		72	74	60-140	2.68	20
Ethylbenzene-d10	0.0859	0.0874	0.10		86	87	60-140	1.75	20
1,2-DCB-d4	0.0657	0.0680	0.10		66	68	60-140	3.39	20

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## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/3/16  
**Date Analyzed:** 3/4/16  
**Instrument:** GC9b  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117525  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117525  
 1603142-001AMS/MSD

### QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	45.6	1.0	40	-	114	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	23.7	23.7		25	95	95	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		15	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
C9	NR	NR			NR	NR	-	NR	

CLIENT: Schutze & Associates, Inc.

**ANALYTICAL QC SUMMARY REPORT**

Work Order: 1603149

Project: SCS557; Trimble Tank Pull

BatchID: 117484

SampleID <b>MB-117484</b>	TestCode: <b>8260gas_s</b>	Units: <b>mg/kg</b>	Prep Date: <b>3/2/2016</b>
Batch ID: <b>117484</b>	TestNo: <b>SW8260B</b>	Run ID: <b>GC16_160308B</b>	Analysis Date: <b>3/3/2016</b>
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

TPH(g)	ND	0.25	-
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**Surrogate Recovery**

Dibromofluoromethane	0.142	0.125	113	70 - 130
Benzene-d6	0.115	0.1	115	60 - 140

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

CLIENT: Schutze & Associates, Inc.

# ANALYTICAL QC SUMMARY REPORT

Work Order: 1603149

Project: SCS557; Trimble Tank Pull

BatchID: 117484

SampleID <b>LCS-117484</b>	TestCode: <b>8260gas_s</b>	Units: <b>mg/kg</b>	Prep Date: <b>3/2/2016</b>							
Batch ID: <b>117484</b>	TestNo: <b>SW8260B</b>	Run ID: <b>GC16_160308B</b>	Analysis Date: <b>3/2/2016</b>							
Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
VOC (C6-C12)	2.44	0.25	3.2	0	76	74 - 142				
<b>Surrogate Recovery</b>										
Dibromofluoromethane	0.142		0.125		114	70 - 130				
Benzene-d6	0.108		0.1		107	60 - 140				

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/2/16  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117493  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117493

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.13	0.25	5	-	83	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	4.59	0.25	5	-	92	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	4.43	0.25	5	-	89	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	3.77	0.25	5	-	75	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-

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## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/2/16  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117493  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117493

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	3.62	0.25	5	-	72	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	4.01	1.3	5	-	80	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	5.42	0.25	5	-	108	30-130
Pentachlorophenol	ND	4.11	1.3	5	-	82	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.61	0.25	5	-	92	30-130
Pyrene	ND	4.01	0.25	5	-	80	30-130
1,2,4-Trichlorobenzene	ND	3.80	0.25	5	-	76	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/2/16  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117493  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117493

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
2-Fluorophenol	4.90	4.28		5	98	86	30-130
Phenol-d5	4.62	4.06		5	92	81	30-130
Nitrobenzene-d5	4.33	4.16		5	87	83	30-130
2-Fluorobiphenyl	3.70	3.48		5	74	70	30-130
2,4,6-Tribromophenol	3.48	3.19		5	70	64	16-130
4-Terphenyl-d14	3.79	3.00		5	76	60	30-130



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/2/16  
**Date Analyzed:** 3/3/16  
**Instrument:** GC19  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117485  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117485  
 1603090-001AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.595	0.40	0.60	-	99	70-130
MTBE	ND	0.0853	0.050	0.10	-	85	70-130
Benzene	ND	0.102	0.0050	0.10	-	102	70-130
Toluene	ND	0.104	0.0050	0.10	-	104	70-130
Ethylbenzene	ND	0.105	0.0050	0.10	-	105	70-130
Xylenes	ND	0.339	0.015	0.30	-	113	70-130

#### Surrogate Recovery

2-Fluorotoluene	0.114	0.113		0.10	114	113	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.433	0.432	0.60	ND	72	72	70-130	0	20
MTBE	0.0617	0.0644	0.10	ND	62,F1	64,F1	70-130	4.14	20
Benzene	0.0636	0.0649	0.10	ND	64,F1	65,F1	70-130	2.07	20
Toluene	0.0658	0.0667	0.10	ND	66,F1	67,F1	70-130	1.41	20
Ethylbenzene	0.0658	0.0668	0.10	ND	66,F1	67,F1	70-130	1.47	20
Xylenes	0.201	0.204	0.30	ND	67,F1	68,F1	70-130	1.32	20

#### Surrogate Recovery

2-Fluorotoluene	0.0661	0.0674	0.10		66,F3	67,F3	70-130	1.87	20
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## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/3/16  
**Date Analyzed:** 3/4/16  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603149  
**BatchID:** 117536  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117536  
 1603149-001AMS/MSD  
 1603149-001APDS

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Cadmium	ND	59.7	0.25	50	-	119	75-125
Chromium	ND	59.8	0.50	50	-	120	75-125
Lead	ND	59.8	0.50	50	-	120	75-125
Nickel	ND	60.9	0.50	50	-	122	75-125
Zinc	ND	597	5.0	500	-	119	75-125

**Surrogate Recovery**

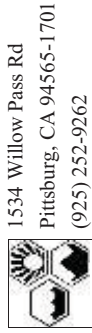
Terbium	509	532		500	102	106	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Cadmium	53.9	47.8	50	0.4105	107	95	75-125	12.0	20
Chromium	98.7	80.5	50	41.96	113	77	75-125	20.3,F8	20
Lead	61.6	67.7	50	7.660	108	120	75-125	9.34	20
Nickel	114	84.2	50	68.46	90	31,F8	75-125	29.7,F8	20
Zinc	549	532	500	32.28	103	100	75-125	3.29	20

**Surrogate Recovery**

Terbium	528	541	500		106	108	70-130	2.47	20
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Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Chromium	92.7	50	41.96	102	80-120
Nickel	122	50	68.46	107	80-120



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1603149 ClientCode: SCO

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  EQulS  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Kevin Loeb  
Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538  
(510) 226-9944 FAX: (510) 625-8176

**Bill to:**

Accounts Payable  
Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538  
priscillajazz@yahoo.com

Requested TAT: 5 days;

Date Received: 03/03/2016  
Date Logged: 03/03/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12

1603149-001	B-8.5-SE	Soil	3/2/2016 14:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A	A
1603149-002	B-8.5-NW	Soil	3/2/2016 14:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A	A
1603149-003	B-11.5-M	Soil	3/2/2016 14:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A	A
1603149-004	SP-1,2,3,4	Soil	3/2/2016 15:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A	A

**Test Legend:**

1	8260B_S	2	8260GAS_S	3	8270_S	4	G-MBTX_S
5	LUFMS_6020_TTLC_S	6	TPH_S	7		8	
9		10		11		12	

Prepared by: Briana Cutino

The following SampleIDs: 001A, 002A, 003A, 004A contain testgroup.

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.



## WORK ORDER SUMMARY

**Client Name:** SCHUTZE & ASSOCIATES, INC.

**QC Level:** LEVEL 2

**Work Order:** 1603149

**Project:** SCS557; Trimble Tank Pull

**Client Contact:** Kevin Loeb

**Date Logged:** 3/3/2016

**Comments:**

**Contact's Email:** kevin@schutze-inc.com; js@schutze-inc.com;  
 Mari@schutze-inc.com; claudine@schutze-inc.com

WaterTrax  WriteOn  EDF  Excel  Email  HardCopy  ThirdParty  J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1603149-001A	B-8.5-SE	Soil	SW6020 (LUFT) Multi-Range TPH(g,d,mo) SW8270C (SVOCs) TPH(g) & 8260 (Basic List) by P&T GCMS	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	3/2/2016 14:00	5 days	<input type="checkbox"/>		
1603149-002A	B-8.5-NW	Soil	SW6020 (LUFT) Multi-Range TPH(g,d,mo) SW8270C (SVOCs) TPH(g) & 8260 (Basic List) by P&T GCMS	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	3/2/2016 14:00	5 days	<input type="checkbox"/>		
1603149-003A	B-11.5-M	Soil	SW6020 (LUFT) Multi-Range TPH(g,d,mo) SW8270C (SVOCs) TPH(g) & 8260 (Basic List) by P&T GCMS	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	3/2/2016 14:00	5 days	<input type="checkbox"/>		
1603149-004A	SP-1,2,3,4	Soil	SW6020 (LUFT) Multi-Range TPH(g,d,mo) TPH(g) & 8260 (Basic List) by P&T GCMS	4 / (4:1)	Stainless Steel tube 2"x6"	<input type="checkbox"/>	3/2/2016 15:00	5 days	<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1603149



# McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701  
 www.mccampbell.com / main@mccampbell.com  
 Telephone: (877) 252-9262 / Fax: (925) 252-9269

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH  1 DAY  2 DAY  3 DAY  5 DAY  10 DAY   
 GeoTracker EDF  PDF  EDD  Write On (DW)  EQUIS   
 Effluent Sample Requiring "J" flag  UST Clean Up Fund Project ; Claim # \_\_\_\_\_

Report To: Kevin Leeb Bill To: \_\_\_\_\_  
 Company: Schutzek Associates, Inc  
 Tele: (510) 226-9944 E-Mail: \_\_\_\_\_  
 Project #: SCS557 Project Name: Trimble Tank pull  
 Project Location: 1647 International Blvd Purchase Order# \_\_\_\_\_  
 Sampler Signature: [Signature]

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX							METHOD PRESERVED			
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HNO3	Other	
B-8.5-SE		3/2	2:00	1										X	TPH as Diesel (8015) (-MO-SS-10)
B-8.5-NW				1										X	TPH as Diesel (8015) (-MO-SS-10)
B-11.5-M				1										X	TPH as Diesel (8015) (-MO-SS-10)
SP-1				1										X	TPH as Diesel (8015) (-MO-SS-10)
SP-2				1										X	TPH as Diesel (8015) (-MO-SS-10)
SP-3				1										X	TPH as Diesel (8015) (-MO-SS-10)
SP-4				1										X	TPH as Diesel (8015) (-MO-SS-10)

Analysis Request	TPH-9	EPA 524.2 / 624 / 8260 (VOCs) (Chlorinated)	EPA 525.2 / 625 / 8270 (SVOCs) (PAHs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)**	LUFF 5 Metals (200.8 / 6020)**	Metals (200.8 / 6020)**	Lab to Filter sample for Dissolved metals analysis
EPA 515 / 8151 (Acidic CI Herbicides)	X	X	X		X	X	X	
EPA 507 / 8141 (NP Pesticides)								
EPA 608 / 8082 PCB's: Aroclors / Congeners								
EPA 505/608 / 8081 (CI Pesticides)								
Total Petroleum Hydrocarbons (418.1) E/B&F)								
Total Petroleum Oil & Grease (1664 / 5520)								
BTEX & TPH as Gas (8021/ 8015) MTBE	X	X	X		X	X	X	

\*\*\*MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of bilef, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

\*\*\* If metals are requested for water samples and the water type is not specified on the chain of custody, then MAI will default to metals by E200.8.

Relinquished By:	Date:	Time:	Received By:	Time:	ICE/
[Signature]	3/5/16	1137	[Signature]	1430	GOOD CONDITION
Relinquished By:	Date:	Time:	Received By:	Time:	HEAD SPACE ABSENT
[Signature]	3/3	1430	[Signature]		DECONTAMINATED IN LAB
Relinquished By:	Date:	Time:	Received By:	Time:	APPROPRIATE CONTAINERS PRESERVED IN LAB
[Signature]			[Signature]		PRESERVATION VOAS O&G METALS OTHER HAZARDOUS: PH<2

COMMENTS: Please provide chromatograms

→ Please provide chromatograms for TPH detection

Completed by Lab



### Sample Receipt Checklist

Client Name: **Schutze & Associates, Inc.**  
 Project Name: **SCS557; Trimble Tank Pull**  
 WorkOrder No: **1603149** Matrix: Soil  
 Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **3/3/2016 14:30**  
 Date Logged: **3/3/2016**  
 Received by: **Briana Cutino**  
 Logged by: **Briana Cutino**

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Sample/Temp Blank temperature Temp: 1°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

#### UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes  No  NA   
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes  No  NA

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1603340

**Report Created for:** Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538

**Project Contact:** Kevin Loeb  
**Project P.O.:**  
**Project Name:** SCS557; Trimble Trunk Pull

**Project Received:** 03/07/2016

Analytical Report reviewed & approved for release on 03/11/2016 by:

Angela Rydelius,  
Laboratory Manager

*The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.*





## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1603340

### Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

### Analytical Qualifiers

d5	TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?)
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



## **Glossary of Terms & Qualifier Definitions**

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1603340

### **Quality Control Qualifiers**

F8 MS/MSD recovery and/or RPD was out of acceptance criteria; PDS validated the prep batch. If PDS recovery was out of acceptance criteria, DLT validated the prep batch.





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/7/16 21:19  
**Date Prepared:** 3/7/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tank II Content	1603340-001A	Solid	03/04/2016 08:00	GC10	117631
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	8.0	40	03/10/2016 21:26	
tert-Amyl methyl ether (TAME)	ND	0.40	40	03/10/2016 21:26	
Benzene	ND	0.40	40	03/10/2016 21:26	
Bromobenzene	ND	0.40	40	03/10/2016 21:26	
Bromochloromethane	ND	0.40	40	03/10/2016 21:26	
Bromodichloromethane	ND	0.40	40	03/10/2016 21:26	
Bromoform	ND	0.40	40	03/10/2016 21:26	
Bromomethane	ND	0.40	40	03/10/2016 21:26	
2-Butanone (MEK)	ND	1.6	40	03/10/2016 21:26	
t-Butyl alcohol (TBA)	ND	4.0	40	03/10/2016 21:26	
n-Butyl benzene	ND	0.40	40	03/10/2016 21:26	
sec-Butyl benzene	ND	0.40	40	03/10/2016 21:26	
tert-Butyl benzene	ND	0.40	40	03/10/2016 21:26	
Carbon Disulfide	ND	0.40	40	03/10/2016 21:26	
Carbon Tetrachloride	ND	0.40	40	03/10/2016 21:26	
Chlorobenzene	ND	0.40	40	03/10/2016 21:26	
Chloroethane	ND	0.40	40	03/10/2016 21:26	
Chloroform	ND	0.40	40	03/10/2016 21:26	
Chloromethane	ND	0.40	40	03/10/2016 21:26	
2-Chlorotoluene	ND	0.40	40	03/10/2016 21:26	
4-Chlorotoluene	ND	0.40	40	03/10/2016 21:26	
Dibromochloromethane	ND	0.40	40	03/10/2016 21:26	
1,2-Dibromo-3-chloropropane	ND	0.32	40	03/10/2016 21:26	
1,2-Dibromoethane (EDB)	ND	0.32	40	03/10/2016 21:26	
Dibromomethane	ND	0.40	40	03/10/2016 21:26	
1,2-Dichlorobenzene	ND	0.40	40	03/10/2016 21:26	
1,3-Dichlorobenzene	ND	0.40	40	03/10/2016 21:26	
1,4-Dichlorobenzene	ND	0.40	40	03/10/2016 21:26	
Dichlorodifluoromethane	ND	0.40	40	03/10/2016 21:26	
1,1-Dichloroethane	ND	0.40	40	03/10/2016 21:26	
1,2-Dichloroethane (1,2-DCA)	ND	0.32	40	03/10/2016 21:26	
1,1-Dichloroethene	ND	0.40	40	03/10/2016 21:26	
cis-1,2-Dichloroethene	ND	0.40	40	03/10/2016 21:26	
trans-1,2-Dichloroethene	ND	0.40	40	03/10/2016 21:26	
1,2-Dichloropropane	ND	0.40	40	03/10/2016 21:26	
1,3-Dichloropropane	ND	0.40	40	03/10/2016 21:26	
2,2-Dichloropropane	ND	0.40	40	03/10/2016 21:26	

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/7/16 21:19  
**Date Prepared:** 3/7/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tank II Content	1603340-001A	Solid	03/04/2016 08:00	GC10	117631

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.40	40	03/10/2016 21:26
cis-1,3-Dichloropropene	ND	0.40	40	03/10/2016 21:26
trans-1,3-Dichloropropene	ND	0.40	40	03/10/2016 21:26
Diisopropyl ether (DIPE)	ND	0.40	40	03/10/2016 21:26
Ethylbenzene	ND	0.40	40	03/10/2016 21:26
Ethyl tert-butyl ether (ETBE)	ND	0.40	40	03/10/2016 21:26
Freon 113	ND	0.40	40	03/10/2016 21:26
Hexachlorobutadiene	ND	0.40	40	03/10/2016 21:26
Hexachloroethane	ND	0.40	40	03/10/2016 21:26
2-Hexanone	ND	0.40	40	03/10/2016 21:26
Isopropylbenzene	ND	0.40	40	03/10/2016 21:26
4-Isopropyl toluene	ND	0.40	40	03/10/2016 21:26
Methyl-t-butyl ether (MTBE)	ND	0.40	40	03/10/2016 21:26
Methylene chloride	ND	0.40	40	03/10/2016 21:26
4-Methyl-2-pentanone (MIBK)	ND	0.40	40	03/10/2016 21:26
Naphthalene	<b>5.1</b>	0.40	40	03/10/2016 21:26
n-Propyl benzene	ND	0.40	40	03/10/2016 21:26
Styrene	ND	0.40	40	03/10/2016 21:26
1,1,1,2-Tetrachloroethane	ND	0.40	40	03/10/2016 21:26
1,1,2,2-Tetrachloroethane	ND	0.40	40	03/10/2016 21:26
Tetrachloroethene	ND	0.40	40	03/10/2016 21:26
Toluene	ND	0.40	40	03/10/2016 21:26
1,2,3-Trichlorobenzene	ND	0.40	40	03/10/2016 21:26
1,2,4-Trichlorobenzene	ND	0.40	40	03/10/2016 21:26
1,1,1-Trichloroethane	ND	0.40	40	03/10/2016 21:26
1,1,2-Trichloroethane	ND	0.40	40	03/10/2016 21:26
Trichloroethene	ND	0.40	40	03/10/2016 21:26
Trichlorofluoromethane	ND	0.40	40	03/10/2016 21:26
1,2,3-Trichloropropane	ND	0.40	40	03/10/2016 21:26
1,2,4-Trimethylbenzene	<b>0.52</b>	0.40	40	03/10/2016 21:26
1,3,5-Trimethylbenzene	ND	0.40	40	03/10/2016 21:26
Vinyl Chloride	ND	0.40	40	03/10/2016 21:26
Xylenes, Total	ND	0.40	40	03/10/2016 21:26

(Cont.)



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/7/16 21:19  
**Date Prepared:** 3/7/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tank II Content	1603340-001A	Solid	03/04/2016 08:00	GC10	117631

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	87	70-130		03/10/2016 21:26
Toluene-d8	88	70-130		03/10/2016 21:26
4-BFB	82	70-130		03/10/2016 21:26
Benzene-d6	74	60-140		03/10/2016 21:26
Ethylbenzene-d10	78	60-140		03/10/2016 21:26
1,2-DCB-d4	87	60-140		03/10/2016 21:26

Analyst(s): KF



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/7/16 21:19  
**Date Prepared:** 3/7/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tank II Content	1603340-001A	Solid	03/04/2016 08:00	GC7	117639

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	<b>650</b>	500	200	03/08/2016 14:09
MTBE	---	25	200	03/08/2016 14:09
Benzene	---	2.5	200	03/08/2016 14:09
Toluene	---	2.5	200	03/08/2016 14:09
Ethylbenzene	---	2.5	200	03/08/2016 14:09
TPH(ss)	<b>1000</b>	500	200	03/08/2016 14:09
Xylenes	---	7.5	200	03/08/2016 14:09

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	106	70-130	03/08/2016 14:09

**Analyst(s):** IA

**Analytical Comments:** d5



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/7/16 21:19  
**Date Prepared:** 3/7/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

## LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tank II Content	1603340-001A	Solid	03/04/2016 08:00	ICP-MS3	117653

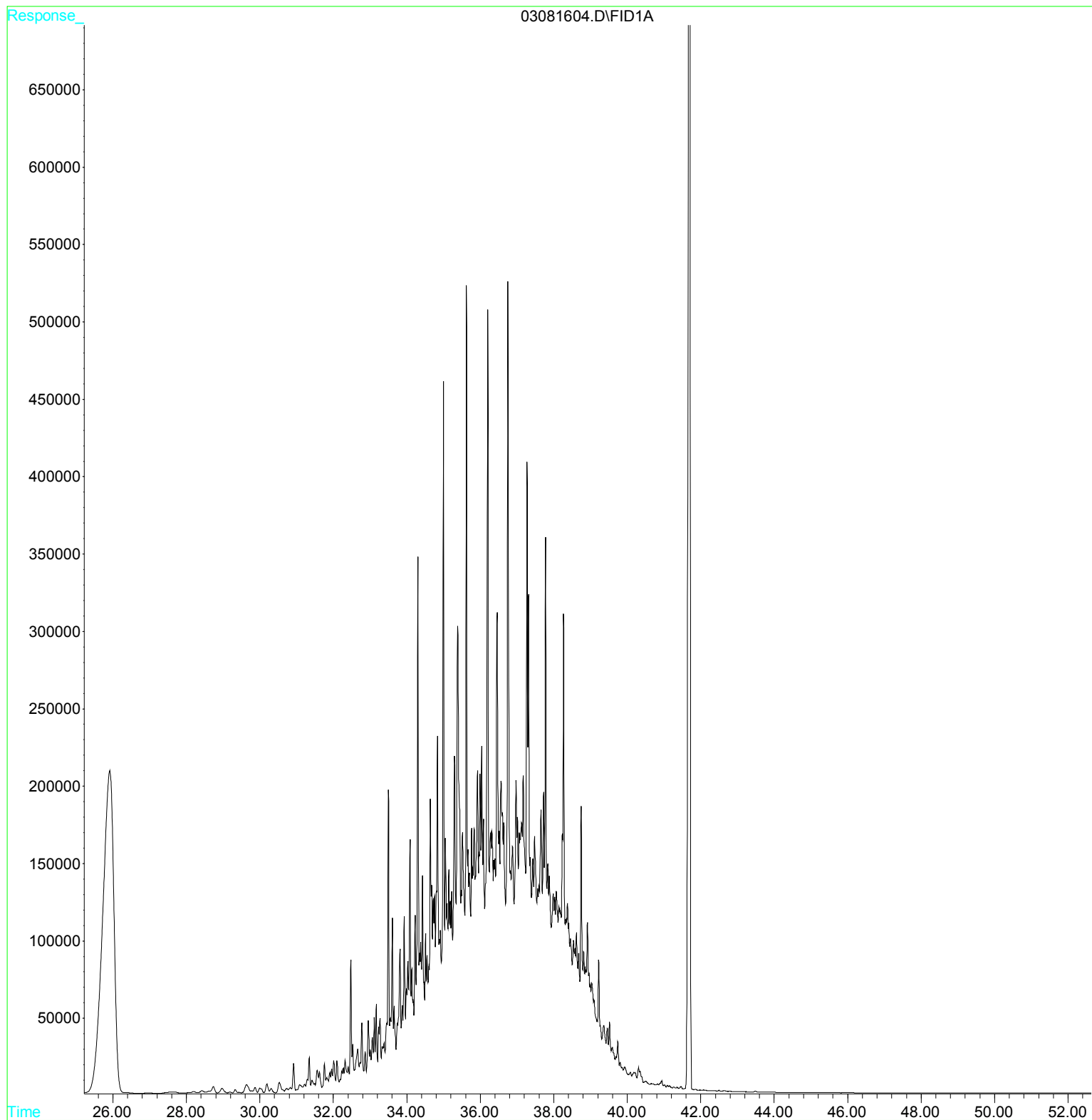
Analytes	Result	RL	DF	Date Analyzed
Cadmium	3.5	0.25	1	03/09/2016 15:38
Chromium	51	0.50	1	03/09/2016 15:38
Lead	72	0.50	1	03/09/2016 15:38
Nickel	56	0.50	1	03/09/2016 15:38
Zinc	1100	5.0	1	03/09/2016 15:38

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	99	70-130	03/09/2016 15:38

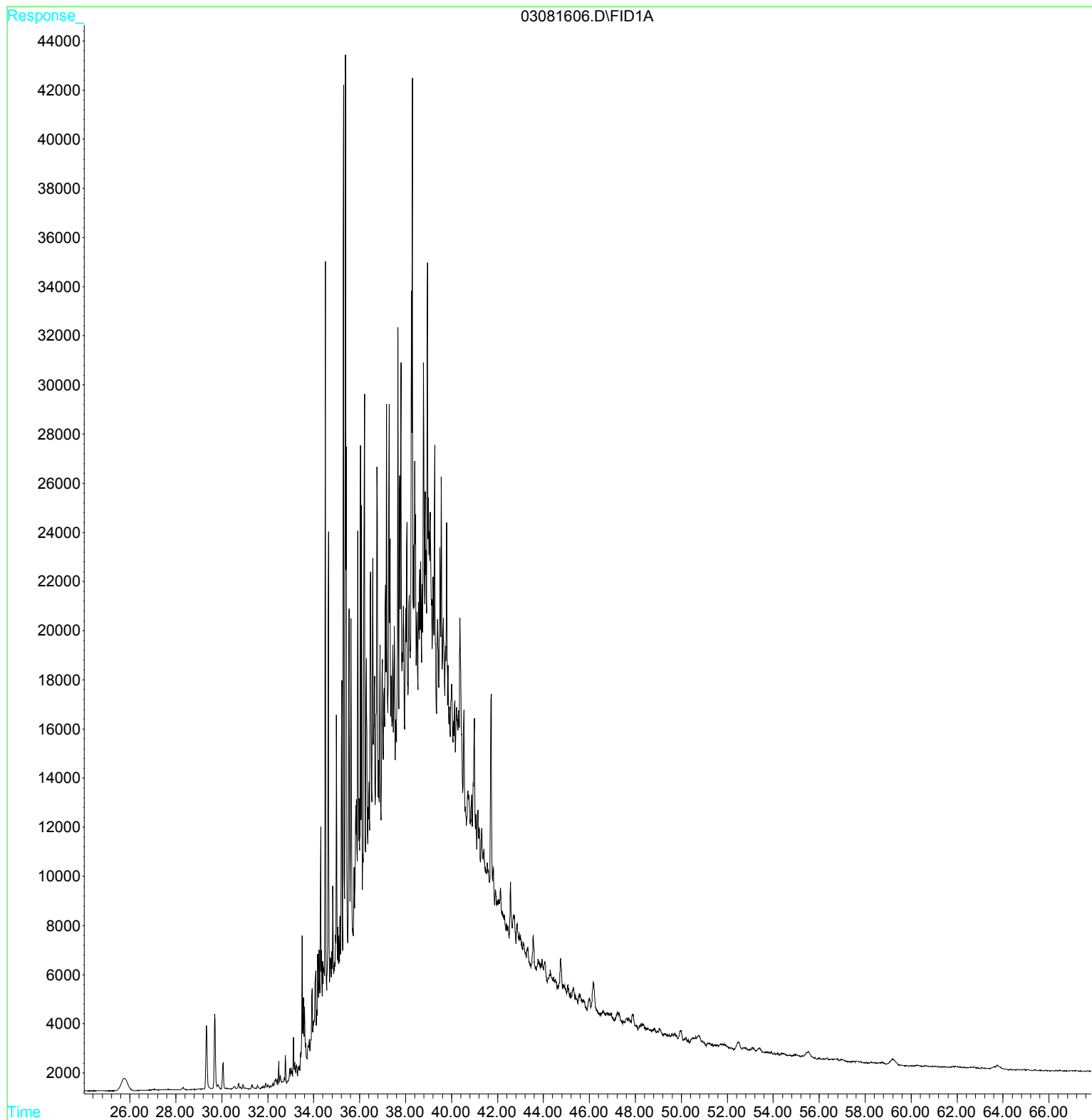
Analyst(s): AC

File : D:\HPCHEM\GC2\DATAA\03081604.D  
Operator : Toshiko  
Acquired : 8 Mar 2016 7:21 pm using AcqMethod GC2ALV18.M  
Instrument : GC-2  
Sample Name: CCV 2-22  
Misc Info :  
Vial Number: 2

Analytical Standard



File : D:\HPCHEM\GC2\DATAA\03081606.D  
Operator : Toshiko  
Acquired : 8 Mar 2016 8:38 pm using AcqMethod GC2ALV18.M  
Instrument : GC-2  
Sample Name: 1603340-001A S +BO, HO,+CG  
Misc Info : TPH  
Vial Number: 3





# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 3/7/16 21:19  
**Date Prepared:** 3/7/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

## Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tank II Content	1603340-001A	Solid	03/04/2016 08:00	GC2A	117660

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	32,000	1000	500	03/08/2016 20:38
TPH-Motor Oil (C18-C36)	38,000	5000	500	03/08/2016 20:38
TPH-Bunker Oil (C10-C36)	59,000	5000	500	03/08/2016 20:38
TPH-Heating Oil (C9-C18)	13,000	1000	500	03/08/2016 20:38

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	03/08/2016 20:38

Analyst(s): TK

Analytical Comments: e7,e2





## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/7/16  
**Date Analyzed:** 3/7/16  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**BatchID:** 117631  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-117631  
 1603292-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0379	0.0050	0.050	-	76	53-116
Benzene	ND	0.0429	0.0050	0.050	-	86	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.210	0.050	0.20	-	105	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0449	0.0050	0.050	-	90	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0457	0.0040	0.050	-	91	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0450	0.0040	0.050	-	90	58-135
1,1-Dichloroethene	ND	0.0427	0.0050	0.050	-	85	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/7/16  
**Date Analyzed:** 3/7/16  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**BatchID:** 117631  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-117631  
 1603292-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0424	0.0050	0.050	-	85	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0422	0.0050	0.050	-	84	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0411	0.0050	0.050	-	82	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0451	0.0050	0.050	-	90	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0433	0.0050	0.050	-	87	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/7/16  
**Date Analyzed:** 3/7/16  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**BatchID:** 117631  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-117631  
 1603292-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	0.107	0.109		0.12	85	87	70-130
Toluene-d8	0.118	0.120		0.12	95	96	70-130
4-BFB	0.0128	0.0137		0.012	102	109	70-130
Benzene-d6	0.0839	0.0878		0.10	84	88	60-140
Ethylbenzene-d10	0.0990	0.110		0.10	99	109	60-140
1,2-DCB-d4	0.0688	0.0751		0.10	69	75	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0391	0.0402	0.050	ND	78	80	56-94	2.97	20
Benzene	0.0429	0.0433	0.050	ND	86	87	60-106	0.996	20
t-Butyl alcohol (TBA)	0.149	0.160	0.20	ND	75	80	56-140	7.00	20
Chlorobenzene	0.0427	0.0440	0.050	ND	85	88	61-108	2.95	20
1,2-Dibromoethane (EDB)	0.0411	0.0419	0.050	ND	82	84	54-119	1.95	20
1,2-Dichloroethane (1,2-DCA)	0.0383	0.0392	0.050	ND	77	78	48-115	2.35	20
1,1-Dichloroethene	0.0418	0.0426	0.050	ND	84	85	46-111	1.70	20
Diisopropyl ether (DIPE)	0.0423	0.0427	0.050	ND	85	85	53-111	0	20
Ethyl tert-butyl ether (ETBE)	0.0403	0.0414	0.050	ND	81	83	61-104	2.78	20
Methyl-t-butyl ether (MTBE)	0.0376	0.0389	0.050	ND	75	78	58-107	3.31	20
Toluene	0.0474	0.0482	0.050	ND	95	96	64-114	1.85	20
Trichloroethene	0.0455	0.0458	0.050	ND	91	92	60-116	0.718	20

<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.106	0.108	0.12		85	86	70-130	1.46	20
Toluene-d8	0.118	0.120	0.12		95	96	70-130	1.35	20
4-BFB	0.0110	0.0110	0.012		88	88	88-121	0	20
Benzene-d6	0.0822	0.0833	0.10		82	83	60-140	1.40	20
Ethylbenzene-d10	0.102	0.102	0.10		102	102	60-140	0	20
1,2-DCB-d4	0.0807	0.0818	0.10		81	82	60-140	1.32	20



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/7/16  
**Date Analyzed:** 3/7/16  
**Instrument:** GC19  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**BatchID:** 117639  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117639  
 1603300-001AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.584	0.40	0.60	-	97	70-130
MTBE	ND	0.0809	0.050	0.10	-	81	70-130
Benzene	ND	0.107	0.0050	0.10	-	107	70-130
Toluene	ND	0.110	0.0050	0.10	-	110	70-130
Ethylbenzene	ND	0.111	0.0050	0.10	-	111	70-130
Xylenes	ND	0.352	0.015	0.30	-	117	70-130
<b>Surrogate Recovery</b>							
2-Fluorotoluene	0.114	0.119		0.10	114	119	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		43	NR	NR	-	NR	
MTBE	NR	NR		ND<1	NR	NR	-	NR	
Benzene	NR	NR		ND<0.1	NR	NR	-	NR	
Toluene	NR	NR		1.2	NR	NR	-	NR	
Ethylbenzene	NR	NR		1.2	NR	NR	-	NR	
Xylenes	NR	NR		4.4	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
2-Fluorotoluene	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/7/16  
**Date Analyzed:** 3/7/16 - 3/8/16  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**BatchID:** 117653  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117653  
 1603278-001AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Cadmium	ND	55.6	0.25	50	-	111	75-125
Chromium	ND	55.2	0.50	50	-	110	75-125
Lead	ND	51.0	0.50	50	-	102	75-125
Nickel	ND	55.9	0.50	50	-	112	75-125
Zinc	ND	557	5.0	500	-	111	75-125
<b>Surrogate Recovery</b>							
Terbium	511	520		500	102	104	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Cadmium	55.9	53.0	50	ND	112	106	75-125	5.29	20
Chromium	130	135	50	67.22	125	136,F8	75-125	4.16	20
Lead	110	84.7	50	24.28	172,F8	121	75-125	26.1,F8	20
Nickel	183	156	50	130.7	105	50,F8	75-125	16.3	20
Zinc	626	591	500	57.35	114	107	75-125	5.65	20
<b>Surrogate Recovery</b>									
Terbium	522	498	500		104	100	70-130	4.69	20

Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Chromium	119	50	67.22	103	80-120
Lead	75.4	50	24.28	102	80-120
Nickel	187	50	130.7	112	80-120



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 3/7/16  
**Date Analyzed:** 3/7/16  
**Instrument:** GC39B  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1603340  
**BatchID:** 117660  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-117660  
 1603278-001AMS/MSD

### QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	42.0	1.0	40	-	105	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	24.9	24.9		25	100	100	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	41.2	41.7	40	ND	103	104	70-130	1.27	30
<b>Surrogate Recovery</b>									
C9	25.2	24.4	25		101	97	70-130	3.20	30

**WorkOrder: 1603340**      **ClientCode: SCO**

WaterTrax     WriteOn     EDF     Excel     EQulS     Email     HardCopy     ThirdParty     J-flag

**Report to:** Kevin Loeb      Accounts Payable  
 Schutze & Associates, Inc.      Schutze & Associates, Inc.  
 44358 South Grimmer Blvd      44358 South Grimmer Blvd  
 Fremont, CA 94538      Fremont, CA 94538  
 (510) 226-9944      FAX: (510) 625-8176      priscillejazz@yahoo.com

**Bill to:** Accounts Payable  
 Schutze & Associates, Inc.  
 44358 South Grimmer Blvd  
 Fremont, CA 94538  
 priscillejazz@yahoo.com

**Requested TAT: 5 days;**      **Date Received: 03/07/2016**  
**Date Logged: 03/07/2016**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12

1603340-001	Tank II Content	Solid	3/4/2016 8:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
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**Test Legend:**

1	8260B_S	2	G-MBTX_S	3	LUFTMS_6020_TTLC_S	4	PREFDF REPORT
5	TPH_S	6		7		8	
9		10		11		12	

**Prepared by: Jena Alfaro**

The following SampleID: 001A contains testgroup.

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.



## WORK ORDER SUMMARY

**Client Name:** SCHUTZE & ASSOCIATES, INC.

**QC Level:** LEVEL 2

**Work Order:** 1603340

**Project:** SCS557; Trimble Tank Pull

**Client Contact:** Kevin Loeb

**Date Logged:** 3/7/2016

**Comments:**

kevin@schutze-inc.com; js@schutze-inc.com;  
 Mari@schutze-inc.com; claudine@schutze-inc.com

WaterTrax  WriteOn  EDF  Excel  Fax  Email  HardCopy  ThirdParty  J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1603340-001A	Tank II Content	Solid	SW6020 (LUFT)	1	8OZ GJ	<input type="checkbox"/>	3/4/2016 8:00	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.





# McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701  
www.mcccampbell.com / main@mcccampbell.com  
Telephone: (877) 252-9262 / Fax: (925) 252-9269

Report To: Kevin Loeb Bill To:

Company: Schutze & Associates, Inc

Tele: (510) 226-9944 E-Mail:

Project #: SCS 557

Project Name: Trumble Tank Pull

Project Location: 1647 International Blvd Purchase Order#

Sampler Signature: [Signature]

*100 SCS 557  
Kevin Loeb*

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH  1 DAY  2 DAY  3 DAY  5 DAY   
GeoTracker EDF  PDF  EDD  Write On (DW)  EQUIS  10 DAY   
Effluent Sample Requiring "J" flag  UST Clean Up Fund Project ; Claim # \_\_\_\_\_

Analysis Request	
Lab to Filter sample for Dissolved metals analysis	
Metals (200.8 / 6020)**	
LURT 5 Metals (200.8 / 6020)**	<input checked="" type="checkbox"/>
CAM 17 Metals (200.8 / 6020)**	
EPA 8270 SIM / 8310 (PAHs / PNAs)	
EPA 525.2 / 625 / 8270 (SVOCs)	
EPA 524.2 / 624 / 8260 (VOCs) <i>(full scan)</i>	<input checked="" type="checkbox"/>
EPA 515 / 8151 (Acidic CI Herbicides)	
EPA 507 / 8141 (NP Pesticides)	
EPA 608 / 8082 PCB's: Aroclors / Congeners	
EPA 505/608 / 8081 (CI Pesticides)	
Total Petroleum Hydrocarbons (418.1) E/B&F)	
Total Petroleum Oil & Grease (1664 / 5520)	
TPH as Diesel (8015) <i>(9-55-mo-1960)</i>	<input checked="" type="checkbox"/>
BTEX & TPH as Gas (8021 / 8015) MTBE	

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX							METHOD PRESERVED								
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sudge	Other	HCL	HNO <sub>3</sub>	Other					
<u>Tank II Content</u>		<u>3/4</u>	<u>8:00</u>	<u>1</u>			<input checked="" type="checkbox"/>													

*Please incubate chromatograms*

\*\*MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

\*\*\* If metals are requested for water samples and the water type is not specified on the chain of custody, then MAI will default to metals by E200.8.

Relinquished By:	Date:	Time:	Received By:	Time:
<u>[Signature]</u>	<u>3/7</u>	<u>12:55pm</u>	<u>[Signature]</u>	
<u>[Signature]</u>	<u>3/7</u>	<u>1630</u>	<u>[Signature]</u>	
Relinquished By:	Date:	Time:	Received By:	Time:

COMMENTS: \_\_\_\_\_

ICE # 317

GOOD CONDITION \_\_\_\_\_  
 HEAD SPACE ABSENT \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_

VOAS O&G METALS OTHER HAZARDOUS  
 PRESERVATION \_\_\_\_\_ pH < 2 \_\_\_\_\_



### Sample Receipt Checklist

Client Name: **Schutze & Associates, Inc.**  
 Project Name: **SCS557; Trimble Tank Pull**  
 WorkOrder №: **1603340** Matrix: Solid  
 Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **3/7/2016 16:30**  
 Date Logged: **3/7/2016**  
 Received by: **Jena Alfaro**  
 Logged by: **Jena Alfaro**

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Sample/Temp Blank temperature Temp: 3.7°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No   
 (Ice Type: WET ICE )

#### UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes  No  NA   
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes  No  NA

-----  
 Comments:

**April 2016**



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1604363

**Report Created for:** Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538

**Project Contact:** Kevin Loeb  
**Project P.O.:**  
**Project Name:** SCS557; Trimble Tank Pull

**Project Received:** 04/08/2016

Analytical Report reviewed & approved for release on 04/21/2016 by:

Angela Rydelius,  
Laboratory Manager

*The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.*





## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1604363

### Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1604363

### Analytical Qualifiers

H samples were analyzed out of holding time  
S Surrogate spike recovery outside accepted recovery limits  
a1 sample diluted due to matrix interference  
a3 sample diluted due to high organic content.  
a4 reporting limits raised due to the sample's matrix prohibiting a full volume extraction.  
b6 lighter than water immiscible sheen/product is present  
d2 heavier gasoline range compounds are significant (aged gasoline?)  
d5 TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?)  
d7 strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram  
e2 diesel range compounds are significant; no recognizable pattern  
e4 gasoline range compounds are significant.  
e7 oil range compounds are significant  
e8 kerosene/kerosene range/jet fuel range  
e11/e4 stoddard solvent/mineral spirit (?); and/or gasoline range compounds are significant.

### Quality Control Qualifiers

F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	GC10	119337
Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Acetone	ND	H	100	1	04/21/2016 05:37
tert-Amyl methyl ether (TAME)	ND	H	5.0	1	04/21/2016 05:37
Benzene	ND	H	5.0	1	04/21/2016 05:37
Bromobenzene	ND	H	5.0	1	04/21/2016 05:37
Bromochloromethane	ND	H	5.0	1	04/21/2016 05:37
Bromodichloromethane	ND	H	5.0	1	04/21/2016 05:37
Bromoform	ND	H	5.0	1	04/21/2016 05:37
Bromomethane	ND	H	5.0	1	04/21/2016 05:37
2-Butanone (MEK)	ND	H	20	1	04/21/2016 05:37
t-Butyl alcohol (TBA)	ND	H	50	1	04/21/2016 05:37
n-Butyl benzene	21	H	5.0	1	04/21/2016 05:37
sec-Butyl benzene	ND	H	5.0	1	04/21/2016 05:37
tert-Butyl benzene	ND	H	5.0	1	04/21/2016 05:37
Carbon Disulfide	ND	H	5.0	1	04/21/2016 05:37
Carbon Tetrachloride	ND	H	5.0	1	04/21/2016 05:37
Chlorobenzene	ND	H	5.0	1	04/21/2016 05:37
Chloroethane	ND	H	5.0	1	04/21/2016 05:37
Chloroform	ND	H	5.0	1	04/21/2016 05:37
Chloromethane	ND	H	5.0	1	04/21/2016 05:37
2-Chlorotoluene	ND	H	5.0	1	04/21/2016 05:37
4-Chlorotoluene	ND	H	5.0	1	04/21/2016 05:37
Dibromochloromethane	ND	H	5.0	1	04/21/2016 05:37
1,2-Dibromo-3-chloropropane	ND	H	5.0	1	04/21/2016 05:37
1,2-Dibromoethane (EDB)	ND	H	5.0	1	04/21/2016 05:37
Dibromomethane	ND	H	5.0	1	04/21/2016 05:37
1,2-Dichlorobenzene	ND	H	5.0	1	04/21/2016 05:37
1,3-Dichlorobenzene	ND	H	5.0	1	04/21/2016 05:37
1,4-Dichlorobenzene	ND	H	5.0	1	04/21/2016 05:37
Dichlorodifluoromethane	ND	H	5.0	1	04/21/2016 05:37
1,1-Dichloroethane	ND	H	5.0	1	04/21/2016 05:37
1,2-Dichloroethane (1,2-DCA)	ND	H	5.0	1	04/21/2016 05:37
1,1-Dichloroethene	ND	H	5.0	1	04/21/2016 05:37
cis-1,2-Dichloroethene	ND	H	5.0	1	04/21/2016 05:37
trans-1,2-Dichloroethene	ND	H	5.0	1	04/21/2016 05:37
1,2-Dichloropropane	ND	H	5.0	1	04/21/2016 05:37
1,3-Dichloropropane	ND	H	5.0	1	04/21/2016 05:37
2,2-Dichloropropane	ND	H	5.0	1	04/21/2016 05:37

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	GC10	119337
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND	H	5.0	1	04/21/2016 05:37
cis-1,3-Dichloropropene	ND	H	5.0	1	04/21/2016 05:37
trans-1,3-Dichloropropene	ND	H	5.0	1	04/21/2016 05:37
Diisopropyl ether (DIPE)	ND	H	5.0	1	04/21/2016 05:37
Ethylbenzene	11	H	5.0	1	04/21/2016 05:37
Ethyl tert-butyl ether (ETBE)	ND	H	5.0	1	04/21/2016 05:37
Freon 113	ND	H	100	1	04/21/2016 05:37
Hexachlorobutadiene	ND	H	5.0	1	04/21/2016 05:37
Hexachloroethane	ND	H	5.0	1	04/21/2016 05:37
2-Hexanone	ND	H	5.0	1	04/21/2016 05:37
Isopropylbenzene	ND	H	5.0	1	04/21/2016 05:37
4-Isopropyl toluene	9.7	H	5.0	1	04/21/2016 05:37
Methyl-t-butyl ether (MTBE)	ND	H	5.0	1	04/21/2016 05:37
Methylene chloride	ND	H	5.0	1	04/21/2016 05:37
4-Methyl-2-pentanone (MIBK)	ND	H	5.0	1	04/21/2016 05:37
Naphthalene	340	H	5.0	1	04/21/2016 05:37
n-Propyl benzene	10	H	5.0	1	04/21/2016 05:37
Styrene	ND	H	5.0	1	04/21/2016 05:37
1,1,1,2-Tetrachloroethane	ND	H	5.0	1	04/21/2016 05:37
1,1,2,2-Tetrachloroethane	ND	H	5.0	1	04/21/2016 05:37
Tetrachloroethene	ND	H	5.0	1	04/21/2016 05:37
Toluene	16	H	5.0	1	04/21/2016 05:37
1,2,3-Trichlorobenzene	ND	H	5.0	1	04/21/2016 05:37
1,2,4-Trichlorobenzene	ND	H	5.0	1	04/21/2016 05:37
1,1,1-Trichloroethane	ND	H	5.0	1	04/21/2016 05:37
1,1,2-Trichloroethane	ND	H	5.0	1	04/21/2016 05:37
Trichloroethene	ND	H	5.0	1	04/21/2016 05:37
Trichlorofluoromethane	ND	H	5.0	1	04/21/2016 05:37
1,2,3-Trichloropropane	ND	H	5.0	1	04/21/2016 05:37
1,2,4-Trimethylbenzene	96	H	5.0	1	04/21/2016 05:37
1,3,5-Trimethylbenzene	24	H	5.0	1	04/21/2016 05:37
Vinyl Chloride	ND	H	5.0	1	04/21/2016 05:37
Xylenes, Total	81	H	5.0	1	04/21/2016 05:37

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager





# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	GC10	119337

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	112	H	70-130		04/21/2016 05:37
Toluene-d8	103	H	70-130		04/21/2016 05:37
4-BFB	124	H	70-130		04/21/2016 05:37

Analyst(s): KF



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC18	119276

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	1.0	10	04/19/2016 21:18
tert-Amyl methyl ether (TAME)	ND	0.050	10	04/19/2016 21:18
Benzene	ND	0.050	10	04/19/2016 21:18
Bromobenzene	ND	0.050	10	04/19/2016 21:18
Bromochloromethane	ND	0.050	10	04/19/2016 21:18
Bromodichloromethane	ND	0.050	10	04/19/2016 21:18
Bromoform	ND	0.050	10	04/19/2016 21:18
Bromomethane	ND	0.050	10	04/19/2016 21:18
2-Butanone (MEK)	ND	0.20	10	04/19/2016 21:18
t-Butyl alcohol (TBA)	ND	0.50	10	04/19/2016 21:18
n-Butyl benzene	ND	0.050	10	04/19/2016 21:18
sec-Butyl benzene	ND	0.050	10	04/19/2016 21:18
tert-Butyl benzene	ND	0.050	10	04/19/2016 21:18
Carbon Disulfide	ND	0.050	10	04/19/2016 21:18
Carbon Tetrachloride	ND	0.050	10	04/19/2016 21:18
Chlorobenzene	ND	0.050	10	04/19/2016 21:18
Chloroethane	ND	0.050	10	04/19/2016 21:18
Chloroform	ND	0.050	10	04/19/2016 21:18
Chloromethane	ND	0.050	10	04/19/2016 21:18
2-Chlorotoluene	ND	0.050	10	04/19/2016 21:18
4-Chlorotoluene	ND	0.050	10	04/19/2016 21:18
Dibromochloromethane	ND	0.050	10	04/19/2016 21:18
1,2-Dibromo-3-chloropropane	ND	0.040	10	04/19/2016 21:18
1,2-Dibromoethane (EDB)	ND	0.040	10	04/19/2016 21:18
Dibromomethane	ND	0.050	10	04/19/2016 21:18
1,2-Dichlorobenzene	ND	0.050	10	04/19/2016 21:18
1,3-Dichlorobenzene	ND	0.050	10	04/19/2016 21:18
1,4-Dichlorobenzene	ND	0.050	10	04/19/2016 21:18
Dichlorodifluoromethane	ND	0.050	10	04/19/2016 21:18
1,1-Dichloroethane	ND	0.050	10	04/19/2016 21:18
1,2-Dichloroethane (1,2-DCA)	ND	0.040	10	04/19/2016 21:18
1,1-Dichloroethene	ND	0.050	10	04/19/2016 21:18
cis-1,2-Dichloroethene	ND	0.050	10	04/19/2016 21:18
trans-1,2-Dichloroethene	ND	0.050	10	04/19/2016 21:18
1,2-Dichloropropane	ND	0.050	10	04/19/2016 21:18
1,3-Dichloropropane	ND	0.050	10	04/19/2016 21:18
2,2-Dichloropropane	ND	0.050	10	04/19/2016 21:18

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC18	119276
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.050	10	04/19/2016 21:18
cis-1,3-Dichloropropene	ND		0.050	10	04/19/2016 21:18
trans-1,3-Dichloropropene	ND		0.050	10	04/19/2016 21:18
Diisopropyl ether (DIPE)	ND		0.050	10	04/19/2016 21:18
Ethylbenzene	ND		0.050	10	04/19/2016 21:18
Ethyl tert-butyl ether (ETBE)	ND		0.050	10	04/19/2016 21:18
Freon 113	ND		0.050	10	04/19/2016 21:18
Hexachlorobutadiene	ND		0.050	10	04/19/2016 21:18
Hexachloroethane	ND		0.050	10	04/19/2016 21:18
2-Hexanone	ND		0.050	10	04/19/2016 21:18
Isopropylbenzene	ND		0.050	10	04/19/2016 21:18
4-Isopropyl toluene	ND		0.050	10	04/19/2016 21:18
Methyl-t-butyl ether (MTBE)	ND		0.050	10	04/19/2016 21:18
Methylene chloride	ND		0.050	10	04/19/2016 21:18
4-Methyl-2-pentanone (MIBK)	ND		0.050	10	04/19/2016 21:18
Naphthalene	ND		0.050	10	04/19/2016 21:18
n-Propyl benzene	ND		0.050	10	04/19/2016 21:18
Styrene	ND		0.050	10	04/19/2016 21:18
1,1,1,2-Tetrachloroethane	ND		0.050	10	04/19/2016 21:18
1,1,2,2-Tetrachloroethane	ND		0.050	10	04/19/2016 21:18
Tetrachloroethene	ND		0.050	10	04/19/2016 21:18
Toluene	ND		0.050	10	04/19/2016 21:18
1,2,3-Trichlorobenzene	ND		0.050	10	04/19/2016 21:18
1,2,4-Trichlorobenzene	ND		0.050	10	04/19/2016 21:18
1,1,1-Trichloroethane	ND		0.050	10	04/19/2016 21:18
1,1,2-Trichloroethane	ND		0.050	10	04/19/2016 21:18
Trichloroethene	ND		0.050	10	04/19/2016 21:18
Trichlorofluoromethane	ND		0.050	10	04/19/2016 21:18
1,2,3-Trichloropropane	ND		0.050	10	04/19/2016 21:18
1,2,4-Trimethylbenzene	ND		0.050	10	04/19/2016 21:18
1,3,5-Trimethylbenzene	ND		0.050	10	04/19/2016 21:18
Vinyl Chloride	ND		0.050	10	04/19/2016 21:18
Xylenes, Total	ND		0.050	10	04/19/2016 21:18

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC18	119276

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	100	70-130		04/19/2016 21:18
Toluene-d8	99	70-130		04/19/2016 21:18
4-BFB	96	70-130		04/19/2016 21:18
Benzene-d6	87	60-140		04/19/2016 21:18
Ethylbenzene-d10	96	60-140		04/19/2016 21:18
1,2-DCB-d4	90	60-140		04/19/2016 21:18

Analyst(s): HK

Analytical Comments: a3



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC18	119276
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		4.0	40	04/19/2016 21:58
tert-Amyl methyl ether (TAME)	ND		0.20	40	04/19/2016 21:58
Benzene	ND		0.20	40	04/19/2016 21:58
Bromobenzene	ND		0.20	40	04/19/2016 21:58
Bromochloromethane	ND		0.20	40	04/19/2016 21:58
Bromodichloromethane	ND		0.20	40	04/19/2016 21:58
Bromoform	ND		0.20	40	04/19/2016 21:58
Bromomethane	ND		0.20	40	04/19/2016 21:58
2-Butanone (MEK)	ND		0.80	40	04/19/2016 21:58
t-Butyl alcohol (TBA)	ND		2.0	40	04/19/2016 21:58
n-Butyl benzene	ND		0.20	40	04/19/2016 21:58
sec-Butyl benzene	ND		0.20	40	04/19/2016 21:58
tert-Butyl benzene	ND		0.20	40	04/19/2016 21:58
Carbon Disulfide	ND		0.20	40	04/19/2016 21:58
Carbon Tetrachloride	ND		0.20	40	04/19/2016 21:58
Chlorobenzene	ND		0.20	40	04/19/2016 21:58
Chloroethane	ND		0.20	40	04/19/2016 21:58
Chloroform	ND		0.20	40	04/19/2016 21:58
Chloromethane	ND		0.20	40	04/19/2016 21:58
2-Chlorotoluene	ND		0.20	40	04/19/2016 21:58
4-Chlorotoluene	ND		0.20	40	04/19/2016 21:58
Dibromochloromethane	ND		0.20	40	04/19/2016 21:58
1,2-Dibromo-3-chloropropane	ND		0.16	40	04/19/2016 21:58
1,2-Dibromoethane (EDB)	ND		0.16	40	04/19/2016 21:58
Dibromomethane	ND		0.20	40	04/19/2016 21:58
1,2-Dichlorobenzene	ND		0.20	40	04/19/2016 21:58
1,3-Dichlorobenzene	ND		0.20	40	04/19/2016 21:58
1,4-Dichlorobenzene	ND		0.20	40	04/19/2016 21:58
Dichlorodifluoromethane	ND		0.20	40	04/19/2016 21:58
1,1-Dichloroethane	ND		0.20	40	04/19/2016 21:58
1,2-Dichloroethane (1,2-DCA)	ND		0.16	40	04/19/2016 21:58
1,1-Dichloroethene	ND		0.20	40	04/19/2016 21:58
cis-1,2-Dichloroethene	ND		0.20	40	04/19/2016 21:58
trans-1,2-Dichloroethene	ND		0.20	40	04/19/2016 21:58
1,2-Dichloropropane	ND		0.20	40	04/19/2016 21:58
1,3-Dichloropropane	ND		0.20	40	04/19/2016 21:58
2,2-Dichloropropane	ND		0.20	40	04/19/2016 21:58

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC18	119276
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.20	40	04/19/2016 21:58
cis-1,3-Dichloropropene	ND		0.20	40	04/19/2016 21:58
trans-1,3-Dichloropropene	ND		0.20	40	04/19/2016 21:58
Diisopropyl ether (DIPE)	ND		0.20	40	04/19/2016 21:58
Ethylbenzene	ND		0.20	40	04/19/2016 21:58
Ethyl tert-butyl ether (ETBE)	ND		0.20	40	04/19/2016 21:58
Freon 113	ND		0.20	40	04/19/2016 21:58
Hexachlorobutadiene	ND		0.20	40	04/19/2016 21:58
Hexachloroethane	ND		0.20	40	04/19/2016 21:58
2-Hexanone	ND		0.20	40	04/19/2016 21:58
Isopropylbenzene	ND		0.20	40	04/19/2016 21:58
4-Isopropyl toluene	ND		0.20	40	04/19/2016 21:58
Methyl-t-butyl ether (MTBE)	ND		0.20	40	04/19/2016 21:58
Methylene chloride	ND		0.20	40	04/19/2016 21:58
4-Methyl-2-pentanone (MIBK)	ND		0.20	40	04/19/2016 21:58
Naphthalene	ND		0.20	40	04/19/2016 21:58
n-Propyl benzene	ND		0.20	40	04/19/2016 21:58
Styrene	ND		0.20	40	04/19/2016 21:58
1,1,1,2-Tetrachloroethane	ND		0.20	40	04/19/2016 21:58
1,1,2,2-Tetrachloroethane	ND		0.20	40	04/19/2016 21:58
Tetrachloroethene	ND		0.20	40	04/19/2016 21:58
Toluene	ND		0.20	40	04/19/2016 21:58
1,2,3-Trichlorobenzene	ND		0.20	40	04/19/2016 21:58
1,2,4-Trichlorobenzene	ND		0.20	40	04/19/2016 21:58
1,1,1-Trichloroethane	ND		0.20	40	04/19/2016 21:58
1,1,2-Trichloroethane	ND		0.20	40	04/19/2016 21:58
Trichloroethene	ND		0.20	40	04/19/2016 21:58
Trichlorofluoromethane	ND		0.20	40	04/19/2016 21:58
1,2,3-Trichloropropane	ND		0.20	40	04/19/2016 21:58
1,2,4-Trimethylbenzene	ND		0.20	40	04/19/2016 21:58
1,3,5-Trimethylbenzene	ND		0.20	40	04/19/2016 21:58
Vinyl Chloride	ND		0.20	40	04/19/2016 21:58
Xylenes, Total	ND		0.20	40	04/19/2016 21:58

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 Angela Rydelius, Lab Manager



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC18	119276

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	100	70-130		04/19/2016 21:58
Toluene-d8	99	70-130		04/19/2016 21:58
4-BFB	90	70-130		04/19/2016 21:58
Benzene-d6	85	60-140		04/19/2016 21:58
Ethylbenzene-d10	97	60-140		04/19/2016 21:58
1,2-DCB-d4	96	60-140		04/19/2016 21:58

Analyst(s): HK

Analytical Comments: a3



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1,2	1604363-005A	Soil	04/06/2016	GC16	119276
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	04/19/2016 14:12
tert-Amyl methyl ether (TAME)	ND		0.0050	1	04/19/2016 14:12
Benzene	ND		0.0050	1	04/19/2016 14:12
Bromobenzene	ND		0.0050	1	04/19/2016 14:12
Bromochloromethane	ND		0.0050	1	04/19/2016 14:12
Bromodichloromethane	ND		0.0050	1	04/19/2016 14:12
Bromoform	ND		0.0050	1	04/19/2016 14:12
Bromomethane	ND		0.0050	1	04/19/2016 14:12
2-Butanone (MEK)	ND		0.020	1	04/19/2016 14:12
t-Butyl alcohol (TBA)	ND		0.050	1	04/19/2016 14:12
n-Butyl benzene	ND		0.0050	1	04/19/2016 14:12
sec-Butyl benzene	ND		0.0050	1	04/19/2016 14:12
tert-Butyl benzene	ND		0.0050	1	04/19/2016 14:12
Carbon Disulfide	ND		0.0050	1	04/19/2016 14:12
Carbon Tetrachloride	ND		0.0050	1	04/19/2016 14:12
Chlorobenzene	ND		0.0050	1	04/19/2016 14:12
Chloroethane	ND		0.0050	1	04/19/2016 14:12
Chloroform	ND		0.0050	1	04/19/2016 14:12
Chloromethane	ND		0.0050	1	04/19/2016 14:12
2-Chlorotoluene	ND		0.0050	1	04/19/2016 14:12
4-Chlorotoluene	ND		0.0050	1	04/19/2016 14:12
Dibromochloromethane	ND		0.0050	1	04/19/2016 14:12
1,2-Dibromo-3-chloropropane	ND		0.0040	1	04/19/2016 14:12
1,2-Dibromoethane (EDB)	ND		0.0040	1	04/19/2016 14:12
Dibromomethane	ND		0.0050	1	04/19/2016 14:12
1,2-Dichlorobenzene	ND		0.0050	1	04/19/2016 14:12
1,3-Dichlorobenzene	ND		0.0050	1	04/19/2016 14:12
1,4-Dichlorobenzene	ND		0.0050	1	04/19/2016 14:12
Dichlorodifluoromethane	ND		0.0050	1	04/19/2016 14:12
1,1-Dichloroethane	ND		0.0050	1	04/19/2016 14:12
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	04/19/2016 14:12
1,1-Dichloroethene	ND		0.0050	1	04/19/2016 14:12
cis-1,2-Dichloroethene	ND		0.0050	1	04/19/2016 14:12
trans-1,2-Dichloroethene	ND		0.0050	1	04/19/2016 14:12
1,2-Dichloropropane	ND		0.0050	1	04/19/2016 14:12
1,3-Dichloropropane	ND		0.0050	1	04/19/2016 14:12
2,2-Dichloropropane	ND		0.0050	1	04/19/2016 14:12

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1,2	1604363-005A	Soil	04/06/2016	GC16	119276
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.0050	1	04/19/2016 14:12
cis-1,3-Dichloropropene	ND		0.0050	1	04/19/2016 14:12
trans-1,3-Dichloropropene	ND		0.0050	1	04/19/2016 14:12
Diisopropyl ether (DIPE)	ND		0.0050	1	04/19/2016 14:12
Ethylbenzene	ND		0.0050	1	04/19/2016 14:12
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	04/19/2016 14:12
Freon 113	ND		0.0050	1	04/19/2016 14:12
Hexachlorobutadiene	ND		0.0050	1	04/19/2016 14:12
Hexachloroethane	ND		0.0050	1	04/19/2016 14:12
2-Hexanone	ND		0.0050	1	04/19/2016 14:12
Isopropylbenzene	ND		0.0050	1	04/19/2016 14:12
4-Isopropyl toluene	ND		0.0050	1	04/19/2016 14:12
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	04/19/2016 14:12
Methylene chloride	ND		0.0050	1	04/19/2016 14:12
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	04/19/2016 14:12
Naphthalene	ND		0.0050	1	04/19/2016 14:12
n-Propyl benzene	ND		0.0050	1	04/19/2016 14:12
Styrene	ND		0.0050	1	04/19/2016 14:12
1,1,1,2-Tetrachloroethane	ND		0.0050	1	04/19/2016 14:12
1,1,2,2-Tetrachloroethane	ND		0.0050	1	04/19/2016 14:12
Tetrachloroethene	ND		0.0050	1	04/19/2016 14:12
Toluene	ND		0.0050	1	04/19/2016 14:12
1,2,3-Trichlorobenzene	ND		0.0050	1	04/19/2016 14:12
1,2,4-Trichlorobenzene	ND		0.0050	1	04/19/2016 14:12
1,1,1-Trichloroethane	ND		0.0050	1	04/19/2016 14:12
1,1,2-Trichloroethane	ND		0.0050	1	04/19/2016 14:12
Trichloroethene	ND		0.0050	1	04/19/2016 14:12
Trichlorofluoromethane	ND		0.0050	1	04/19/2016 14:12
1,2,3-Trichloropropane	ND		0.0050	1	04/19/2016 14:12
1,2,4-Trimethylbenzene	ND		0.0050	1	04/19/2016 14:12
1,3,5-Trimethylbenzene	ND		0.0050	1	04/19/2016 14:12
Vinyl Chloride	ND		0.0050	1	04/19/2016 14:12
Xylenes, Total	ND		0.0050	1	04/19/2016 14:12

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1,2	1604363-005A	Soil	04/06/2016	GC16	119276

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	99		70-130	04/19/2016 14:12
Toluene-d8	104		70-130	04/19/2016 14:12
4-BFB	109		70-130	04/19/2016 14:12
Benzene-d6	115		60-140	04/19/2016 14:12
Ethylbenzene-d10	121		60-140	04/19/2016 14:12
1,2-DCB-d4	96		60-140	04/19/2016 14:12

Analyst(s): HK



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/18/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001B	Water	04/07/2016	GC18	119675
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		1000	100	04/18/2016 20:38
tert-Amyl methyl ether (TAME)	ND		50	100	04/18/2016 20:38
Benzene	ND		50	100	04/18/2016 20:38
Bromobenzene	ND		50	100	04/18/2016 20:38
Bromochloromethane	ND		50	100	04/18/2016 20:38
Bromodichloromethane	ND		50	100	04/18/2016 20:38
Bromoform	ND		50	100	04/18/2016 20:38
Bromomethane	ND		50	100	04/18/2016 20:38
2-Butanone (MEK)	ND		200	100	04/18/2016 20:38
t-Butyl alcohol (TBA)	ND		200	100	04/18/2016 20:38
n-Butyl benzene	51		50	100	04/18/2016 20:38
sec-Butyl benzene	ND		50	100	04/18/2016 20:38
tert-Butyl benzene	ND		50	100	04/18/2016 20:38
Carbon Disulfide	ND		50	100	04/18/2016 20:38
Carbon Tetrachloride	ND		50	100	04/18/2016 20:38
Chlorobenzene	ND		50	100	04/18/2016 20:38
Chloroethane	ND		50	100	04/18/2016 20:38
Chloroform	ND		50	100	04/18/2016 20:38
Chloromethane	ND		50	100	04/18/2016 20:38
2-Chlorotoluene	ND		50	100	04/18/2016 20:38
4-Chlorotoluene	ND		50	100	04/18/2016 20:38
Dibromochloromethane	ND		50	100	04/18/2016 20:38
1,2-Dibromo-3-chloropropane	ND		20	100	04/18/2016 20:38
1,2-Dibromoethane (EDB)	ND		50	100	04/18/2016 20:38
Dibromomethane	ND		50	100	04/18/2016 20:38
1,2-Dichlorobenzene	ND		50	100	04/18/2016 20:38
1,3-Dichlorobenzene	ND		50	100	04/18/2016 20:38
1,4-Dichlorobenzene	ND		50	100	04/18/2016 20:38
Dichlorodifluoromethane	ND		50	100	04/18/2016 20:38
1,1-Dichloroethane	ND		50	100	04/18/2016 20:38
1,2-Dichloroethane (1,2-DCA)	ND		50	100	04/18/2016 20:38
1,1-Dichloroethene	ND		50	100	04/18/2016 20:38
cis-1,2-Dichloroethene	ND		50	100	04/18/2016 20:38
trans-1,2-Dichloroethene	ND		50	100	04/18/2016 20:38
1,2-Dichloropropane	ND		50	100	04/18/2016 20:38
1,3-Dichloropropane	ND		50	100	04/18/2016 20:38
2,2-Dichloropropane	ND		50	100	04/18/2016 20:38

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## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/18/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001B	Water	04/07/2016	GC18	119675
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		50	100	04/18/2016 20:38
cis-1,3-Dichloropropene	ND		50	100	04/18/2016 20:38
trans-1,3-Dichloropropene	ND		50	100	04/18/2016 20:38
Diisopropyl ether (DIPE)	ND		50	100	04/18/2016 20:38
Ethylbenzene	<b>73</b>		50	100	04/18/2016 20:38
Ethyl tert-butyl ether (ETBE)	ND		50	100	04/18/2016 20:38
Freon 113	ND		50	100	04/18/2016 20:38
Hexachlorobutadiene	ND		50	100	04/18/2016 20:38
Hexachloroethane	ND		50	100	04/18/2016 20:38
2-Hexanone	ND		50	100	04/18/2016 20:38
Isopropylbenzene	ND		50	100	04/18/2016 20:38
4-Isopropyl toluene	ND		50	100	04/18/2016 20:38
Methyl-t-butyl ether (MTBE)	ND		50	100	04/18/2016 20:38
Methylene chloride	ND		50	100	04/18/2016 20:38
4-Methyl-2-pentanone (MIBK)	ND		50	100	04/18/2016 20:38
Naphthalene	<b>210</b>		50	100	04/18/2016 20:38
n-Propyl benzene	<b>92</b>		50	100	04/18/2016 20:38
Styrene	ND		50	100	04/18/2016 20:38
1,1,1,2-Tetrachloroethane	ND		50	100	04/18/2016 20:38
1,1,2,2-Tetrachloroethane	ND		50	100	04/18/2016 20:38
Tetrachloroethene	ND		50	100	04/18/2016 20:38
Toluene	ND		50	100	04/18/2016 20:38
1,2,3-Trichlorobenzene	ND		50	100	04/18/2016 20:38
1,2,4-Trichlorobenzene	ND		50	100	04/18/2016 20:38
1,1,1-Trichloroethane	ND		50	100	04/18/2016 20:38
1,1,2-Trichloroethane	ND		50	100	04/18/2016 20:38
Trichloroethene	ND		50	100	04/18/2016 20:38
Trichlorofluoromethane	ND		50	100	04/18/2016 20:38
1,2,3-Trichloropropane	ND		50	100	04/18/2016 20:38
1,2,4-Trimethylbenzene	<b>470</b>		50	100	04/18/2016 20:38
1,3,5-Trimethylbenzene	<b>94</b>		50	100	04/18/2016 20:38
Vinyl Chloride	ND		50	100	04/18/2016 20:38
Xylenes, Total	<b>250</b>		50	100	04/18/2016 20:38

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/18/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001B	Water	04/07/2016	GC18	119675

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	98	70-130		04/18/2016 20:38
Toluene-d8	97	70-130		04/18/2016 20:38
4-BFB	97	70-130		04/18/2016 20:38

Analyst(s): HK

Analytical Comments: b6



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L

## TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	GC18	119337

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH(g)	2400	H	0.25	1	04/21/2016 15:12

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	89	H	70-130	04/21/2016 15:12

Analyst(s): HK



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC18	119276

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	14	2.5	10	04/19/2016 21:18

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	91	70-130	04/19/2016 21:18

Analyst(s): HK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC18	119276

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	81	10	40	04/19/2016 21:58

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	91	70-130	04/19/2016 21:58

Analyst(s): HK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1,2	1604363-005A	Soil	04/06/2016	GC16	119276

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	04/19/2016 14:12

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	97	70-130	04/19/2016 14:12

Analyst(s): HK



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/16/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

## TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001B	Water	04/07/2016	GC16	119675

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	7700	500	10	04/16/2016 16:13

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	100	70-130	04/16/2016 16:13

**Analyst(s):** AK      **Analytical Comments:** b6





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/14/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC21	119523
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		2.0	1	04/15/2016 11:55
Acenaphthylene	ND		2.0	1	04/15/2016 11:55
Acetochlor	ND		2.0	1	04/15/2016 11:55
Anthracene	ND		2.0	1	04/15/2016 11:55
Benzidine	ND		10	1	04/15/2016 11:55
Benzo (a) anthracene	ND		2.0	1	04/15/2016 11:55
Benzo (a) pyrene	ND		2.0	1	04/15/2016 11:55
Benzo (b) fluoranthene	ND		2.0	1	04/15/2016 11:55
Benzo (g,h,i) perylene	ND		2.0	1	04/15/2016 11:55
Benzo (k) fluoranthene	ND		2.0	1	04/15/2016 11:55
Benzyl Alcohol	ND		10	1	04/15/2016 11:55
1,1-Biphenyl	ND		2.0	1	04/15/2016 11:55
Bis (2-chloroethoxy) Methane	ND		2.0	1	04/15/2016 11:55
Bis (2-chloroethyl) Ether	ND		2.0	1	04/15/2016 11:55
Bis (2-chloroisopropyl) Ether	ND		2.0	1	04/15/2016 11:55
Bis (2-ethylhexyl) Adipate	ND		2.0	1	04/15/2016 11:55
Bis (2-ethylhexyl) Phthalate	ND		2.0	1	04/15/2016 11:55
4-Bromophenyl Phenyl Ether	ND		2.0	1	04/15/2016 11:55
Butylbenzyl Phthalate	ND		2.0	1	04/15/2016 11:55
4-Chloroaniline	ND		4.0	1	04/15/2016 11:55
4-Chloro-3-methylphenol	ND		2.0	1	04/15/2016 11:55
2-Chloronaphthalene	ND		2.0	1	04/15/2016 11:55
2-Chlorophenol	ND		2.0	1	04/15/2016 11:55
4-Chlorophenyl Phenyl Ether	ND		2.0	1	04/15/2016 11:55
Chrysene	ND		2.0	1	04/15/2016 11:55
Dibenzo (a,h) anthracene	ND		2.0	1	04/15/2016 11:55
Dibenzofuran	ND		2.0	1	04/15/2016 11:55
Di-n-butyl Phthalate	ND		2.0	1	04/15/2016 11:55
1,2-Dichlorobenzene	ND		2.0	1	04/15/2016 11:55
1,3-Dichlorobenzene	ND		2.0	1	04/15/2016 11:55
1,4-Dichlorobenzene	ND		2.0	1	04/15/2016 11:55
3,3-Dichlorobenzidine	ND		4.0	1	04/15/2016 11:55
2,4-Dichlorophenol	ND		2.0	1	04/15/2016 11:55
Diethyl Phthalate	ND		2.0	1	04/15/2016 11:55
2,4-Dimethylphenol	ND		2.0	1	04/15/2016 11:55
Dimethyl Phthalate	ND		2.0	1	04/15/2016 11:55
4,6-Dinitro-2-methylphenol	ND		10	1	04/15/2016 11:55

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/14/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC21	119523
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
2,4-Dinitrophenol	ND		50	1	04/15/2016 11:55
2,4-Dinitrotoluene	ND		2.0	1	04/15/2016 11:55
2,6-Dinitrotoluene	ND		2.0	1	04/15/2016 11:55
Di-n-octyl Phthalate	ND		4.0	1	04/15/2016 11:55
1,2-Diphenylhydrazine	ND		2.0	1	04/15/2016 11:55
Fluoranthene	ND		2.0	1	04/15/2016 11:55
Fluorene	ND		2.0	1	04/15/2016 11:55
Hexachlorobenzene	ND		2.0	1	04/15/2016 11:55
Hexachlorobutadiene	ND		2.0	1	04/15/2016 11:55
Hexachlorocyclopentadiene	ND		10	1	04/15/2016 11:55
Hexachloroethane	ND		2.0	1	04/15/2016 11:55
Indeno (1,2,3-cd) pyrene	ND		2.0	1	04/15/2016 11:55
Isophorone	ND		2.0	1	04/15/2016 11:55
2-Methylnaphthalene	ND		2.0	1	04/15/2016 11:55
2-Methylphenol (o-Cresol)	ND		2.0	1	04/15/2016 11:55
3 & 4-Methylphenol (m,p-Cresol)	ND		2.0	1	04/15/2016 11:55
Naphthalene	ND		2.0	1	04/15/2016 11:55
2-Nitroaniline	ND		10	1	04/15/2016 11:55
3-Nitroaniline	ND		10	1	04/15/2016 11:55
4-Nitroaniline	ND		10	1	04/15/2016 11:55
Nitrobenzene	ND		2.0	1	04/15/2016 11:55
2-Nitrophenol	ND		10	1	04/15/2016 11:55
4-Nitrophenol	ND		10	1	04/15/2016 11:55
N-Nitrosodiphenylamine	ND		2.0	1	04/15/2016 11:55
N-Nitrosodi-n-propylamine	ND		2.0	1	04/15/2016 11:55
Pentachlorophenol	ND		10	1	04/15/2016 11:55
Phenanthrene	ND		2.0	1	04/15/2016 11:55
Phenol	ND		2.0	1	04/15/2016 11:55
Pyrene	ND		2.0	1	04/15/2016 11:55
1,2,4-Trichlorobenzene	ND		2.0	1	04/15/2016 11:55
2,4,5-Trichlorophenol	ND		2.0	1	04/15/2016 11:55
2,4,6-Trichlorophenol	ND		2.0	1	04/15/2016 11:55

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/14/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC21	119523

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	111	30-130		04/15/2016 11:55
Phenol-d5	91	30-130		04/15/2016 11:55
Nitrobenzene-d5	78	30-130		04/15/2016 11:55
2-Fluorobiphenyl	85	30-130		04/15/2016 11:55
2,4,6-Tribromophenol	62	16-130		04/15/2016 11:55
4-Terphenyl-d14	88	30-130		04/15/2016 11:55

**Analyst(s):** REB

**Analytical Comments:** a4



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/14/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC21	119523
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		2.0	1	04/15/2016 12:23
Acenaphthylene	ND		2.0	1	04/15/2016 12:23
Acetochlor	ND		2.0	1	04/15/2016 12:23
Anthracene	ND		2.0	1	04/15/2016 12:23
Benzidine	ND		10	1	04/15/2016 12:23
Benzo (a) anthracene	ND		2.0	1	04/15/2016 12:23
Benzo (a) pyrene	ND		2.0	1	04/15/2016 12:23
Benzo (b) fluoranthene	ND		2.0	1	04/15/2016 12:23
Benzo (g,h,i) perylene	ND		2.0	1	04/15/2016 12:23
Benzo (k) fluoranthene	ND		2.0	1	04/15/2016 12:23
Benzyl Alcohol	ND		10	1	04/15/2016 12:23
1,1-Biphenyl	ND		2.0	1	04/15/2016 12:23
Bis (2-chloroethoxy) Methane	ND		2.0	1	04/15/2016 12:23
Bis (2-chloroethyl) Ether	ND		2.0	1	04/15/2016 12:23
Bis (2-chloroisopropyl) Ether	ND		2.0	1	04/15/2016 12:23
Bis (2-ethylhexyl) Adipate	ND		2.0	1	04/15/2016 12:23
Bis (2-ethylhexyl) Phthalate	ND		2.0	1	04/15/2016 12:23
4-Bromophenyl Phenyl Ether	ND		2.0	1	04/15/2016 12:23
Butylbenzyl Phthalate	ND		2.0	1	04/15/2016 12:23
4-Chloroaniline	ND		4.0	1	04/15/2016 12:23
4-Chloro-3-methylphenol	ND		2.0	1	04/15/2016 12:23
2-Chloronaphthalene	ND		2.0	1	04/15/2016 12:23
2-Chlorophenol	ND		2.0	1	04/15/2016 12:23
4-Chlorophenyl Phenyl Ether	ND		2.0	1	04/15/2016 12:23
Chrysene	ND		2.0	1	04/15/2016 12:23
Dibenzo (a,h) anthracene	ND		2.0	1	04/15/2016 12:23
Dibenzofuran	ND		2.0	1	04/15/2016 12:23
Di-n-butyl Phthalate	ND		2.0	1	04/15/2016 12:23
1,2-Dichlorobenzene	ND		2.0	1	04/15/2016 12:23
1,3-Dichlorobenzene	ND		2.0	1	04/15/2016 12:23
1,4-Dichlorobenzene	ND		2.0	1	04/15/2016 12:23
3,3-Dichlorobenzidine	ND		4.0	1	04/15/2016 12:23
2,4-Dichlorophenol	ND		2.0	1	04/15/2016 12:23
Diethyl Phthalate	ND		2.0	1	04/15/2016 12:23
2,4-Dimethylphenol	ND		2.0	1	04/15/2016 12:23
Dimethyl Phthalate	ND		2.0	1	04/15/2016 12:23
4,6-Dinitro-2-methylphenol	ND		10	1	04/15/2016 12:23

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/14/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC21	119523
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
2,4-Dinitrophenol	ND		50	1	04/15/2016 12:23
2,4-Dinitrotoluene	ND		2.0	1	04/15/2016 12:23
2,6-Dinitrotoluene	ND		2.0	1	04/15/2016 12:23
Di-n-octyl Phthalate	ND		4.0	1	04/15/2016 12:23
1,2-Diphenylhydrazine	ND		2.0	1	04/15/2016 12:23
Fluoranthene	ND		2.0	1	04/15/2016 12:23
Fluorene	ND		2.0	1	04/15/2016 12:23
Hexachlorobenzene	ND		2.0	1	04/15/2016 12:23
Hexachlorobutadiene	ND		2.0	1	04/15/2016 12:23
Hexachlorocyclopentadiene	ND		10	1	04/15/2016 12:23
Hexachloroethane	ND		2.0	1	04/15/2016 12:23
Indeno (1,2,3-cd) pyrene	ND		2.0	1	04/15/2016 12:23
Isophorone	ND		2.0	1	04/15/2016 12:23
2-Methylnaphthalene	ND		2.0	1	04/15/2016 12:23
2-Methylphenol (o-Cresol)	ND		2.0	1	04/15/2016 12:23
3 & 4-Methylphenol (m,p-Cresol)	ND		2.0	1	04/15/2016 12:23
Naphthalene	ND		2.0	1	04/15/2016 12:23
2-Nitroaniline	ND		10	1	04/15/2016 12:23
3-Nitroaniline	ND		10	1	04/15/2016 12:23
4-Nitroaniline	ND		10	1	04/15/2016 12:23
Nitrobenzene	ND		2.0	1	04/15/2016 12:23
2-Nitrophenol	ND		10	1	04/15/2016 12:23
4-Nitrophenol	ND		10	1	04/15/2016 12:23
N-Nitrosodiphenylamine	ND		2.0	1	04/15/2016 12:23
N-Nitrosodi-n-propylamine	ND		2.0	1	04/15/2016 12:23
Pentachlorophenol	ND		10	1	04/15/2016 12:23
Phenanthrene	ND		2.0	1	04/15/2016 12:23
Phenol	ND		2.0	1	04/15/2016 12:23
Pyrene	ND		2.0	1	04/15/2016 12:23
1,2,4-Trichlorobenzene	ND		2.0	1	04/15/2016 12:23
2,4,5-Trichlorophenol	ND		2.0	1	04/15/2016 12:23
2,4,6-Trichlorophenol	ND		2.0	1	04/15/2016 12:23

(Cont.)



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/14/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC21	119523

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	104	30-130		04/15/2016 12:23
Phenol-d5	84	30-130		04/15/2016 12:23
Nitrobenzene-d5	74	30-130		04/15/2016 12:23
2-Fluorobiphenyl	81	30-130		04/15/2016 12:23
2,4,6-Tribromophenol	52	16-130		04/15/2016 12:23
4-Terphenyl-d14	86	30-130		04/15/2016 12:23

**Analyst(s):** REB

**Analytical Comments:** a4



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW9045C  
**Analytical Method:** SW9045C\_Corr  
**Unit:** pH units

### Corrosivity

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	WetChem	119569

Analytes	Result	Accuracy	DF	Date Analyzed
Corrosivity	6.4	±0.05	1	04/11/2016 20:35

Analyst(s): RB



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/15/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW1010  
**Analytical Method:** SW1010  
**Unit:** °C

### Flash Point by SW1010

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	WetChem	119623

Analytes	Result	Accuracy	DF	Date Analyzed
Flash Point	>100 °C	±2	1	04/15/2016 15:55

Analyst(s): AL





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/L

### Gasoline Range(C6-C12) & Stoddard Solvent Range(C9-C12) Volatile Hydrocarbons W/BTEX & MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	GC19	119339

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	19,000	2500	5	04/13/2016 16:54
TPH(ss)	37,000	2500	5	04/13/2016 16:54
MTBE	---	250	5	04/13/2016 16:54
Benzene	---	25	5	04/13/2016 16:54
Toluene	---	25	5	04/13/2016 16:54
Ethylbenzene	---	25	5	04/13/2016 16:54
Xylenes	---	75	5	04/13/2016 16:54

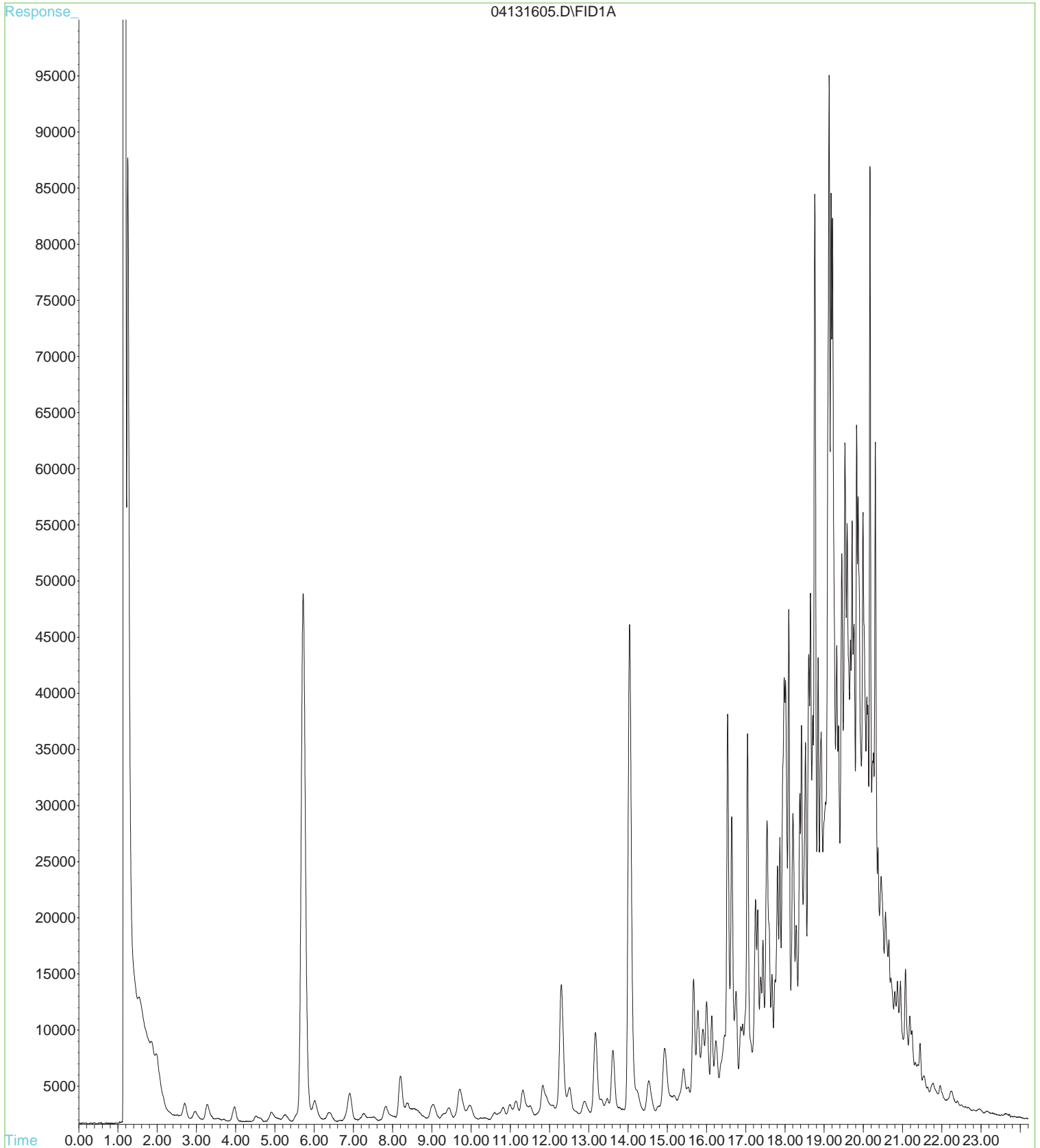
Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	88	70-130	04/13/2016 16:54

Analyst(s): IA

Analytical Comments: d7

File : D:\HPCHEM\GC19\DATA\04131605.D  
Operator : IRINA  
Acquired : 13 Apr 2016 4:54 pm using AcqMethod GC19P2.M  
Instrument : GC-19  
Sample Name: 1604363-004A O rr  
Misc Info : G-MBTXEX\_O  
Vial Number: 5

1604363-004A





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC19	119277
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	<b>23</b>		1.0	1	04/12/2016 04:26
MTBE	---		0.050	1	04/12/2016 04:26
Benzene	---		0.0050	1	04/12/2016 04:26
Toluene	---		0.0050	1	04/12/2016 04:26
Ethylbenzene	---		0.0050	1	04/12/2016 04:26
TPH(ss)	<b>45</b>		1.0	1	04/12/2016 04:26
Xylenes	---		0.015	1	04/12/2016 04:26
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	93		70-130		04/12/2016 04:26
<u>Analyst(s): IA</u>			<u>Analytical Comments:</u> d5		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC19	119277
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	<b>150</b>		20	20	04/11/2016 23:24
MTBE	---		1.0	20	04/11/2016 23:24
Benzene	---		0.10	20	04/11/2016 23:24
Toluene	---		0.10	20	04/11/2016 23:24
Ethylbenzene	---		0.10	20	04/11/2016 23:24
TPH(ss)	<b>280</b>		20	20	04/11/2016 23:24
Xylenes	---		0.30	20	04/11/2016 23:24
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	114		70-130		04/11/2016 23:24
<u>Analyst(s): IA</u>			<u>Analytical Comments:</u> d5		

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1,2	1604363-005A	Soil	04/06/2016	GC19	119277

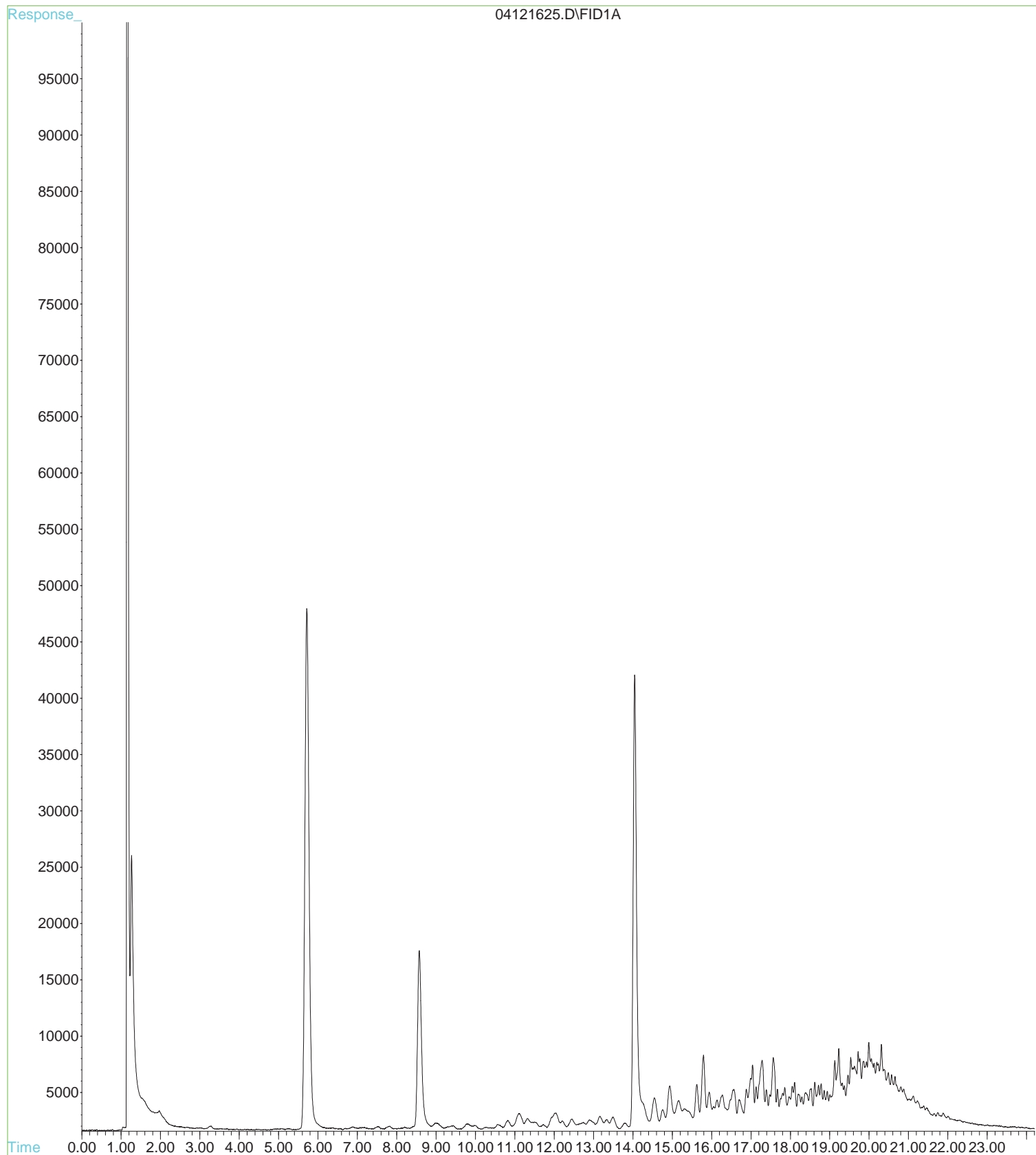
Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	04/13/2016 00:02
MTBE	---	0.050	1	04/13/2016 00:02
Benzene	---	0.0050	1	04/13/2016 00:02
Toluene	---	0.0050	1	04/13/2016 00:02
Ethylbenzene	---	0.0050	1	04/13/2016 00:02
TPH(ss)	ND	1.0	1	04/13/2016 00:02
Xylenes	---	0.015	1	04/13/2016 00:02

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	104	70-130	04/13/2016 00:02

Analyst(s): IA

File : D:\HPCHEM\GC19\DATA\04121625.D  
Operator : IRINA  
Acquired : 13 Apr 2016 4:03 am using AcqMethod GC19P2.M  
Instrument : GC-19  
Sample Name: 1604363-002A S rr  
Misc Info : G-MBTXEX\_S  
Vial Number: 25

1604363-002A





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/15/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

### Gasoline Range(C6-C12) & Stoddard Solvent Range(C9-C12) Volatile Hydrocarbons W/BTEX & MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001A	Water	04/07/2016	GC19	119530

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	8000	500	10	04/15/2016 14:27
MTBE	ND	50	10	04/15/2016 14:27
Benzene	11	5.0	10	04/15/2016 14:27
Toluene	ND	5.0	10	04/15/2016 14:27
Ethylbenzene	100	5.0	10	04/15/2016 14:27
TPH(ss)	15,000	500	10	04/15/2016 14:27
Xylenes	360	15	10	04/15/2016 14:27

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	96	70-130	04/15/2016 14:27

Analyst(s): IA

Analytical Comments: d2,b6



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	ICP-MS1	119288

Analytes	Result	RL	DF	Date Analyzed
Cadmium	ND	0.25	1	04/12/2016 18:44
Chromium	45	0.50	1	04/12/2016 18:44
Lead	13	0.50	1	04/12/2016 18:44
Nickel	99	0.50	1	04/12/2016 18:44
Zinc	40	5.0	1	04/12/2016 18:44

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	106	70-130	04/12/2016 18:44

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	ICP-MS1	119288

Analytes	Result	RL	DF	Date Analyzed
Cadmium	ND	0.25	1	04/12/2016 18:50
Chromium	54	0.50	1	04/12/2016 18:50
Lead	13	0.50	1	04/12/2016 18:50
Nickel	72	0.50	1	04/12/2016 18:50
Zinc	39	5.0	1	04/12/2016 18:50

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	109	70-130	04/12/2016 18:50

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BF-1,2	1604363-005A	Soil	04/06/2016	ICP-MS1	119288

Analytes	Result	RL	DF	Date Analyzed
Cadmium	ND	0.25	1	04/12/2016 19:22
Chromium	12	0.50	1	04/12/2016 19:22
Lead	0.91	0.50	1	04/12/2016 19:22
Nickel	23	0.50	1	04/12/2016 19:22
Zinc	57	5.0	1	04/12/2016 19:22

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	110	70-130	04/12/2016 19:22

Analyst(s): DVH



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** E200.8  
**Analytical Method:** E200.8  
**Unit:** µg/L

### LUFT 5 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001C	Water	04/07/2016	ICP-MS3	119270
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Cadmium	ND		2.5	10	04/12/2016 22:28
Chromium	66		5.0	10	04/12/2016 22:28
Lead	140		5.0	10	04/12/2016 22:28
Nickel	120		5.0	10	04/12/2016 22:28
Zinc	ND		150	10	04/12/2016 22:28
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	121		70-130		04/12/2016 22:28
<u>Analyst(s):</u> BBO			<u>Analytical Comments:</u> a1		





# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SM9040B  
**Analytical Method:** SM9040B  
**Unit:** pH units @ 25°C

## pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	WetChem	119569

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.35	±0.05	1	04/11/2016 20:41

Analyst(s): RB

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 20:48  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3010  
**Analytical Method:** SW6020  
**Unit:** mg/kg

### RCRA Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	ICP-MS1	119340
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Arsenic	ND		0.50	1	04/13/2016 16:35
Barium	ND		5.0	1	04/13/2016 16:35
Cadmium	ND		0.25	1	04/13/2016 16:35
Chromium	ND		0.50	1	04/13/2016 16:35
Lead	<b>0.69</b>		0.50	1	04/13/2016 16:35
Mercury	ND		0.050	1	04/13/2016 16:35
Selenium	ND		0.50	1	04/13/2016 16:35
Silver	ND		0.50	1	04/13/2016 16:35

Analyst(s): DVH



## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/11/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3580A  
**Analytical Method:** SW8015B  
**Unit:** mg/kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
TC	1604363-004A	Oil	04/06/2016	GC11B	119338

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	<b>480,000</b>	80,000	500	04/13/2016 12:58
TPH-Motor Oil (C18-C36)	<b>570,000</b>	400,000	500	04/13/2016 12:58
TPH-Bunker Oil (C10-C36)	<b>780,000</b>	400,000	500	04/13/2016 12:58
TPH-Heating Oil (C9-C18)	<b>220,000</b>	80,000	500	04/13/2016 12:58

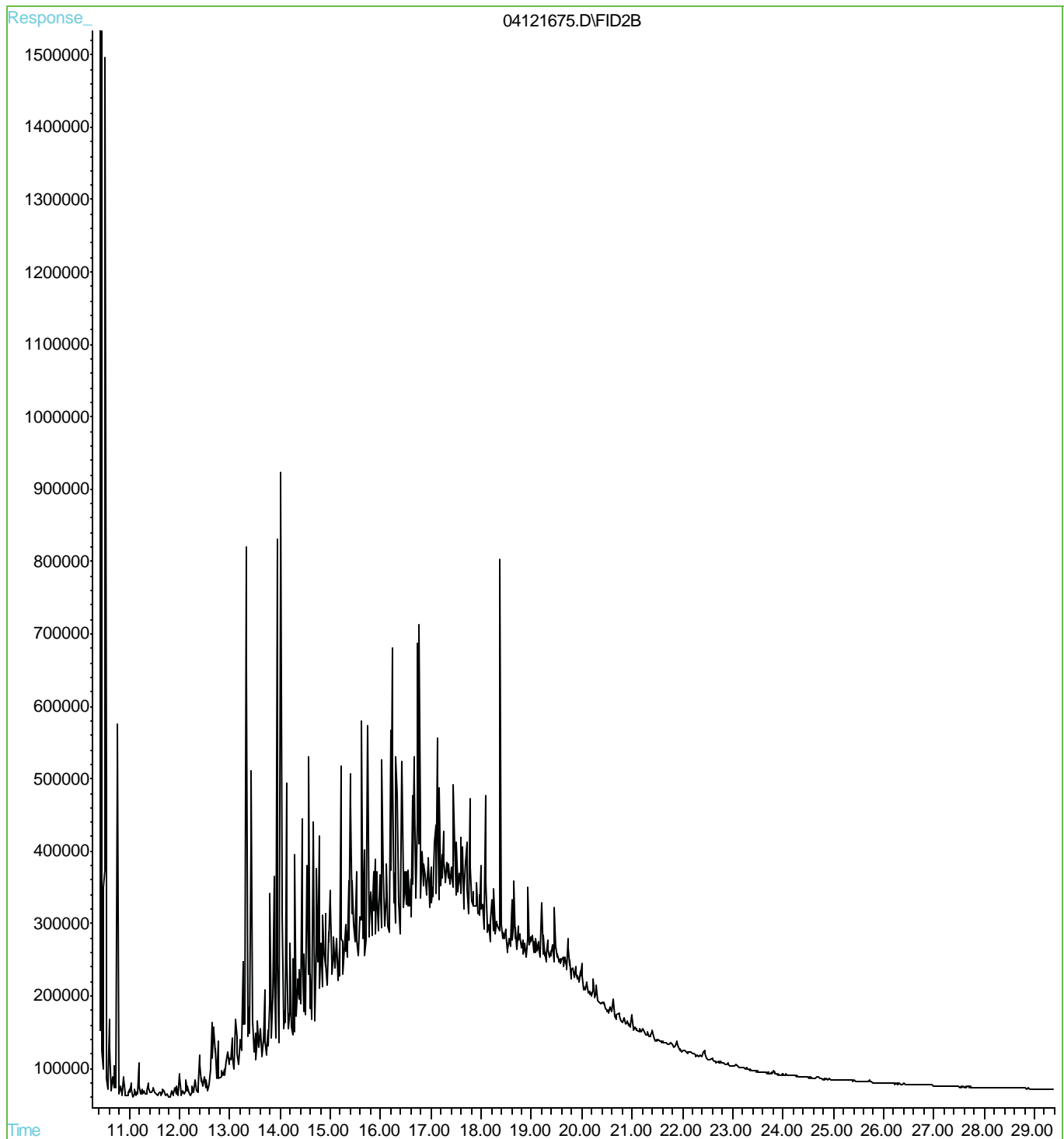
Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	04/13/2016 12:58

Analyst(s): TK

Analytical Comments: e2,e7

File : D:\HPCHEM\GC11\DATAB\04121675.D  
Operator : Toshiko  
Acquired : 13 Apr 2016 12:58 pm using AcqMethod GC11A\_B.M  
Instrument : GC-11  
Sample Name: 1604363-004A O +BO,HTO RR  
Misc Info : TPH  
Vial Number: 88

1604363-004A





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-NW	1604363-002A	Soil	04/07/2016	GC6B	119278

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	60	5.0	5	04/11/2016 23:31
TPH-Motor Oil (C18-C36)	86	25	5	04/11/2016 23:31
TPH-Bunker Oil (C10-C36)	120	25	5	04/11/2016 23:31
TPH-Heating Oil (C9-C18)	29	5.0	5	04/11/2016 23:31
Surrogates	REC (%)	Limits		Date Analyzed
C9	83	70-130		04/11/2016 23:31

Analyst(s): TK Analytical Comments: e2,e7

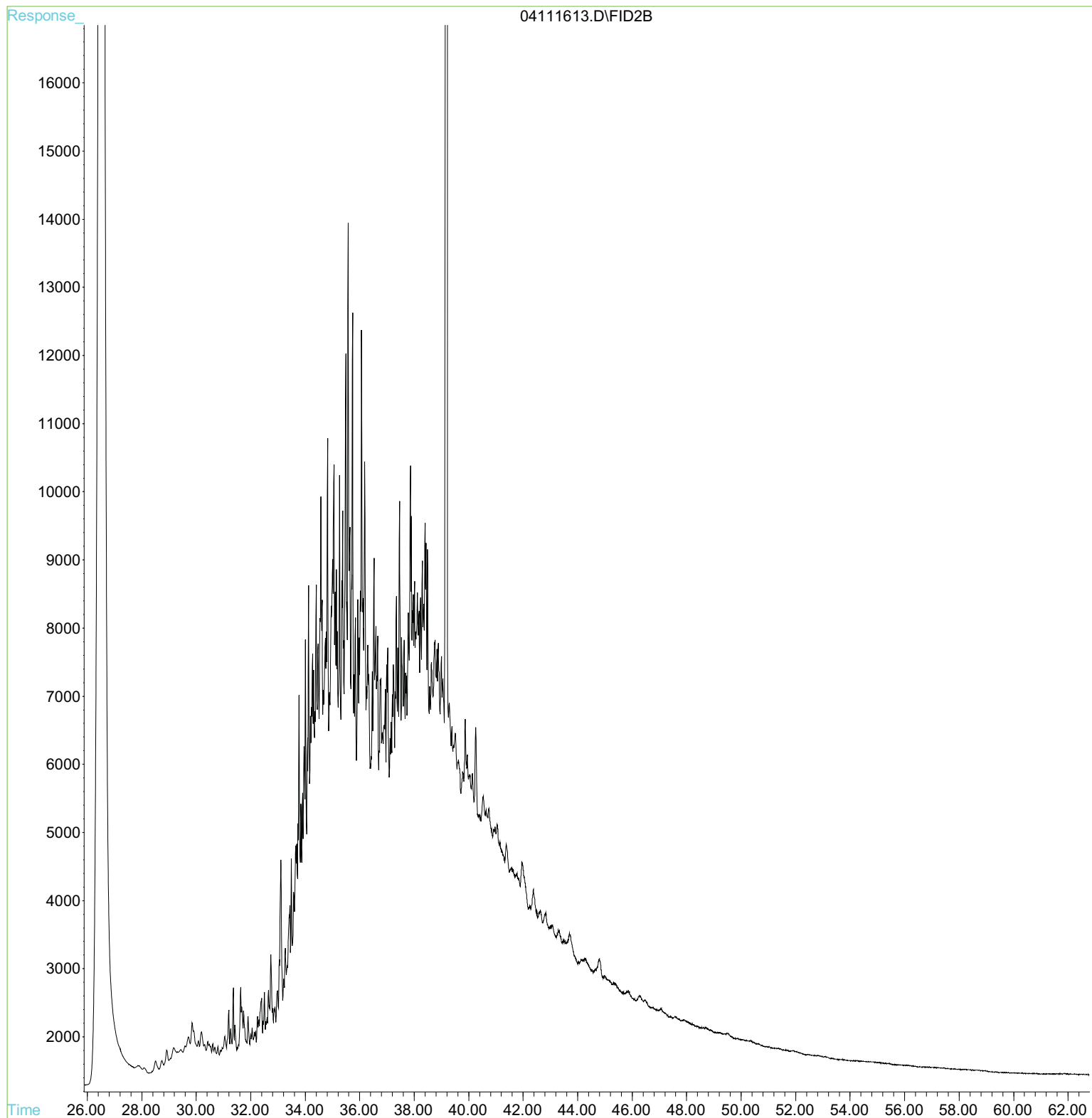
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	GC9b	119278

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	82	2.0	2	04/12/2016 13:20
TPH-Motor Oil (C18-C36)	65	10	2	04/12/2016 13:20
TPH-Bunker Oil (C10-C36)	120	10	2	04/12/2016 13:20
TPH-Heating Oil (C9-C18)	61	2.0	2	04/12/2016 13:20
Surrogates	REC (%)	Limits		Date Analyzed
C9	85	70-130		04/12/2016 13:20

Analyst(s): TK Analytical Comments: e7,e2,e11/e4

File : D:\HPCHEM\GC6\DATAB\04111613.D  
Operator : Toshiko  
Acquired : 11 Apr 2016 11:31 pm using AcqMethod GC6AI.M  
Instrument : GC-6  
Sample Name: 1604363-002A S +BO,HTO  
Misc Info : TPH  
Vial Number: 57

1604363-002A





## Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 4/8/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3510C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-W	1604363-001A	Water	04/07/2016	GC9a	119286

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	<b>52,000</b>	1000	10	04/12/2016 17:23
TPH-Motor Oil (C18-C36)	<b>13,000</b>	5000	10	04/12/2016 17:23
TPH-Bunker Oil (C10-C36)	<b>61,000</b>	5000	10	04/12/2016 17:23
TPH-Heating Oil (C9-C18)	<b>49,000</b>	1000	10	04/12/2016 17:23

Surrogates	REC (%)	Limits	Date Analyzed
C9	120	70-130	04/12/2016 17:23

Analyst(s): TK

Analytical Comments: e4,e2,e7,e8,b6



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/21/16  
**Instrument:** GC10  
**Matrix:** Liquid  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119337  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L  
**Sample ID:** MB-119337

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	100	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	-	5.0	-	-	-	-
Benzene	ND	-	5.0	-	-	-	-
Bromobenzene	ND	-	5.0	-	-	-	-
Bromochloromethane	ND	-	5.0	-	-	-	-
Bromodichloromethane	ND	-	5.0	-	-	-	-
Bromoform	ND	-	5.0	-	-	-	-
Bromomethane	ND	-	5.0	-	-	-	-
2-Butanone (MEK)	ND	-	20	-	-	-	-
t-Butyl alcohol (TBA)	ND	-	50	-	-	-	-
n-Butyl benzene	ND	-	5.0	-	-	-	-
sec-Butyl benzene	ND	-	5.0	-	-	-	-
tert-Butyl benzene	ND	-	5.0	-	-	-	-
Carbon Disulfide	ND	-	5.0	-	-	-	-
Carbon Tetrachloride	ND	-	5.0	-	-	-	-
Chlorobenzene	ND	-	5.0	-	-	-	-
Chloroethane	ND	-	5.0	-	-	-	-
Chloroform	ND	-	5.0	-	-	-	-
Chloromethane	ND	-	5.0	-	-	-	-
2-Chlorotoluene	ND	-	5.0	-	-	-	-
4-Chlorotoluene	ND	-	5.0	-	-	-	-
Dibromochloromethane	ND	-	5.0	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	5.0	-	-	-	-
1,2-Dibromoethane (EDB)	ND	-	5.0	-	-	-	-
Dibromomethane	ND	-	5.0	-	-	-	-
1,2-Dichlorobenzene	ND	-	5.0	-	-	-	-
1,3-Dichlorobenzene	ND	-	5.0	-	-	-	-
1,4-Dichlorobenzene	ND	-	5.0	-	-	-	-
Dichlorodifluoromethane	ND	-	5.0	-	-	-	-
1,1-Dichloroethane	ND	-	5.0	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	-	5.0	-	-	-	-
1,1-Dichloroethene	ND	-	5.0	-	-	-	-
cis-1,2-Dichloroethene	ND	-	5.0	-	-	-	-
trans-1,2-Dichloroethene	ND	-	5.0	-	-	-	-
1,2-Dichloropropane	ND	-	5.0	-	-	-	-
1,3-Dichloropropane	ND	-	5.0	-	-	-	-
2,2-Dichloropropane	ND	-	5.0	-	-	-	-

(Cont.)

NELAP 4033ORELAP

 QA/QC Officer





## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/21/16  
**Instrument:** GC10  
**Matrix:** Liquid  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119337  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L  
**Sample ID:** MB-119337

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	5.0	-	-	-	-
cis-1,3-Dichloropropene	ND	-	5.0	-	-	-	-
trans-1,3-Dichloropropene	ND	-	5.0	-	-	-	-
Diisopropyl ether (DIPE)	ND	-	5.0	-	-	-	-
Ethylbenzene	ND	-	5.0	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	5.0	-	-	-	-
Freon 113	ND	-	5.0	-	-	-	-
Hexachlorobutadiene	ND	-	5.0	-	-	-	-
Hexachloroethane	ND	-	5.0	-	-	-	-
2-Hexanone	ND	-	5.0	-	-	-	-
Isopropylbenzene	ND	-	5.0	-	-	-	-
4-Isopropyl toluene	ND	-	5.0	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	-	5.0	-	-	-	-
Methylene chloride	ND	-	5.0	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	5.0	-	-	-	-
Naphthalene	ND	-	5.0	-	-	-	-
n-Propyl benzene	ND	-	5.0	-	-	-	-
Styrene	ND	-	5.0	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	5.0	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	5.0	-	-	-	-
Tetrachloroethene	ND	-	5.0	-	-	-	-
Toluene	ND	-	5.0	-	-	-	-
1,2,3-Trichlorobenzene	ND	-	5.0	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	5.0	-	-	-	-
1,1,1-Trichloroethane	ND	-	5.0	-	-	-	-
1,1,2-Trichloroethane	ND	-	5.0	-	-	-	-
Trichloroethene	ND	-	5.0	-	-	-	-
Trichlorofluoromethane	ND	-	5.0	-	-	-	-
1,2,3-Trichloropropane	ND	-	5.0	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	5.0	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	5.0	-	-	-	-
Vinyl Chloride	ND	-	5.0	-	-	-	-
Xylenes, Total	ND	-	5.0	-	-	-	-



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/21/16  
**Instrument:** GC10  
**Matrix:** Liquid  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119337  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/L  
**Sample ID:** MB-119337

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	281	-		250	112	-	-
Toluene-d8	258	-		250	103	-	-
4-BFB	26.6	-		25	106	-	-



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/9/16  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119276  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-119276  
 1604337-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0360	0.0050	0.050	-	72	53-116
Benzene	ND	0.0471	0.0050	0.050	-	94	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.164	0.050	0.20	-	82	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0423	0.0050	0.050	-	85	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0398	0.0040	0.050	-	80	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0448	0.0040	0.050	-	90	58-135
1,1-Dichloroethene	ND	0.0457	0.0050	0.050	-	91	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

(Cont.)

NELAP 4033ORELAP

 QA/QC Officer



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/9/16  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119276  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-119276  
 1604337-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0442	0.0050	0.050	-	88	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0429	0.0050	0.050	-	86	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0402	0.0050	0.050	-	80	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0468	0.0050	0.050	-	94	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0448	0.0050	0.050	-	90	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

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NELAP 4033ORELAP

 QA/QC Officer



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/9/16  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119276  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-119276  
 1604337-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	0.119	0.122		0.12	95	98	70-130
Toluene-d8	0.120	0.117		0.12	96	94	70-130
4-BFB	0.00971	0.00977		0.012	78	78	70-130
Benzene-d6	0.0785	0.0912		0.10	79	91	60-140
Ethylbenzene-d10	0.0828	0.0940		0.10	83	94	60-140
1,2-DCB-d4	0.0765	0.0794		0.10	76	79	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0360	0.0376	0.050	ND	72	75	56-94	4.30	0
Benzene	0.0468	0.0470	0.050	ND	94	94	60-106	0	0
t-Butyl alcohol (TBA)	0.168	0.180	0.20	ND	84	90	56-140	7.04	0
Chlorobenzene	0.0413	0.0418	0.050	ND	83	84	61-108	1.07	0
1,2-Dibromoethane (EDB)	0.0412	0.0433	0.050	ND	82	87	54-119	4.83	0
1,2-Dichloroethane (1,2-DCA)	0.0450	0.0460	0.050	ND	90	92	48-115	2.09	0
1,1-Dichloroethene	0.0469	0.0470	0.050	ND	94	94	46-111	0	0
Diisopropyl ether (DIPE)	0.0429	0.0429	0.050	ND	86	86	53-111	0	0
Ethyl tert-butyl ether (ETBE)	0.0418	0.0428	0.050	ND	84	86	61-104	2.36	0
Methyl-t-butyl ether (MTBE)	0.0407	0.0426	0.050	ND	81	85	58-107	4.50	0
Toluene	0.0451	0.0456	0.050	ND	90	91	64-114	1.23	0
Trichloroethene	0.0445	0.0450	0.050	ND	89	90	60-116	1.28	0

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.121	0.122	0.12		97	98	70-130	0.894	0
Toluene-d8	0.115	0.118	0.12		92	94	70-130	2.03	0
4-BFB	0.0101	0.0107	0.012		81	86	88-121	5.89	0
Benzene-d6	0.0918	0.0899	0.10		92	90	60-140	2.15	0
Ethylbenzene-d10	0.0910	0.0895	0.10		91	89	60-140	1.76	0
1,2-DCB-d4	0.0788	0.0787	0.10		79	79	60-140	0	0



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/16/16  
**Date Analyzed:** 4/16/16  
**Instrument:** GC16  
**Matrix:** Water  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119675  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-119675  
 1604363-001BMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.01	0.50	10	-	90	54-140
Benzene	ND	9.93	0.50	10	-	99	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	32.3	2.0	40	-	81	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.06	0.50	10	-	91	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.22	0.50	10	-	92	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	9.53	0.50	10	-	95	66-125
1,1-Dichloroethene	ND	10.2	0.50	10	-	102	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

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NELAP 4033ORELAP

 QA/QC Officer



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/16/16  
**Date Analyzed:** 4/16/16  
**Instrument:** GC16  
**Matrix:** Water  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119675  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-119675  
 1604363-001BMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	9.69	0.50	10	-	97	57-136
Ethanol	ND	-	50	-	-	-	-
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.53	0.50	10	-	95	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.15	0.50	10	-	92	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.18	0.50	10	-	92	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.41	0.50	10	-	94	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/16/16  
**Date Analyzed:** 4/16/16  
**Instrument:** GC16  
**Matrix:** Water  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119675  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-119675  
 1604363-001BMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	26.2	26.0		25	105	104	70-130
Toluene-d8	24.6	23.5		25	98	94	70-130
4-BFB	2.55	2.71		2.5	102	108	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	NR	NR		ND<50	NR	NR	-	NR	
Benzene	NR	NR		ND<50	NR	NR	-	NR	
t-Butyl alcohol (TBA)	NR	NR		ND<200	NR	NR	-	NR	
Chlorobenzene	NR	NR		ND<50	NR	NR	-	NR	
1,2-Dibromoethane (EDB)	NR	NR		ND<50	NR	NR	-	NR	
1,2-Dichloroethane (1,2-DCA)	NR	NR		ND<50	NR	NR	-	NR	
1,1-Dichloroethene	NR	NR		ND<50	NR	NR	-	NR	
Diisopropyl ether (DIPE)	NR	NR		ND<50	NR	NR	-	NR	
Ethyl tert-butyl ether (ETBE)	NR	NR		ND<50	NR	NR	-	NR	
Methyl-t-butyl ether (MTBE)	NR	NR		ND<50	NR	NR	-	NR	
Toluene	NR	NR		ND<50	NR	NR	-	NR	
Trichloroethene	NR	NR		ND<50	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
Dibromofluoromethane	NR	NR			NR	NR	-	NR	
Toluene-d8	NR	NR			NR	NR	-	NR	
4-BFB	NR	NR			NR	NR	-	NR	



CLIENT: Schutze & Associates, Inc.

**ANALYTICAL QC SUMMARY REPORT**

Work Order: 1604363

Project: SCS557; Trimble Tank Pull

BatchID: 119276

SampleID <b>MB-119276</b>	TestCode: <b>8260gas_s</b>	Units: <b>mg/kg</b>	Prep Date: <b>4/8/2016</b>
Batch ID: <b>119276</b>	TestNo: <b>SW8260B</b>	Run ID: <b>GC10_160422C</b>	Analysis Date: <b>4/9/2016</b>
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

TPH(g)	ND	0.25	-
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**Surrogate Recovery**

Dibromofluoromethane	0.164	0.125	131	70 - 130	S
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**Qualifiers:**  
 ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

CLIENT: Schutze & Associates, Inc.

# ANALYTICAL QC SUMMARY REPORT

Work Order: 1604363

Project: SCS557; Trimble Tank Pull

BatchID: 119276

SampleID	LCS-119276	TestCode:	8260gas_s	Units:	mg/kg	Prep Date:	4/8/2016			
Batch ID:	119276	TestNo:	SW8260B	Run ID:	GC10_160422C	Analysis Date:	4/9/2016			
Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual

VOC (C6-C12)	3.20	0.25	3.2	0	100	74 - 142				
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### Surrogate Recovery

Dibromofluoromethane	0.168		0.125		134	70 - 130				S
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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range

CLIENT: Schutze & Associates, Inc.

# ANALYTICAL QC SUMMARY REPORT

Work Order: 1604363

Project: SCS557; Trimble Tank Pull

BatchID: 119337

SampleID <b>MB-119337</b>	TestCode: <b>8260gas_o</b>	Units: <b>mg/L</b>	Prep Date: <b>4/11/2016</b>
Batch ID: <b>119337</b>	TestNo: <b>SW8260B</b>	Run ID: <b>GC18_160422C</b>	Analysis Date: <b>4/21/2016</b>
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

TPH(g)	ND	500	-							
<b>Surrogate Recovery</b>										
Dibromofluoromethane	221		250		88	70 - 130				

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range

CLIENT: Schutze & Associates, Inc.

# ANALYTICAL QC SUMMARY REPORT

Work Order: 1604363

Project: SCS557; Trimble Tank Pull

BatchID: 119675

SampleID <b>MB-119675</b>	TestCode: <b>8260GAS_W</b>	Units: <b>µg/L</b>	Prep Date: <b>4/16/2016</b>
Batch ID: <b>119675</b>	TestNo: <b>SW8260B</b>	Run ID: <b>GC16_160417B</b>	Analysis Date: <b>4/16/2016</b>
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

TPH(g)	ND	50	-							
<b>Surrogate Recovery</b>										
Dibromofluoromethane	25.9		25		103	70 - 130				

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range

CLIENT: Schutze & Associates, Inc.

# ANALYTICAL QC SUMMARY REPORT

Work Order: 1604363

Project: SCS557; Trimble Tank Pull

BatchID: 119675

SampleID	LCS-119675	TestCode: 8260gas_w	Units: µg/L	Prep Date: 4/16/2016						
Batch ID:	119675	TestNo: SW8260B	Run ID: GC16_160417B	Analysis Date: 4/16/2016						
Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual

VOC (C6-C12)	517	50	644	0	80	70 - 130				
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**Surrogate Recovery**

Dibromofluoromethane	25.5		25		102	70 - 130				
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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/13/16  
**Date Analyzed:** 4/13/16  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119523  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-119523

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.34	0.25	5	-	87	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.25	-	-	-	-
4-Chloro-3-methylphenol	ND	4.72	0.25	5	-	94	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	4.50	0.25	5	-	90	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.06	0.25	5	-	81	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/13/16  
**Date Analyzed:** 4/13/16  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119523  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-119523

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	4.44	0.25	5	-	89	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.58	1.3	5	-	72	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.08	0.25	5	-	82	30-130
Pentachlorophenol	ND	4.32	1.3	5	-	86	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.24	0.25	5	-	85	30-130
Pyrene	ND	4.97	0.25	5	-	99	30-130
1,2,4-Trichlorobenzene	ND	4.37	0.25	5	-	87	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/13/16  
**Date Analyzed:** 4/13/16  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119523  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-119523

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
2-Fluorophenol	5.02	4.88		5	100	98	30-130
Phenol-d5	4.27	4.29		5	85	86	30-130
Nitrobenzene-d5	3.82	4.06		5	76	81	30-130
2-Fluorobiphenyl	3.80	4.00		5	76	80	30-130
2,4,6-Tribromophenol	2.98	3.67		5	60	73	30-130
4-Terphenyl-d14	3.89	4.18		5	78	84	30-130





## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/11/16  
**Instrument:** WetChem  
**Matrix:** Liquid  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119569  
**Extraction Method:** SW9045C  
**Analytical Method:** SW9045C\_Corr  
**Unit:** pH units

### QC Summary Report for SW9045C\_Corr

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1604363-004A	6.4	1	6.4	1	0	10

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/15/16  
**Date Analyzed:** 4/15/16  
**Instrument:** WetChem  
**Matrix:** Oil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119623  
**Extraction Method:** SW1010  
**Analytical Method:** SW1010  
**Unit:** °C

### QC Summary Report for Flash Point

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1604363-004A	>100 °C	1	>100 °C	1	N/A	2



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/12/16  
**Instrument:** GC19  
**Matrix:** Oil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119339  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/L  
**Sample ID:** MB-119339

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	-	500	-	-	-	-
MTBE	ND	-	50	-	-	-	-
Benzene	ND	-	5.0	-	-	-	-
Toluene	ND	-	5.0	-	-	-	-
Ethylbenzene	ND	-	5.0	-	-	-	-
Xylenes	ND	-	15	-	-	-	-
<b>Surrogate Recovery</b>							
aaa-TFT	90.6	-		100	91	-	-



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/9/16  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119277  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-119277  
 1604363-002AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.521	0.40	0.60	-	87	70-130
MTBE	ND	0.0888	0.050	0.10	-	89	70-130
Benzene	ND	0.108	0.0050	0.10	-	108	70-130
Toluene	ND	0.100	0.0050	0.10	-	100	70-130
Ethylbenzene	ND	0.108	0.0050	0.10	-	108	70-130
Xylenes	ND	0.320	0.015	0.30	-	107	70-130
<b>Surrogate Recovery</b>							
aaa-TFT	0.114	0.123		0.10	114	123	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		1.3	NR	NR	-	NR	
MTBE	NR	NR		ND	NR	NR	-	NR	
Benzene	NR	NR		ND	NR	NR	-	NR	
Toluene	NR	NR		ND	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND	NR	NR	-	NR	
Xylenes	NR	NR		ND	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
aaa-TFT	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/13/16  
**Date Analyzed:** 4/13/16  
**Instrument:** GC3  
**Matrix:** Water  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119530  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L  
**Sample ID:** MB/LCS-119530  
 1604314-001AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	58.6	40	60	-	98	70-130
MTBE	ND	9.30	5.0	10	-	93	70-130
Benzene	ND	9.70	0.50	10	-	97	70-130
Toluene	ND	9.86	0.50	10	-	99	70-130
Ethylbenzene	ND	9.96	0.50	10	-	100	70-130
Xylenes	ND	30.3	1.5	30	-	101	70-130
<b>Surrogate Recovery</b>							
aaa-TFT	9.88	9.80		10	99	98	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	54.8	60.2	60	ND	91	100	70-130	9.39	20
MTBE	8.07	9.49	10	ND	81	95	70-130	16.2	20
Benzene	9.26	9.97	10	ND	93	100	70-130	7.45	20
Toluene	9.44	10.2	10	ND	94	102	70-130	8.21	20
Ethylbenzene	9.64	10.5	10	ND	96	105	70-130	8.88	20
Xylenes	29.0	32.1	30	ND	97	107	70-130	10.3	20
<b>Surrogate Recovery</b>									
aaa-TFT	10.2	9.64	10		102	96	70-130	5.25	20



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/11/16  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119288  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-119288  
 1604362-028AMS/MSD  
 1604362-028APDS

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Cadmium	ND	55.9	0.25	50	-	112	75-125
Chromium	ND	59.4	0.50	50	-	119	75-125
Lead	ND	54.8	0.50	50	-	110	75-125
Nickel	ND	54.2	0.50	50	-	108	75-125
Zinc	ND	549	5.0	500	-	110	75-125
<b>Surrogate Recovery</b>							
Terbium	556	579		500	111	116	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Cadmium	54.0	49.6	50	0.36	107	98	75-125	8.55	20
Chromium	74.1	68.7	50	19	111	100	75-125	7.51	20
Lead	68.4	63.6	50	27.49	82	72,F10	75-125	7.40	20
Nickel	66.1	61.5	50	11	110	101	75-125	7.24	20
Zinc	751	690	500	230	104	92	75-125	8.48	20
<b>Surrogate Recovery</b>									
Terbium	563	503	500		113	101	70-130	11.4	20

Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Lead	78.6	50	27.49	102	75-125

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Cadmium	ND<1.2	0.36		
Chromium	19.4	19	2.11	10
Lead	26.9	27.49	2.15	10
Nickel	11.0	11	0	
Zinc	223	230	3.04	10

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/11/16  
**Instrument:** ICP-MS2  
**Matrix:** Water  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119270  
**Extraction Method:** E200.8  
**Analytical Method:** E200.8  
**Unit:** µg/L  
**Sample ID:** MB/LCS-119270  
 1604341-001EMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Cadmium	ND	51.5	0.25	50	-	103	85-115
Chromium	ND	54.2	0.50	50	-	108	85-115
Lead	ND	50.4	0.50	50	-	101	85-115
Nickel	ND	51.4	0.50	50	-	103	85-115
Zinc	ND	533	15	500	-	107	85-115
<b>Surrogate Recovery</b>							
Terbium	776	737		750	103	98	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Cadmium	51.5	52.6	50	ND	103	105	70-130	2.00	20
Chromium	89.6	91.5	50	38.30	103	106	70-130	2.11	20
Lead	61.6	62.4	50	10.25	103	104	70-130	1.32	20
Nickel	88.1	89.9	50	39.46	97	101	70-130	2.02	20
Zinc	616	635	500	127.5	98	102	70-130	2.97	20
<b>Surrogate Recovery</b>									
Terbium	834	843	750		111	112	70-130	1.00	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Cadmium	ND<1.2	ND		
Chromium	41.0	38.30	7.05	10
Lead	10.4	10.25	1.46	
Nickel	41.8	39.46	5.93	10
Zinc	137	127.5	7.45	

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/11/16  
**Instrument:** WetChem  
**Matrix:** Liquid  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119569  
**Extraction Method:** SM9040B  
**Analytical Method:** SM9040B  
**Unit:** pH units @ 25°C

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1604363-004A	6.35	1	6.36	1	0.01	0.1

 QA/QC Officer



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/12/16  
**Instrument:** ICP-MS1  
**Matrix:** Oil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119340  
**Extraction Method:** SW3010  
**Analytical Method:** SW6020  
**Unit:** mg/kg  
**Sample ID:** MB-119340

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Arsenic	ND	-	0.50	-	-	-	-
Barium	ND	-	5.0	-	-	-	-
Cadmium	ND	-	0.25	-	-	-	-
Chromium	ND	-	0.50	-	-	-	-
Lead	ND	-	0.50	-	-	-	-
Mercury	ND	-	0.050	-	-	-	-
Selenium	ND	-	0.50	-	-	-	-
Silver	ND	-	0.50	-	-	-	-
<b>Surrogate Recovery</b>							
Terbium	487	-		500	97	-	-





## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/11/16  
**Date Analyzed:** 4/12/16  
**Instrument:** GC6A  
**Matrix:** Oil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119338  
**Extraction Method:** SW3580A  
**Analytical Method:** SW8015B  
**Unit:** mg/kg  
**Sample ID:** MB-119338

### QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	-	160	-	-	-	-
TPH-Motor Oil (C18-C36)	ND	-	800	-	-	-	-
<b>Surrogate Recovery</b>							
C9	1830	-		2000	92	-	-



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/9/16  
**Instrument:** GC9a  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 119278  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-119278  
 1604346-001AMS/MSD

### QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	40.0	1.0	40	-	100	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	22.2	22.4		25	89	89	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	39.6	39.0	40	2.846	92	90	70-130	1.51	30
<b>Surrogate Recovery</b>									
C9	22.1	22.1	25		88	88	70-130	0	30



## Quality Control Report

**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 4/8/16  
**Date Analyzed:** 4/9/16  
**Instrument:** GC9b  
**Matrix:** Water  
**Project:** SCS557; Trimble Tank Pull

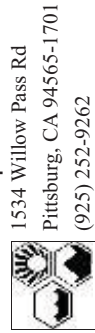
**WorkOrder:** 1604363  
**BatchID:** 119286  
**Extraction Method:** SW3510C  
**Analytical Method:** SW8015B  
**Unit:** µg/L  
**Sample ID:** MB/LCS/LCSD-119286

### QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
<b>Surrogate Recovery</b>					
C9	562		625	90	65-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1070	1090	1000	107	109	61-157	1.49	30
<b>Surrogate Recovery</b>								
C9	564	569	625	90	91	65-122	0.968	30





1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1604363 ClientCode: SCO

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  EQulS  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Kevin Loeb  
Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538  
(510) 226-9944 FAX: (510) 625-8176

**Bill to:**

Accounts Payable  
Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538  
priscillajazz@yahoo.com

Requested TAT: 5 days;

Date Received: 04/08/2016

Date Logged: 04/08/2016

Email: kevin@schutze-inc.com; js@schutze-inc.co  
cc/3rd Party:  
PO: 44358 South Grimmer Blvd  
ProjectNo: SCS557; Trimble Tank Pull

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)									
					13	14	15	16	17	18	19	20	21	22

1604363-001	B-10-W	Water	4/7/2016	<input type="checkbox"/>																				
1604363-002	SW-10-NW	Soil	4/7/2016	<input type="checkbox"/>	A										A									
1604363-003	SW-10-SE	Soil	4/7/2016	<input type="checkbox"/>	A										A									
1604363-004	TC	Oil	4/6/2016	<input type="checkbox"/>						A	A	A												
1604363-005	BF-1,2	Soil	4/6/2016	<input type="checkbox"/>	A																			

**Test Legend:**

13	LUFTMS_6020_TTLC_S	14	LUFTMS_TTLC_W	15	PH_L	16	RCRAMS_TTLC_O
17	TPH_O	18	TPH_S	19	TPH_W	20	
21		22		23		24	

Prepared by: Briana Cutino

The following SampleIDs: 001A, 001B, 002A, 003A, 004A, 005A contain testgroup.

Comments: Citric Acid added to 001\_4/11/16 5D\_TAT

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



## WORK ORDER SUMMARY

**Client Name:** SCHUTZE & ASSOCIATES, INC.      **QC Level:** LEVEL 2      **Work Order:** 1604363  
**Project:** SCSS57; Trimble Tank Pull      **Client Contact:** Kevin Loeb      **Date Logged:** 4/8/2016  
**Comments:** Citric Acid added to 001 4/11/16 5D TAT      **Contact's Email:** kevin@schutze-inc.com; js@schutze-inc.com; Mari@schutze-inc.com; claudine@schutze-inc.com

WaterTrax    WriteOn    EDF    Excel    Fax    Email    HardCopy    ThirdParty    J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1604363-001A	B-10-W	Water	Multi-Range TPH(g,d,mo)	1	VOA w/ HCl	<input type="checkbox"/>	4/7/2016	5 days	Present	<input type="checkbox"/>	
1604363-001B	B-10-W	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	VOA w/ HCl	<input type="checkbox"/>	4/7/2016	5 days	Present	<input type="checkbox"/>	
1604363-001C	B-10-W	Water	E200.8 (LUFT)	1	VOA w/ HCl	<input type="checkbox"/>	4/7/2016	5 days	Present	<input type="checkbox"/>	
1604363-002A	SW-10-NW	Soil	SW6020 (LUFT)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	4/7/2016	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1604363-003A	SW-10-SE	Soil	SW6020 (LUFT)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	4/7/2016	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1604363-004A	TC	Oil	SW6020 (RCRA Metals)	1	ILA w/ HCl	<input type="checkbox"/>	4/6/2016	5 days		<input type="checkbox"/>	
			SM9040B (pH)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW1010 (Flash Point)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** SCHUTZE & ASSOCIATES, INC. **QC Level:** LEVEL 2 **Work Order:** 1604363  
**Project:** SCS557; Trimble Tank Pull **Client Contact:** Kevin Loeb **Date Logged:** 4/8/2016  
**Comments:** Citric Acid added to 001 4/11/16 5D TAT  
**Contact's Email:** kevin@schutze-inc.com; js@schutze-inc.com;  
 Mari@schutze-inc.com; claudine@schutze-inc.com

WaterTrax  WriteOn  EDF  Excel  Fax  Email  HardCopy  ThirdParty  J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1604363-004A	TC	Oil	SW9045C (Corrosivity) TPH(g) & 8260 (Basic List) by P&T GCMS	1	1LA w/ HCl	<input type="checkbox"/>	4/6/2016	5 days	<input type="checkbox"/>		
1604363-005A	BF-1,2	Soil	SW6020 (LUFT) SW8021B/8015Bm (G/MBTEX) TPH(g) & 8260 (Basic List) by P&T GCMS	2 / (2:1)	Stainless Steel tube 2"x6"	<input type="checkbox"/>	4/6/2016	5 days	<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.







### Sample Receipt Checklist

Client Name: **Schutze & Associates, Inc.**  
 Project Name: **SCS557; Trimble Tank Pull**  
 WorkOrder No: **1604363** Matrix: Oil/Soil/Water  
 Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **4/8/2016 18:55**  
 Date Logged: **4/8/2016**  
 Received by: **Briana Cutino**  
 Logged by: **Briana Cutino**

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Sample/Temp Blank temperature Temp: 2°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

#### UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes  No  NA   
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes  No  NA

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1604363 A

**Report Created for:** Schutze & Associates, Inc.  
44358 South Grimmer Blvd  
Fremont, CA 94538

**Project Contact:** Kevin Loeb  
**Project P.O.:**  
**Project Name:** SCS557; Trimble Tank Pull

**Project Received:** 04/08/2016

Analytical Report reviewed & approved for release on 05/10/2016 by:

Angela Rydelius,  
Laboratory Manager

*The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.*





## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1604363

### Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



## Glossary of Terms & Qualifier Definitions

**Client:** Schutze & Associates, Inc.  
**Project:** SCS557; Trimble Tank Pull  
**WorkOrder:** 1604363

### Analytical Qualifiers

H samples were analyzed out of holding time  
S Surrogate spike recovery outside accepted recovery limits  
a1 sample diluted due to matrix interference  
a3 sample diluted due to high organic content.  
a4 reporting limits raised due to the sample's matrix prohibiting a full volume extraction.  
b6 lighter than water immiscible sheen/product is present  
d2 heavier gasoline range compounds are significant (aged gasoline?)  
d5 TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?)  
d7 strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram  
e2 diesel range compounds are significant; no recognizable pattern  
e4 gasoline range compounds are significant.  
e7 oil range compounds are significant  
e8 kerosene/kerosene range/jet fuel range  
e11/e4 stoddard solvent/mineral spirit (?); and/or gasoline range compounds are significant.

### Quality Control Qualifiers

F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.



# Analytical Report

**Client:** Schutze & Associates, Inc.  
**Date Received:** 4/8/16 18:55  
**Date Prepared:** 5/3/16  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**Extraction Method:** SW3060A  
**Analytical Method:** SW7199  
**Unit:** mg/Kg

## Hexachrome by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SW-10-SE	1604363-003A	Soil	04/07/2016	IC2	120442

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	4.0	1	05/05/2016 16:28

Analyst(s): AO



## Quality Control Report

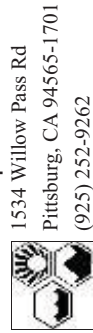
**Client:** Schutze & Associates, Inc.  
**Date Prepared:** 5/3/16  
**Date Analyzed:** 5/5/16  
**Instrument:** IC2  
**Matrix:** Soil  
**Project:** SCS557; Trimble Tank Pull

**WorkOrder:** 1604363  
**BatchID:** 120442  
**Extraction Method:** SW3060A  
**Analytical Method:** SW7199  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-120442  
 1604363-003AMS/MSD

### QC Summary Report for SW7199 (Hexachrome)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Hexachrome	ND	200	4.0	200	-	100	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Hexachrome	175	174	200	ND	88	87	70-130	1.03	20



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1604363 A ClientCode: SCO

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  Fax  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:** Kevin Loeb      Accounts Payable  
 Schutze & Associates, Inc.      Schutze & Associates, Inc.  
 44358 South Grimmer Blvd      44358 South Grimmer Blvd  
 Fremont, CA 94538      Fremont, CA 94538  
 (510) 226-9944      FAX: (510) 625-8176      priscillajazz@yahoo.com

**Bill to:** Accounts Payable  
 Schutze & Associates, Inc.  
 44358 South Grimmer Blvd  
 Fremont, CA 94538  
 priscillajazz@yahoo.com

**Requested TAT:** 5 days;      **Date Received:** 04/08/2016  
**Date Logged:** 04/08/2016      **Date Add-On:** 04/29/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12

1604363-003	SW-10-SE	Soil	4/7/2016	<input type="checkbox"/>	A														
-------------	----------	------	----------	--------------------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Test Legend:**

1	7199_TTLC_S	2	3	4
5		7	8	11
9		10	12	

Prepared by: Briana Cutino  
Add-On Prepared By: Maria Venegas

**Comments:** 7199 TTLC added to 003 4/29/16 5D TAT

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.







## **APPENDIX C**

### **1951 Sanborn Map (detail)**

14TH  
1633-35 1637-39-4

E. 14TH ST.  
1643

E. 14TH ST. 1647

D.H.

(33)  
F.A.

2 20' P.C.  
MACHINE SHOP

1B1  
11B  
3F

9' X 9'  
SAW  
FILING

12' 10'  
A. &  
STGE.  
CONC. FL.

W.G.  
W.G.  
W.G.  
W.G.

16'  
WOOD POSTS - CONC.  
F.L.R. - STEEL TRUSS ROOF.

DYEING & CLEANING WKS.

17TH RV. 1249

30'

R. 1643  
E. 14TH ST.

(TILE)

TILE WALL

1R. CH.  
DRY CLEANING  
TILE INF. CONC. WALLS. CONC.  
FIRE

AV.

SOLANO WAY.

40

20'

216

# **APPENDIX D**

## **UST Unauthorized Release Report**

**(April 7, 2016)**



# **APPENDIX E**

## **Hazardous Waste Tank Closure Certification Forms**

1 tank # (1)

# UNIFIED PROGRAM CONSOLIDATED FORM HAZARDOUS WASTE HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

Page \_\_\_\_ of \_\_\_\_

## I. FACILITY IDENTIFICATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)<sup>3.</sup> Warehouse at 1647 International Blvd FACILITY ID# CA C 0 0 2 8 5 9 8 0 4<sup>1.</sup>

TANK OWNER NAME Irene Trimble & Alan Diman<sup>740.</sup>

TANK OWNER ADDRESS 2101 Sunset Drive W.<sup>741.</sup>

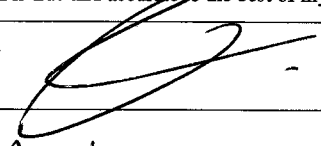
TANK OWNER CITY University Place<sup>742.</sup> STATE WA<sup>743.</sup> ZIP CODE 98466<sup>744.</sup>

## II. TANK CLOSURE INFORMATION

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor			Concentration of Oxygen		
		Top	Center	Bottom	Top	Center	Bottom
		1	<u>1</u> <sup>745.</sup>	<u>55</u> <sup>746a.</sup>	<u>75</u> <sup>746b.</sup>	<u>55</u> <sup>746c.</sup>	<u>85</u> <sup>747a.</sup>
2	<u>748.</u>	<u>749a.</u>	<u>749b.</u>	<u>749c.</u>	<u>750a.</u>	<u>750b.</u>	<u>750c.</u>
3	<u>751.</u>	<u>752a.</u>	<u>752b.</u>	<u>752c.</u>	<u>753a.</u>	<u>753b.</u>	<u>753c.</u>

## III. CERTIFICATION

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER  STATUS OR AFFILIATION OF CERTIFYING PERSON Certifier is a representative of the CUPA, authorized agency, or LIA:<sup>760.</sup>

NAME OF CERTIFIER (Print)<sup>754.</sup> Todd Hurley  Yes  No

TITLE OF CERTIFIER<sup>755.</sup> U.P. Name of CUPA, authorized agency, or LIA:<sup>761.</sup>

ADDRESS<sup>756.</sup> 530 Boulder Ct #106 If certifier is other than CUPA / LIA check appropriate box below:<sup>762.</sup>

CITY<sup>757.</sup> Pleasanton Ca 94566  a. Certified Industrial Hygienist (CIH)

PHONE<sup>758.</sup> 925-727-9413  b. Certified Safety Professional (CSP)

DATE<sup>759.</sup> 6/8/16 CERTIFICATION TIME  c. Certified Marine Chemist (CMC)

d. Registered Environmental Health Specialist (REHS)

e. Professional Engineer (PE)

f. Class II Registered Environmental Assessor

g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS  Yes  No<sup>763.</sup>  
(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.)

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC:<sup>764.</sup>  
Destruction

A copy of this certificate shall accompany the tank to the recycling/disposal facility and be provided to the agency overseeing tank closure (i.e. CUPA or other authorized local agency); the owner and/or operator of the tank system; and the tank removal contractor.

Tank # 2

**UNIFIED PROGRAM CONSOLIDATED FORM  
HAZARDOUS WASTE  
HAZARDOUS WASTE TANK CLOSURE CERTIFICATION**

**I. FACILITY IDENTIFICATION**

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) <sup>3.</sup> *Ware house at 1647 International Blvd* FACILITY ID# *CA 000 2859804* <sup>1.</sup>

TANK OWNER NAME <sup>740.</sup>  
*Irene Trimble & Alan Dimen*

TANK OWNER ADDRESS <sup>741.</sup>  
*2101 Sunset Drive W.*

TANK OWNER CITY <sup>742.</sup> *University Place* STATE <sup>743.</sup> *WA* ZIP CODE <sup>744.</sup> *98466*

**II. TANK CLOSURE INFORMATION**

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor			Concentration of Oxygen		
		Top	Center	Bottom	Top	Center	Bottom
		1	<i>2</i> <sup>745.</sup>	<i>&lt; 5</i> <sup>746a.</sup>	<i>5</i> <sup>746b.</sup>	<i>&lt; 5</i> <sup>746c.</sup>	<i>&lt; 5</i> <sup>747a.</sup>
2	<sup>748.</sup>	<sup>749a.</sup>	<sup>749b.</sup>	<sup>749c.</sup>	<sup>750a.</sup>	<sup>750b.</sup>	<sup>750c.</sup>
3	<sup>751.</sup>	<sup>752a.</sup>	<sup>752b.</sup>	<sup>752c.</sup>	<sup>753a.</sup>	<sup>753b.</sup>	<sup>753c.</sup>

**III. CERTIFICATION**

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER <sup>754.</sup> 	STATUS OR AFFILIATION OF CERTIFYING PERSON <sup>760.</sup> Certifier is a representative of the CUPA, authorized agency, or LIA: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Name of CUPA, authorized agency, or LIA: <sup>761.</sup> <i>N/A</i> If certifier is other than CUPA / LIA check appropriate box below: <sup>762.</sup> <input type="checkbox"/> a. Certified Industrial Hygienist (CIH) <input type="checkbox"/> b. Certified Safety Professional (CSP) <input type="checkbox"/> c. Certified Marine Chemist (CMC) <input type="checkbox"/> d. Registered Environmental Health Specialist (REHS) <input type="checkbox"/> e. Professional Engineer (PE) <input type="checkbox"/> f. Class II Registered Environmental Assessor <input checked="" type="checkbox"/> g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)
NAME OF CERTIFIER (Print) <sup>754.</sup> <i>Todd Hurley</i>	
TITLE OF CERTIFIER <sup>755.</sup> <i>U.P</i>	
ADDRESS <sup>756.</sup> <i>530 Boulder Ct #106</i>	
CITY <sup>757.</sup> <i>Pleasanton, Ca 94566</i>	
PHONE <sup>758.</sup> <i>925 727-9413</i>	
DATE <sup>759.</sup>	CERTIFICATION TIME

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS <sup>763.</sup>  
(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.)  Yes  No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC: <sup>764.</sup>  
*Destruction*

A copy of this certificate shall accompany the tank to the recycling/disposal facility and be provided to the agency overseeing tank closure (i.e. CUPA or other authorized local agency); the owner and/or operator of the tank system; and the tank removal contractor.



# **APPENDIX F**

## **Waste Disposal Documentation**

WEIGHMASTER CERTIFICATE Number E-305357 Original

Date/Time: 03/03/16 09:45:57 AM



Dealers in Ferrous and Non-Ferrous Metals

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

WEIGHMASTER:

Alco Iron & Metal Co.  
1091 Doolittle Dr.  
San Leandro, CA 94577

Delivered To: (Buyer)  
Alco Iron & Metal Co

Carrier: SELLER  
Truck ID:  
License: 5Y46442  
Trailers: N\A N\A

Weighed For: (Seller)  
WESTERN ABATEMENT / PLEASAN  
530 BOULDER CT # 106  
PLEASANTON, CA 94566

Commodity: 1-UNPREP

9,540 LB Gross E 03/03/16 09:17:16 AM  
8,020 LB Tare E 03/03/16 09:45:56 AM  
1,520 LB Net

Jose Hernandez

Notes:

#.04 60.80

JOB # OAKLAND UST

CERT of Distribution  
STEEL RECEIVED  
ON ACCOUNT  
2016

Deputy SIGNATURE

Jose M HIDALGO  
Driver SELLER 1

Ally Scott

BILL OF SALE

I hereby state that I am the lawful owner of the material described herein, that have a right to sell same and that for payment received in full, hereby acknowledge I sell and convey title of same to Alco Iron & Metal Co.

HOLD HARMLESS AGREEMENT:

Seller will indemnify and hold buyer harmless from damages, demands, and liabilities, including reasonable attorney's fees resulting from the breach of any warranty hereunder and driver agrees to be responsible for damage to vehicle during unloading.

I represent and warrant that this material does not contain a hazardous substance as defined by Federal or State Law, and I agree to indemnify Alco Iron & Metal Co. against all claims

US1 TANK

**WEIGHMASTER CERTIFICATE Number E-309224 Customer**

Date/Time: 04/08/16 08:51:51 AM



Dealers in Ferrous and Non-Ferrous Metals

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

**WEIGHMASTER:**

Alco Iron & Metal Co.  
1091 Doolittle Dr.  
San Leandro, CA 94577

Delivered To: (Buyer)  
**Alco Iron & Metal Co**

Carrier: **SELLER**  
Truck ID:  
License: **5Y46442**  
Trailers: **N\A N\A**

Weighed For: (Seller)  
**WESTERN ABATEMENT / OAKLAND  
16TH ST & WOOD ST  
OAKLAND, CA**

Commodity: **1-UNPREP**

**9,860 LB Gross E 04/08/16 08:35:02 AM  
7,980 LB Tare E 04/08/16 08:51:48 AM  
1,880 LB Net**

100-620-91-AM  
WA-16-029-001

**Jose Hernandez**

Notes:

BIG TANK

Deputy SIGNATURE

Driver SELLER 1

**BILL OF SALE**

I hereby state that I am the lawful owner of the material described herein, that have a right to sell same and that for payment received in full, hereby acknowledge I sell and convey title of same to Alco Iron & Metal Co.

**HOLD HARMLESS AGREEMENT:**

Seller will indemnify and hold buyer harmless from damages, demands, and liabilities, including reasonable attorney's fees resulting from the breach of any warranty hereunder and driver agrees to be responsible for damage to vehicle during unloading.  
I represent and warrant that this material does not contain a hazardous substance as defined by Federal or State Law, and I agree to indemnify Alco Iron & Metal Co. against all claims