

---

**REMOVAL OF UNDERGROUND STORAGE TANK  
PARKSIDE  
5750 – 5780 HOLLIS STREET  
Emeryville, California**

**Archstone  
Oakland, California**

**13 November 2012  
Project No. 73147902**

13 November 2012  
Project 731047902

Mr. Daniel Emerson  
Archstone  
807 Broadway Street, Suite 210  
Oakland, California 94607

Subject: Removal of Underground Storage Tank  
Parkside Development  
Emeryville, California

Dear Mr. Emerson:

We are pleased to submit our report titled "*Removal of Underground Storage Tank*" for the Parkside development in Emeryville, California.

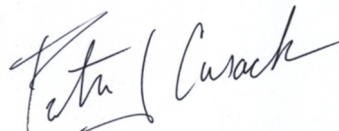
We appreciate the opportunity to be of service to you on this project. If you have any questions or require additional information, please call.

We appreciate the opportunity to assist you with this project. If you have any questions or need any information clarified, please call Mr. Peter J. Cusack at (415) 955-5244.

Sincerely yours,  
Treadwell & Rollo, A Langan Company



Noel Liner, PG  
Senior Staff Geologist



Peter J. Cusack, REA  
Associate

731047902.07 NL\_Ltr.

Enclosure

cc: Mr. Chris Tougeron – Alameda County Department of Environmental Health

---

**REMOVAL OF UNDERGROUND STORAGE TANK  
PARKSIDE  
5750 – 5780 HOLLIS STREET  
Emeryville, California**

**Archstone  
Oakland, California**

**13 November 2012  
Project No. 73147902**

**TABLE OF CONTENTS**

1.0 INTRODUCTION .....1  
2.0 BACKGROUND .....1  
3.0 FIELD ACTIVITIES .....2  
    3.1 Removal of One 6,000-Gallon Heating Oil Underground Storage Tank .....2  
    3.2 Soil Sampling .....3  
4.0 ANALYTICAL TESTING.....3  
5.0 ANALYTICAL RESULTS .....4  
    5.1 Tank Excavation Results .....4  
    5.2 Stockpiled Soil Results .....4  
6.0 EXCAVATION BACKFILL.....5  
7.0 OBSERVATIONS .....5  
8.0 CONCLUSIONS.....5  
9.0 LIMITATIONS .....6

TABLES

FIGURES

APPENDIX A - Permits, Notifications, and Inspection Records

APPENDIX B - Hazardous Waste Manifests and Disposal Records

APPENDIX C - Analytical Results and Chain-of-Custody Records

**REMOVAL OF UNDERGROUND STORAGE TANK  
PARKSIDE  
5750 - 5780 HOLLIS STREET  
Emeryville, California**

**1.0 INTRODUCTION**

This report describes and documents the removal of one 6,000-gallon heating oil underground storage tank (UST) and associated piping from the Site at 5780 Hollis Street, Emeryville, California (Figure 1). The approximately 2.35 acre site currently contains two vacant buildings and asphalt parking. The Site is bounded by Doyle Street to the east, Powell Street to the north, Stanford Avenue to the south, and Hollis Street to the west. Development plans include demolishing the existing structures and constructing apartments. The development will consist of a podium parking structure with apartment units above the parking structure in the area bound by Powell Street, Hollis Street, Doyle Street, and the City of Emeryville Parking lot.

Based on a previous consultant's environmental report, the 6,000-gallon heating oil UST was located adjacent to the southeastern-most corner of the building, outside the building footprint, within the City of Emeryville parking lot and abutting Doyle Street (Figure 2). The heating oil tank was reported by the City of Emeryville to have been installed to service the subject property. No further information was available on the installation date of the UST; a square shaped feature on the 1911 Sanborn map was reported, however it was unclear if the feature represented the UST (PES 2006).

Complete Environmental Solutions, Inc. of Benicia, California, a licensed remediation contractor, removed and disposed of the tank. Treadwell & Rollo was retained to observe the removal activities, collect and analyze soil samples, evaluate the analytical results, consult with the client and contractor, and prepare this report documenting these activities.

**2.0 BACKGROUND**

The UST was previously uncovered in 1992 by the City of Emeryville during a Street relocation and park project at the northwest corner of Doyle and Stanford Avenue. The UST was also identified in 1993, 1994, and 2006 Phase I Environmental Site Assessments (Harza Kaldvee, Ceres, and PES, respectively) conducted for the Site.

### **3.0 FIELD ACTIVITIES**

Tank removal began on 9 September 2012 and was completed on 11 September 2012. The work which was performed by Complete Environmental Solutions, Inc. consisted of:

- Saw-cutting and demolishing the concrete above the UST;
- Excavating soil to expose the UST;
- Inerting the tank;
- Removing, inspecting, and disposing of the tank; and
- Backfilling the excavations with the stockpiled soil.

The tank was removed prior to the approval of the underground storage tank closure plan obtained from the Alameda County Department of Environmental Health (ACDEH); the Alameda County Fire Department (ACFD) was notified prior to removing the UST. Copies of the permits, notifications, and inspection records are presented in Appendix A.

#### **3.1 Removal of One 6,000-Gallon Heating Oil Underground Storage Tank**

The 6,000-gallon heating oil tank was located beneath the City of Emeryville parking lot, along the southern wall of the Powell Street building in the southeast corner of the property. On 10 September 2012, a portion of the concrete and asphalt and the underlying soil was removed to a depth of approximately 3 feet below ground surface to the top of the tank. Prior to the tank removal activities, the tank was triple-rinsed with water to ensure that the residual heating oil was removed; rinsate water was removed from the tank and collected within a vacuum truck. Mr. Chris Tougeron and Mr. Mark Detterman, Hazardous Materials Specialists for the ACDEH were present during the tank removal activities. After completion of rinsing, the 6,000-gallon heating oil UST was removed and visually inspected.

The tank was located on a concrete pad and constructed of single-wall steel. The tank appeared to be in good condition with no visible evidence of any pitting or containment failures. The tank was loaded onto a truck and disposed of under hazardous waste manifests. Copies of the hazardous waste manifests and disposal records are provided in Appendix B.

The 6,000-gallon tank measured approximately 18 feet in length and 8 feet in diameter. The tank excavation measured approximately 25 feet long by 11 feet wide by 12 feet deep. The soil surrounding

the tank consisted of heterogeneous fill material. No obvious soil staining, odors, or groundwater were observed during the excavation and removal process.

### **3.2 Soil Sampling**

Treadwell & Rollo collected a total of six soil samples from the excavation; two base samples from the soil below the tank and four sidewall samples (one from each sidewall). The base samples were gathered at approximately 12 feet below ground surface on the east and west side of the former tank pits. Sidewall samples Tank1-NW, Tank1-EW, and Tank1-WW were collected approximately 4.5 feet below the ground surface. Sidewall sample Tank1-SW was collected approximately 6 feet below the ground surface. The samples were obtained by excavating a small quantity of soil with a backhoe bucket and driving a two-inch-diameter stainless steel tube into the soil. The ends of the sample tubes were covered with Teflon and plastic caps.

The soil that was excavated in order to remove the tank was stockpiled in the parking lot on plastic sheeting and secured by the contractor prior to collecting a four-point composite soil sample for analysis for stockpile disposal. All samples were collected into four-inch by two-inch stainless steel sampling tubes, capped with Teflon and plastic sample caps, labeled, and placed in an ice-cooled chest until delivery to a certified laboratory under chain-of-custody procedures. The locations of the samples are shown on Figure 2.

### **4.0 ANALYTICAL TESTING**

The soil samples were delivered to McCampbell Analytical, Inc., a California certified analytical laboratory in Pittsburg, California. The soil samples were analyzed for the following constituents:

- Total petroleum hydrocarbons as diesel (TPH-d) by EPA 8015 Modified;
- Total petroleum hydrocarbons as motor oil (TPH-mo) by EPA 8015 Modified;
- Total petroleum hydrocarbons as gasoline (TPH-g) by EPA 8015;
- Volatile organic compounds (VOCs) by EPA Method 8260B;
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270C; and,
- LUFT 5 metals (cadmium, chromium, lead, nickel, and zinc) by EPA method 6010B.

Analyses were consistent with the recommendations contained in the "Recommended Minimum Verification Analysis for Underground Storage Tank Leaks" published by the San Francisco Bay Regional Water Quality Control Board (revision date 21 November 2003) for tanks containing heating fuel/heating oil.

## **5.0 ANALYTICAL RESULTS**

The analytical results of the soil samples from the UST excavation and stockpile are presented in Table 1. A copy of the certified laboratory report for the analyses described above is presented in Appendix C.

### **5.1 Tank Excavation Results**

No TPHg, VOCs, or SVOCs were detected in any soil samples, including any fuel additives or oxygenates such as MTBE, EDB, EDC, TAME, ETBE, DIPE, TBA, or BTEX at or above the reported detection limits.

TPH-d was detected in four of the six samples at concentrations ranging from 2.7 milligrams per kilogram (mg/kg) in the north sidewall sample (Tank1-NW) to 200 mg/kg in the bottom sample at the eastern end (Tank1-E) of the excavation. TPH-mo was detected in four of the six samples at concentrations ranging from 22 mg/kg in the north sidewall sample (Tank1-NW) to 360 mg/kg in the bottom sample collected at the eastern end (Tank1-E) of the excavation. One sample (Tank1-E) had a reported detection of TPH-d above the applicable ESL (200 mg/kg versus 180 mg/kg) and TPH-mo near the ESL (360 mg/kg versus 370 mg/kg). All other samples were much lower than ESLs or did not have detections.

With the exception of total lead in sample Tank1-E, chromium, lead, nickel, and zinc were all reported above detection limits in each sample, however all detections for metals were below SF Bay Regional Water Quality Control Board residential ESLs. Cadmium was not detected in any soil sample.

### **5.2 Stockpiled Soil Results**

No TPHg, VOCs, or SVOCs were detected at or above the method reporting limits in the soil sample collected from the stockpiled soil. TPH-d and TPH-mo was detected in the stockpiled soil at concentrations of 18 mg/kg and 64 mg/kg, respectively. The metal concentrations were within background levels.



## **6.0 EXCAVATION BACKFILL**

The UST excavation was backfilled with the stockpiled soil that was excavated during the UST removal activities.

## **7.0 OBSERVATIONS**

Our observations during the tank removal activities and the results of the soil sampling are summarized below:

- The 6,000-gallon heating oil UST appeared to be in good condition with no visible evidence of pitting, holes, or containment failures;
- The tank was located on a concrete pad;
- The tank was thoroughly cleaned with rinsate to ensure that the tank was clean prior to removal;
- The backfill soil surrounding the tank consisted of heterogeneous fill material;
- No groundwater was encountered within the tank excavation;
- No TPHg, VOCs, or SVOCs were detected in soil samples collected from the beneath the tank, sidewall, or in the stockpiled soil at or above the method reporting limits;
- Low levels of TPH-d and TPH-mo were detected in the bottom, north sidewall, east sidewall, and stockpiled samples but the levels are below the Site's established cleanup goals of 83 mg/kg and 370 mg/kg, respectively;
- Minor concentrations of lead, nickel, chromium and zinc were detected in the soil samples collected from the tank excavation, sidewall and the stockpiled soil samples;
- The tank was loaded onto a licensed hazardous waste truck and transported to Ecology Control Industries, at 255 Parr Boulevard in Richmond, CA, a State certified treatment facility for final cleaning, then transported to Alco Iron and Metal, a metal recycler; and
- The rinsate was transported by Environmental Recovery Services of Gardena, California, to be disposed at Liquid Environmental Solutions in Phoenix, Arizona.

## **8.0 CONCLUSIONS**

On the basis of our observations during the UST removal and the analytical testing, we judge that the remedial activities described in this report successfully removed the heating oil UST adjacent to the

Powell Street building. Based on the analytical results, the surrounding soil was not adversely affected by the past use of the underground storage tank and further remediation and over excavation is not required. No groundwater was encountered during the tank excavation and therefore, has not likely been affected by the past use of the underground storage tank. Based on these results, we request that this Site be granted Case Closure with no further action required.

## **9.0 LIMITATIONS**

Descriptions of specific field activities and historical events are based on our observations, and on information provided by others. The opinions and information presented in this report apply to site conditions and the information available at the time the work was performed and do not apply to changes of which we are not aware or have not had the opportunity to evaluate.

**TABLES**

**Table 1**  
**Soil Analytical Results for Non-Metals**  
**Parkside**  
**Emeryville, California**  
**Project: 731047902**

Sample ID	Depth (feet)	Date Sample	TPHg	TPHd	TPHmo	VOCs	SVOCs	
			<b>mg/kg</b>					
Tank1-E	12.0	9/11/12	< 1.0	<b>200</b>	360	ND	ND	
Tank1-W	12.0	9/11/12	< 1.0	34	67	ND	ND	
Tank1-NW	4.5	9/11/12	< 1.0	2.7	22	ND	ND	
Tank1-SW	6.0	9/11/12	< 1.0	< 1.0	< 5.0	ND	ND	
Tank1-EW	4.5	9/11/12	< 1.0	8.3	36	ND	ND	
Tank1-WW	4.5	9/11/12	< 1.0	< 1.0	< 5.0	ND	ND	
SP-1-4	--	9/11/12	< 1.0	18	64	ND	ND	
<b>Environmental Screening Levels (mg/kg)</b>								
≤ 10			100	100	370	--	--	
≥ 10			180	180	5000	--	--	

**Notes:**

mg/kg - milligrams per kilograms

TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M

TPHd - Total Petroleum Hydrocarbons as Diesel Range, EPA Method 8015M

VOCs - Volatile Organic Compounds, EPA Method SW8260B

SVOCs - Semi-Volatile Organic Compounds, EPA Method SW8270C

ND - Not detected at or above the laboratory reporting limit

< 1.0 - Analyte was not detected above the laboratory reporting limit (1.0 mg/kg)

-- - Not Applicable

Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007, Residential Land Use where groundwater is not a current or potential drinking water resource

**Table 2**  
**Soil Analytical Results for Metals**  
**Parkside**  
**Emeryville, California**  
**Project: 731047902**

Sample ID	Depth (feet)	Date Sampled	Cadmium	Chromium	Lead	Nickel	Zinc	
			<b>(mg/kg)</b>					
Tank1-E	12.0	9/11/12	< 1.5	58	< 5.0	78	69	
Tank1-W	12.0	9/11/12	< 1.5	72	9.4	100	110	
Tank1-NW	4.5	9/11/12	< 1.5	64	44	46	90	
Tank1-SW	6.0	9/11/12	< 1.5	76	10	48	57	
Tank1-EW	4.5	9/11/12	< 1.5	73	19	45	70	
Tank1-WW	4.5	9/11/12	< 1.5	90	10	54	70	
SP-1-4	--	9/11/12	< 1.5	53	74	59	140	
<b>Hazardous Waste Criteria</b>								
TTL	(mg/kg)		100	2,500	1,000	2,000	5,000	
STL	(mg/L)		1	--	--	20	250	
TCL	(mg/L)		--	--	--	--	--	
<b>Environmental Screening Levels (mg/kg)</b>								
	≤ 10		1.7	750	200	150	600	
	≥ 10		39	2,500	750	260	2,500	

**Notes:**

mg/kg - milligrams per kilograms

< 1.5 - Analyte was not detected above the laboratory reporting limit (1.5 mg/kg).

-- Not analyzed

TTL - California Total Threshold Limit Concentration - State hazardous waste criterion

STL - California Soluble Threshold Limit Concentration

TCL - Federal Toxicity Characteristic Leaching Procedure

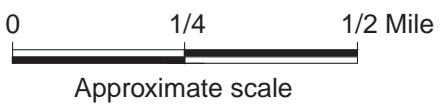
-- - Not Applicable

Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007, Residential Land Use where groundwater is not a current or potential drinking water resource

**FIGURES**



Base map: The Thomas Guide  
 San Francisco County  
 1999



**PARKSIDE**  
 Emeryville, California

**SITE LOCATION MAP**



Date 08/10/12 Project No. 731047902 Figure 1

\\langan.com\data\SF\data9\731047902\Cadd Data - 731047902\2D-DesignFiles\Environmental\731047902-N-SP0105.dwg 11/12/12



Reference: Base map from drawing titled "Soil and Groundwater Sampling Locations, The Papermill", by PES Environmental, Inc. dated 05/06

**EXPLANATION**

- S1 Approximate location of soil sample by Anton Geological dated October 2002
- SB-1 Approximate location of soil boring by PES Environmental dated April 2006
- GW-1 Approximate location of groundwater sample by PES Environmental dated April 2006
- SB-10 Approximate location of soil exploratory boring by Treadwell & Rollo, Inc. dated December 2006
- SB-3 Approximate location of soil, soil vapor and/or groundwater sample by Environ dated July 2012
- CS-1 Approximate location of soil boring by Treadwell & Rollo, October 2012
- TR-1 Approximate location of soil boring by Treadwell & Rollo, October 2012
- T-1-E Approximate location of soil samples from tank removal by Treadwell & Rollo, September 2012

- Approximate development boundary
- Approximate limits of under storage tank excavation
- Approximate limits of under storage tank excavation stockpile

0 40 Feet  
Approximate scale

<b>PARKSIDE</b> Emeryville, California		
<b>SITE PLAN WITH TANK EXCAVATION AND SAMPLE LOCATION</b>		
Date 11/12/12	Project No. 731047902	Figure 2
 A LANGAN COMPANY		



**APPENDIX A**  
**Permits, Notifications, and Inspection Records**

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

WORKING COPY

△ DAN EMERSON

\* TREADWELL

THIS PAGE - LEGAL ISSUES.

1. BUSINESS

a. BUSINESS - DEVELOPED, OWNER  
OR DEVELOPMENT?

4. OWNER - SAME AS ABOVE

5. GENERATOR - " " "

**UNDERGROUND STORAGE TANK CLOSURE PLAN**

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

- △ 1. Name of Business \_\_\_\_\_  
Business Owner or Contact Person (PRINT) \_\_\_\_\_
- △ 2. Site Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_
- △ 3. Mailing Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_
- △ 4. Property Owner \_\_\_\_\_  
Business Name (if applicable) \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_
- △ 5. Generator name under which tank will be manifested  
\_\_\_\_\_

\* EPA I.D. No. under which tank(s) will be manifested C A \_\_\_\_\_

TREADWELL TO GET.

6. Contractor COMPLETE ENVIRONMENTAL SOLUTIONS, INC.  
Address 4690 EAST 2<sup>ND</sup> STREET, #3  
City, State BENICIA, CA Zip 94510 Phone 707.747.4800  
License Type A-HAZ, ASB C-21 ID# 900268

\* 7. Consultant (if applicable) \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

\* 8. Main Contact Person for Investigation (if applicable)  
Name \_\_\_\_\_ Title \_\_\_\_\_  
Company \_\_\_\_\_  
Phone \_\_\_\_\_

9. Number of underground tanks being closed with this plan (1) ONE  
Length of piping being removed under this plan ± 20 FEET.  
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 ENVIRONMENTAL RECOVERY SERVICES EPA I.D. No. CAR000188201  
Hauler License No. 74655 License Exp. Date 7/31/12  
Address 15902 S Main St  
City, State Gardena, CA Zip 90248

b) Product/Residual Sludge/Rinsate Disposal Site  
Name LIQUID ENVIRONMENTAL SOLUTIONS OF ARIZONA EPA I.D. No. AZR000188201  
Address 5159 W. VAN BUREN ST.  
City, State PHOENIX, AZ Zip 85043

c) Tank and Piping Transporter

Name ECOLOGY CONTROL INDUSTRIES EPA I.D. No. CAD982030173  
Hauler License No. 1533 License Exp. Date 06/30/12  
Address 255 PARR BLVD.  
City, State RICHMOND, CA. Zip 94801

d) Tank and Piping Disposal Site

Name ECOLOGY CONTROL INDUSTRIES EPA I.D. No. CAD009466392  
Address 255 PARR BLVD.  
City, State RICHMOND, CA Zip 94801

\* 11. Sample Collector

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

\* 12. Laboratory

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Zip \_\_\_\_\_  
State Certification No. \_\_\_\_\_

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

If yes, describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

DRY ICE WILL BE PLACED INTO THE TANK @ A  
RATE OF 30 LBS/1000 GALS. AN LEL METER WILL  
BE USED TO VERIFY THE EFFECTIVENESS

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)		
6000			

**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	
Stockpiled Soil Volume (estimated)	Sampling Plan

**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

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

18. Submit Worker's Compensation Certificate copy

Name of Insurer STATE FUND # 1888014

\* 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.

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 COMPLETE ENVIRONMENTAL SOLUTIONS, INC

Name of Individual RONALD K. RINEHART

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

PROPERTY OWNER OR  MOST RECENT TANK OPERATOR (Check one)

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

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

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



**TABLE #2**  
 REVISED 21 NOVEMBER 2003

**RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR  
 UNDERGROUND TANK LEAKS**

<u>HYDROCARBON LEAK</u>	<u>SOIL ANALYSIS</u> (SW-846 METHOD)		<u>WATER ANALYSIS</u> (Water/Waste Water Method)	
<b>Gasoline (Leaded and Unleaded)</b>	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH	by 8260 for soil and 524.2/624 (8260) for water		
	TOTAL LEAD	AA --Optional--	TOTAL LEAD	AA
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT
<b>Unknown Fuel</b>	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH	by 8260 for soil and 524.2/624 (8260) for water		
	TOTAL LEAD	AA --Optional--	TOTAL LEAD	AA
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT
<b>Diesel, Jet Fuel, Kerosene, and Fuel/Heating Oil</b>	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH	by 8260 for soil and 524.2/624 (8260) for water		
<b>Chlorinated Solvents</b>	CL HC	8260	CL HC	524.2/624 (8260)
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or 502.2/602 (8021)
	1,4-Dioxane	8270M	1,4-Dioxane	8270M
<b>Non-chlorinated Solvents</b>	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or 502.2/602 (8021)
<b>Waste, Used, or Unknown Oil</b>	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	O&G	9070	O&G	418.1
	BTEX	8260	BTEX	524.2/624 (8260)
	CL HC	8260	CL HC	524.2/624 (8260)
	1,4-Dioxane	8270M	1,4-Dioxane	8270M
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH	by 8260 for soil and 524.2/624 (8260) for water		
	METALS (Cd, Cr, Pb, Ni, Zn)	by ICAP or AA for soil water		
	PCB*, PCP*, PNA, CREOSOTE	by 8270 for soil and 524/625 (8270) for water If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)		

**NOTES:**

1. 8021 replaces old methods 8020 and 8010
2. 8260 replaces old method 8240
3. Reference: Table B-1 in Appendix B of "Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators" (EPA 510-B-97-001).

TABLE #2  
REVISED 21 NOVEMBER 2003

RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR  
UNDERGROUND TANK LEAKS

<u>HYDROCARBON LEAK</u>	<u>SOIL ANALYSIS</u> (SW-846 METHOD)		<u>WATER ANALYSIS</u> (Water/Waste Water Method)	
Gasoline (Leaded and Unleaded)	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
	TOTAL LEAD	AA --Optional--	TOTAL LEAD	AA
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT
Unknown Fuel	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
	TOTAL LEAD	AA --Optional--	TOTAL LEAD	AA
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT
Diesel, Jet Fuel, Kerosene, and Fuel/Heating Oil	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260	BTEX	524.2/624 (8260)
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
Chlorinated Solvents	CL HC	8260	CL HC	524.2/624 (8260)
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or 502.2/602 (8021)
	1,4-Dioxane	8270M	1,4-Dioxane	8270M
Non-chlorinated Solvents	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or 502.2/602 (8021)
Waste, Used, or Unknown Oil	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)
	O&G	9070	O&G	418.1
	BTEX	8260	BTEX	524.2/624 (8260)
	CL HC	8260	CL HC	524.2/624 (8260)
	1,4-Dioxane	8270M	1,4-Dioxane	8270M
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)
	MTBE, TAME, ETBE, DIPE, TBA, and EtOH by 8260 for soil and 524.2/624 (8260) for water			
	METALS (Cd, Cr, Pb, Ni, Zn) by ICAP or AA for soil water			
	PCB*, PCP*, PNA, CREOSOTE by 8270 for soil and 524/625 (8270) for water			
If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)				

NOTES:

1. 8021 replaces old methods 8020 and 8010
2. 8260 replaces old method 8240
3. Reference: Table B-1 in Appendix B of "Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators" (EPA 510-B-97-001).

**APPENDIX B**  
**Hazardous Waste Manifests and Disposal Records**



<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>CA C002691273</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 368-4773</b>	4. Manifest Tracking Number <b>010562869 JJK</b>		
5. Generator's Name and Mailing Address <b>API EMERYVILLE PARKSIDE LLC 907 BROADWAY STE 210 OAKLAND CA 94607</b>				Generator's Site Address (if different than mailing address) <b>1342 STANFORD AVE EMERYVILLE CA 94608</b>			
Generator's Phone: <b>510 368-2419</b>				U.S. EPA ID Number <b>CAR000188201</b>			
6. Transporter 1 Company Name <b>ENVIRONMENTAL RECOVERY SERVICES, INC.</b>				U.S. EPA ID Number			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>DEMENNO KERDOON 2000 NORTH ALAMEDA STREET COMPTON CA 90222</b>				U.S. EPA ID Number <b>CAT080013352</b>			
Facility's Phone: <b>(610)837-7100</b>							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
1.	<b>NON RCRA HAZARDOUS WASTE, LIQUID (OIL)</b>	<b>1</b>	<b>DM</b>	<b>55</b>	<b>G</b>	<b>221</b>	
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information <b>9811 API'S - WASTE OIL</b>				<b>ERG#: 951, 171 - ERS W.O. 88030 - ECD</b>			
				<b>24 HR EMERGENCY CONTACT: ENVIROSERV</b>			
15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offeror's Printed/Typed Name <b>DARIL BRUCE WARE</b>				Signature <i>[Signature]</i>		Month Day Year <b>10 13 12</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <b>KENT</b>				Signature <i>[Signature]</i>		Month Day Year <b>10 18 12</b>	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number: _____							
18b. Alternate Facility (or Generator)				U.S. EPA ID Number			
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name				Signature		Month Day Year	



HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

Page of

I. FACILITY IDENTIFICATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) <sup>3</sup>	FACILITY ID#										
API EMERYVILLE PARKSIDE											
TANK OWNER NAME <span style="float:right">740</span>											
TANK OWNER ADDRESS <span style="float:right">741</span>											
1342 STANFORD AVE EMERYVILLE CA											
TANK OWNER CITY <span style="float:right">742</span>				STATE <span style="float:right">743</span>				ZIP CODE <span style="float:right">744</span>			

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	745	0 <sup>746a</sup>	0 <sup>746b</sup>	0 <sup>746c</sup>	19 <sup>747a</sup>	18 <sup>747b</sup>	14 <sup>747c</sup>
2	748						
3	751						

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
<i>Henry M. Sorenson</i> 633	Certifier is a representative of the CUPA, authorized agency, or LIA: <span style="float:right">760</span>
NAME OF CERTIFIER (Print) <span style="float:right">754</span>	<input type="checkbox"/> Yes <input type="checkbox"/> No
Henry Sorenson	Name of CUPA, authorized agency, or LIA: <span style="float:right">761</span>
TITLE OF CERTIFIER <span style="float:right">755</span>	If certifier is other than CUPA / LIA check appropriate box below: <span style="float:right">762</span>
MARINE CHEMIST	<input type="checkbox"/> a. Certified Industrial Hygienist (CIH)
ADDRESS <span style="float:right">756</span>	<input type="checkbox"/> b. Certified Safety Professional (CSP)
29338 CHANCE ST	<input checked="" type="checkbox"/> c. Certified Marine Chemist (CMC)
CITY <span style="float:right">757</span>	<input type="checkbox"/> d. Registered Environmental Health Specialist (REHS)
HAYWARD, CA 94544	<input type="checkbox"/> e. Professional Engineer (PE)
PHONE <span style="float:right">758</span>	<input type="checkbox"/> f. Class II Registered Environmental Assessor
510 209 9849	<input type="checkbox"/> g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)
DATE <sup>759</sup>	CERTIFICATION TIME
9/11/12	1415

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS 763  
 (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 764

A copy of this certificate shall accompany the tank to the recycling / disposal facility and be provided to the CUPA. If there is no CUPA, copies shall be submitted to the LIA and authorized agency; owner / operator of the tank system; removal contractor; and the recycling / disposal facility.



**WEIGHMASTER CERTIFICATE Number E-163043 Customer**

Date/Time: 09/11/12 04:04:31 PM



Dealers in Ferrous and Non-Ferrous Metals

WEIGHMASTER:  
Alco Iron & Metal Co.  
1091 Doolittle Dr.  
San Leandro, CA 94577

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.

Carrier: **SELLER**  
Truck ID:  
License: **FB19**  
Trailers: **N\A N\A**

Delivered To: (Buyer)  
**Alco Iron & Metal Co**

Commodity: **1-UNPREP - TANK**  
**8' x 15'**

Weighed For: (Seller)

*\* Need Cert. of Destruction*

*Enviroserve*  
811 HANSEN WAY → *Jobsite*  
PALO ALTO, CA 95585

17,260 LB Gross      E 09/11/12 03:38:58 PM  
11,500 LB Tare      E 09/11/12 04:04:31 PM  
5,760 LB Net

*ck to: Kent Olson*  
*19 Chilmark Ln*  
*Alameda, Ca 94502*  
*520-9614*

**Esteban Ruiz**

Notes:

*# - 05*



1091 Doolittle Drive San Leandro, CA 94577 PH: 510-562-1107 FAX: 510-562-6529

TO Cosignee	<b>Enviroserve Company</b>	Shipper No.	<b>9111220</b>
Address	1342 Standford Ave Emeryville, CA	Equipment:	20' Flat Bed
		Date:	9/11/2012

Contact Name **Kent** Contact PH# **510-520-9614**

No. of Shipping Units	Kind of Packaging, Description of Articles, Special Marks and Exceptions
1	Flat Bed Live Load

Received By: *[Signature]* *Driver Jesus R.*

Corporate Headquarters  
Metal Service Center  
2140 Davis Street  
San Leandro, CA 94577  
Ph: 510-562-1107  
Fax: 510-562-1354

San Leandro Division  
1091 Doolittle Drive  
San Leandro, CA 94577  
Ph: 510-562-1108  
Fax: 510-562-6259

Mare Island Division  
321 Azuar Drive  
Vallejo, CA 94592  
Ph: 707-562-1107  
Fax: 707-562-2531

Stockton Division  
2201 W. Washington  
Port Road 22  
Stockton, CA 95203  
Ph: 209-939-9310  
Fax: 209-939-9311

CERTIFICATE OF DESTRUCTION

This is to certify that the following items listed below were purchased by Alco for scrap purposes only. Alco Iron & Metal received the items below from:

Enviroserve – Kent Olsen

With the intention of dismantling the items in our Scrap Yard in San Leandro so that it could not be resold or used for its original manufactured purpose.

I, further certify that on 9-11-12, Alco Iron & Metal Company performed the above functions and will route all the recyclable materials to the appropriate vendors. This is all in accordance with all current laws and local ordinances.

The following items were purchased for destruction by Alco Iron & Metal Company:

A) Tank – 8' x 15'

Alco Iron & Metal Company  
1091 Doolittle Drive  
San Leandro, Ca 94577

Date 9-11-2012

By: *Holly J. Rawlins*

**APPENDIX C**  
**Analytical Results and**  
**Chain-of-Custody Records**





## Analytical Report

Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
		Date Received: 09/12/12
	Client Contact: Peter Cusack	Date Reported: 09/13/12
	Client P.O.:	Date Completed: 09/13/12

**WorkOrder: 1209271**

September 13, 2012

Dear Peter:

Enclosed within are:

- 1) The results of the **7** analyzed samples from your project: **#731047902; Parkside Emeryville,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
 Laboratory Manager  
 McC Campbell Analytical, Inc.

*The analytical results relate only to the items tested.*

# RUSH

1209271

## Treadwell & Rollo

Environmental and Geotechnical Consultant

### CHAIN OF CUSTODY RECORD

555 Montgomery Street, Suite 1300, San Francisco, CA 94111 Ph: 415.955.9040/Fax: 415.955.9041  
 501 14th Street, Third Floor, Oakland CA 94612 Ph: 510.874.4500/Fax: 510.874.4507  
 777 Campus Commons Rd., Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7412

Site Name: Parkside Emeryville  
 Job Number: 731047902  
 Project Manager/Contact: Peter Cusack  
 Samplers: Rob Milgrom  
 Recorder (Signature Required): *[Signature]*

**Turnaround**  
**Time**  
24 Hour

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix			No. Containers & Preservative						Analysis Requested				Silica gel clean-up	Hold	Remarks																
				Soil	Water	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	Other																								
TANK1-E	9-11-12	1440		X							X																								
TANK1-W	9-11-12	1442		X							X																								
TANK1-NW	9-11-12	1444		X							X																								
TANK1-SW	9-11-12	1446		X							X																								
TANK1-EW	9-11-12	1448		X							X																								
TANK1-WW	9-11-12	1450		X							X																								
SP-1-4	9-11-12	1335		X							X																								
												ICE IN GOOD CONDITION _____ HEAD SPACE ABSENT _____ DEFLUORINATED IN LAB _____ PRESERVATION _____				APPROPRIATE CONTAINERS _____ PRESERVED IN LAB _____ VOAS   O&G   METALS   OTHER																			
Relinquished by: (Signature) <i>[Signature]</i>			Date <u>9-11-12</u>			Time <u>1240</u>			Received by: (Signature) <i>[Signature]</i>			Date <u>9/12/12</u>			Time <u>1240</u>																				
Relinquished by: (Signature) <i>[Signature]</i>			Date			Time			Received by: (Signature)			Date			Time																				
Relinquished by: (Signature)			Date			Time			Received by Lab: (Signature) <i>[Signature]</i>			Date <u>9/12/12</u>			Time <u>1445</u>																				
Sent to Laboratory (Name): <u>McLampbell</u>												Method of Shipment				<input checked="" type="checkbox"/> Lab courier <input type="checkbox"/> Fed Ex <input type="checkbox"/> Airborne <input type="checkbox"/> UPS																			
Laboratory Comments/Notes:												<input type="checkbox"/> Hand Carried <input type="checkbox"/> Private Courier (Co. Name)																							



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1209271

ClientCode: TWRF

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQuIS   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Report to:  
 Peter Cusack  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 (415) 955-9040    FAX: (415) 955-9041

Email: pjcusack@treadwellrollo.com  
 cc:  
 PO:  
 ProjectNo: #731047902; Parkside Emeryville

Bill to:  
 Accounts Payable  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111

Requested TAT: 1 day  
 Date Received: 09/12/2012  
 Date Printed: 09/12/2012

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
1209271-001	Tank1-E	Soil	9/11/2012 14:40	<input type="checkbox"/>	A	A	A	A								
1209271-002	Tank1-W	Soil	9/11/2012 14:42	<input type="checkbox"/>	A	A	A	A								
1209271-003	Tank1-NW	Soil	9/11/2012 14:44	<input type="checkbox"/>	A	A	A	A								
1209271-004	Tank1-SW	Soil	9/11/2012 14:46	<input type="checkbox"/>	A	A	A	A								
1209271-005	Tank1-EW	Soil	9/11/2012 14:48	<input type="checkbox"/>	A	A	A	A								
1209271-006	Tank1-WW	Soil	9/11/2012 14:50	<input type="checkbox"/>	A	A	A	A								
1209271-007	SP-1-4	Soil	9/11/2012 13:35	<input type="checkbox"/>	A	A	A	A								

**Test Legend:**

1	8260B_S	2	8270D_S	3	G-MBTEX_S	4	LUFT_S	5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A contain testgroup.

Prepared by: Zoraida Cortez

Comments: SEND HARD COPY

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.



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **9/12/2012 3:09:16 PM**  
 Project Name: **#731047902; Parkside Emeryville** Login Reviewed by: **Zoraida Cortez**  
 WorkOrder N°: **1209271** Matrix: Soil Carrier: Rob Pringle (MAI Courier)

#### 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   
 Container/Temp Blank temperature Cooler Temp: 3.6°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----  
 Comments:



Treadwell & Rollo
555 Montgomery St., Suite 1300
San Francisco, CA 94111

Client Project ID: #731047902;
Parkside Emeryville
Client Contact: Peter Cusack
Client P.O.:

Date Sampled: 09/11/12
Date Received: 09/12/12
Date Extracted: 09/12/12
Date Analyzed: 09/12/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Table with 2 columns: Lab ID, Client ID, Matrix and their corresponding values: 1209271-001A, Tank1-E, Soil

Main data table with 8 columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 111, %SS2: 129, %SS3: 111

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.





Treadwell & Rollo
555 Montgomery St., Suite 1300
San Francisco, CA 94111

Client Project ID: #731047902;
Parkside Emeryville
Client Contact: Peter Cusack
Client P.O.:

Date Sampled: 09/11/12
Date Received: 09/12/12
Date Extracted: 09/12/12
Date Analyzed: 09/13/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Table with 2 columns: Lab ID (1209271-002A), Client ID (Tank1-W), Matrix (Soil)

Main data table with 8 columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 115, %SS2: 130, %SS3: 119

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Treadwell & Rollo 555 Montgomery St., Suite 1300 San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/13/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Lab ID	1209271-003A
Client ID	Tank1-NW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes, Total	ND	1.0	0.005

**Surrogate Recoveries (%)**

%SS1:	112	%SS2:	131
%SS3:	120		

**Comments:**

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Table with client information: Treadwell & Rollo, Client Project ID: #731047902, Date Sampled: 09/11/12, Date Received: 09/12/12, Client Contact: Peter Cusack, Date Extracted: 09/12/12, San Francisco, CA 94111, Client P.O., Date Analyzed: 09/13/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Summary table with columns: Lab ID (1209271-004A), Client ID (Tank1-SW), Matrix (Soil)

Main data table with columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 113, %SS2: 129, %SS3: 118

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.





Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111

Client Project ID: #731047902;  
Parkside Emeryville  
Client Contact: Peter Cusack  
Client P.O.:

Date Sampled: 09/11/12  
Date Received: 09/12/12  
Date Extracted: 09/12/12  
Date Analyzed: 09/12/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Lab ID	1209271-005A
Client ID	Tank1-EW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes, Total	ND	1.0	0.005

**Surrogate Recoveries (%)**

%SS1:	101	%SS2:	110
%SS3:	91		

**Comments:**

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Treadwell & Rollo
555 Montgomery St., Suite 1300
San Francisco, CA 94111

Client Project ID: #731047902;
Parkside Emeryville
Client Contact: Peter Cusack
Client P.O.:

Date Sampled: 09/11/12
Date Received: 09/12/12
Date Extracted: 09/12/12
Date Analyzed: 09/13/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Table with 2 columns: Lab ID (1209271-006A), Client ID (Tank1-WW), Matrix (Soil)

Main data table with 8 columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 114, %SS2: 130, %SS3: 118

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Treadwell & Rollo
555 Montgomery St., Suite 1300
San Francisco, CA 94111

Client Project ID: #731047902;
Parkside Emeryville
Client Contact: Peter Cusack
Client P.O.:

Date Sampled: 09/11/12
Date Received: 09/12/12
Date Extracted: 09/12/12
Date Analyzed: 09/13/12

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209271

Table with 2 columns: Lab ID (1209271-007A), Client ID (SP-1-4), Matrix (Soil)

Main data table with 8 columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 113, %SS2: 128, %SS3: 117

Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
# surrogate diluted out of range or coelutes with another peak; (&) low surrogate due to matrix interference.



Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/12/12

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Lab ID	1209271-001A
Client ID	Tank1-E
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.25	Acenaphthylene	ND	1.0	0.25
Acetochlor	ND	1.0	0.25	Anthracene	ND	1.0	0.25
Benzidine	ND	1.0	1.3	Benzoic Acid	ND	1.0	2.5
Benzo (a) anthracene	ND	1.0	0.25	Benzo (b) fluoranthene	ND	1.0	0.25
Benzo (k) fluoranthene	ND	1.0	0.25	Benzo (g,h,i) perylene	ND	1.0	0.25
Benzo (a) pyrene	ND	1.0	0.25	Benzyl Alcohol	ND	1.0	1.3
1,1-Biphenyl	ND	1.0	0.25	Bis (2-chloroethoxy) Methane	ND	1.0	0.25
Bis (2-chloroethyl) Ether	ND	1.0	0.25	Bis (2-chloroisopropyl) Ether	ND	1.0	0.25
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.25	4-Bromophenyl Phenyl Ether	ND	1.0	0.25
Butylbenzyl Phthalate	ND	1.0	0.25	4-Chloroaniline	ND	1.0	0.25
4-Chloro-3-methylphenol	ND	1.0	0.25	2-Chloronaphthalene	ND	1.0	0.25
2-Chlorophenol	ND	1.0	0.25	4-Chlorophenyl Phenyl Ether	ND	1.0	0.25
Chrysene	ND	1.0	0.25	Dibenzo (a,h) anthracene	ND	1.0	0.25
Dibenzofuran	ND	1.0	0.25	Di-n-butyl Phthalate	ND	1.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.25	1,3-Dichlorobenzene	ND	1.0	0.25
1,4-Dichlorobenzene	ND	1.0	0.25	3,3-Dichlorobenzidine	ND	1.0	0.5
2,4-Dichlorophenol	ND	1.0	0.25	Diethyl Phthalate	ND	1.0	0.25
2,4-Dimethylphenol	ND	1.0	0.25	Dimethyl Phthalate	ND	1.0	0.25
4,6-Dinitro-2-methylphenol	ND	1.0	1.3	2,4-Dinitrophenol	ND	1.0	6.3
2,4-Dinitrotoluene	ND	1.0	0.25	2,6-Dinitrotoluene	ND	1.0	0.25
Di-n-octyl Phthalate	ND	1.0	0.25	1,2-Diphenylhydrazine	ND	1.0	0.25
Fluoranthene	ND	1.0	0.25	Fluorene	ND	1.0	0.25
Hexachlorobenzene	ND	1.0	0.25	Hexachlorobutadiene	ND	1.0	0.25
Hexachlorocyclopentadiene	ND	1.0	1.3	Hexachloroethane	ND	1.0	0.25
Indeno (1,2,3-cd) pyrene	ND	1.0	0.25	Isophorone	ND	1.0	0.25
2-Methylnaphthalene	ND	1.0	0.25	2-Methylphenol (o-Cresol)	ND	1.0	0.25
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.25	Naphthalene	ND	1.0	0.25
2-Nitroaniline	ND	1.0	1.3	3-Nitroaniline	ND	1.0	1.3
4-Nitroaniline	ND	1.0	1.3	Nitrobenzene	ND	1.0	0.25
2-Nitrophenol	ND	1.0	1.3	4-Nitrophenol	ND	1.0	1.3
N-Nitrosodiphenylamine	ND	1.0	0.25	N-Nitrosodi-n-propylamine	ND	1.0	0.25
Pentachlorophenol	ND	1.0	1.3	Phenanthrene	ND	1.0	0.25
Phenol	ND	1.0	0.25	Pyrene	ND	1.0	0.25
1,2,4-Trichlorobenzene	ND	1.0	0.25	2,4,5-Trichlorophenol	ND	1.0	0.25
2,4,6-Trichlorophenol	ND	1.0	0.25				

**Surrogate Recoveries (%)**

%SS1:	79	%SS2:	73
%SS3:	58	%SS4:	59
%SS5:	58	%SS6:	60

**Comments:**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.



Table with client information: Treadwell & Rollo, Client Project ID: #731047902, Date Sampled: 09/11/12, Date Received: 09/12/12, Client Contact: Peter Cusack, Date Extracted: 09/12/12, San Francisco, CA 94111, Client P.O., Date Analyzed: 09/12/12

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Table with Lab ID: 1209271-002A, Client ID: Tank1-W, Matrix: Soil

Main data table with columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 87, %SS2: 81, %SS3: 63, %SS4: 65, %SS5: 65, %SS6: 62

Comments:

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.

Handwritten signature



Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/12/12

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Lab ID	1209271-003A
Client ID	Tank1-NW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.25	Acenaphthylene	ND	1.0	0.25
Acetochlor	ND	1.0	0.25	Anthracene	ND	1.0	0.25
Benzidine	ND	1.0	1.3	Benzoic Acid	ND	1.0	2.5
Benzo (a) anthracene	ND	1.0	0.25	Benzo (b) fluoranthene	ND	1.0	0.25
Benzo (k) fluoranthene	ND	1.0	0.25	Benzo (g,h,i) perylene	ND	1.0	0.25
Benzo (a) pyrene	ND	1.0	0.25	Benzyl Alcohol	ND	1.0	1.3
1,1-Biphenyl	ND	1.0	0.25	Bis (2-chloroethoxy) Methane	ND	1.0	0.25
Bis (2-chloroethyl) Ether	ND	1.0	0.25	Bis (2-chloroisopropyl) Ether	ND	1.0	0.25
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.25	4-Bromophenyl Phenyl Ether	ND	1.0	0.25
Butylbenzyl Phthalate	ND	1.0	0.25	4-Chloroaniline	ND	1.0	0.25
4-Chloro-3-methylphenol	ND	1.0	0.25	2-Chloronaphthalene	ND	1.0	0.25
2-Chlorophenol	ND	1.0	0.25	4-Chlorophenyl Phenyl Ether	ND	1.0	0.25
Chrysene	ND	1.0	0.25	Dibenzo (a,h) anthracene	ND	1.0	0.25
Dibenzofuran	ND	1.0	0.25	Di-n-butyl Phthalate	ND	1.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.25	1,3-Dichlorobenzene	ND	1.0	0.25
1,4-Dichlorobenzene	ND	1.0	0.25	3,3-Dichlorobenzidine	ND	1.0	0.5
2,4-Dichlorophenol	ND	1.0	0.25	Diethyl Phthalate	ND	1.0	0.25
2,4-Dimethylphenol	ND	1.0	0.25	Dimethyl Phthalate	ND	1.0	0.25
4,6-Dinitro-2-methylphenol	ND	1.0	1.3	2,4-Dinitrophenol	ND	1.0	6.3
2,4-Dinitrotoluene	ND	1.0	0.25	2,6-Dinitrotoluene	ND	1.0	0.25
Di-n-octyl Phthalate	ND	1.0	0.25	1,2-Diphenylhydrazine	ND	1.0	0.25
Fluoranthene	ND	1.0	0.25	Fluorene	ND	1.0	0.25
Hexachlorobenzene	ND	1.0	0.25	Hexachlorobutadiene	ND	1.0	0.25
Hexachlorocyclopentadiene	ND	1.0	1.3	Hexachloroethane	ND	1.0	0.25
Indeno (1,2,3-cd) pyrene	ND	1.0	0.25	Isophorone	ND	1.0	0.25
2-Methylnaphthalene	ND	1.0	0.25	2-Methylphenol (o-Cresol)	ND	1.0	0.25
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.25	Naphthalene	ND	1.0	0.25
2-Nitroaniline	ND	1.0	1.3	3-Nitroaniline	ND	1.0	1.3
4-Nitroaniline	ND	1.0	1.3	Nitrobenzene	ND	1.0	0.25
2-Nitrophenol	ND	1.0	1.3	4-Nitrophenol	ND	1.0	1.3
N-Nitrosodiphenylamine	ND	1.0	0.25	N-Nitrosodi-n-propylamine	ND	1.0	0.25
Pentachlorophenol	ND	1.0	1.3	Phenanthrene	ND	1.0	0.25
Phenol	ND	1.0	0.25	Pyrene	ND	1.0	0.25
1,2,4-Trichlorobenzene	ND	1.0	0.25	2,4,5-Trichlorophenol	ND	1.0	0.25
2,4,6-Trichlorophenol	ND	1.0	0.25				

**Surrogate Recoveries (%)**

%SS1:	112	%SS2:	105
%SS3:	79	%SS4:	80
%SS5:	83	%SS6:	82

**Comments:**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.





Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/12/12

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Lab ID	1209271-004A
Client ID	Tank1-SW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.25	Acenaphthylene	ND	1.0	0.25
Acetochlor	ND	1.0	0.25	Anthracene	ND	1.0	0.25
Benzidine	ND	1.0	1.3	Benzoic Acid	ND	1.0	2.5
Benzo (a) anthracene	ND	1.0	0.25	Benzo (b) fluoranthene	ND	1.0	0.25
Benzo (k) fluoranthene	ND	1.0	0.25	Benzo (g,h,i) perylene	ND	1.0	0.25
Benzo (a) pyrene	ND	1.0	0.25	Benzyl Alcohol	ND	1.0	1.3
1,1-Biphenyl	ND	1.0	0.25	Bis (2-chloroethoxy) Methane	ND	1.0	0.25
Bis (2-chloroethyl) Ether	ND	1.0	0.25	Bis (2-chloroisopropyl) Ether	ND	1.0	0.25
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.25	4-Bromophenyl Phenyl Ether	ND	1.0	0.25
Butylbenzyl Phthalate	ND	1.0	0.25	4-Chloroaniline	ND	1.0	0.25
4-Chloro-3-methylphenol	ND	1.0	0.25	2-Chloronaphthalene	ND	1.0	0.25
2-Chlorophenol	ND	1.0	0.25	4-Chlorophenyl Phenyl Ether	ND	1.0	0.25
Chrysene	ND	1.0	0.25	Dibenzo (a,h) anthracene	ND	1.0	0.25
Dibenzofuran	ND	1.0	0.25	Di-n-butyl Phthalate	ND	1.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.25	1,3-Dichlorobenzene	ND	1.0	0.25
1,4-Dichlorobenzene	ND	1.0	0.25	3,3-Dichlorobenzidine	ND	1.0	0.5
2,4-Dichlorophenol	ND	1.0	0.25	Diethyl Phthalate	ND	1.0	0.25
2,4-Dimethylphenol	ND	1.0	0.25	Dimethyl Phthalate	ND	1.0	0.25
4,6-Dinitro-2-methylphenol	ND	1.0	1.3	2,4-Dinitrophenol	ND	1.0	6.3
2,4-Dinitrotoluene	ND	1.0	0.25	2,6-Dinitrotoluene	ND	1.0	0.25
Di-n-octyl Phthalate	ND	1.0	0.25	1,2-Diphenylhydrazine	ND	1.0	0.25
Fluoranthene	ND	1.0	0.25	Fluorene	ND	1.0	0.25
Hexachlorobenzene	ND	1.0	0.25	Hexachlorobutadiene	ND	1.0	0.25
Hexachlorocyclopentadiene	ND	1.0	1.3	Hexachloroethane	ND	1.0	0.25
Indeno (1,2,3-cd) pyrene	ND	1.0	0.25	Isophorone	ND	1.0	0.25
2-Methylnaphthalene	ND	1.0	0.25	2-Methylphenol (o-Cresol)	ND	1.0	0.25
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.25	Naphthalene	ND	1.0	0.25
2-Nitroaniline	ND	1.0	1.3	3-Nitroaniline	ND	1.0	1.3
4-Nitroaniline	ND	1.0	1.3	Nitrobenzene	ND	1.0	0.25
2-Nitrophenol	ND	1.0	1.3	4-Nitrophenol	ND	1.0	1.3
N-Nitrosodiphenylamine	ND	1.0	0.25	N-Nitrosodi-n-propylamine	ND	1.0	0.25
Pentachlorophenol	ND	1.0	1.3	Phenanthrene	ND	1.0	0.25
Phenol	ND	1.0	0.25	Pyrene	ND	1.0	0.25
1,2,4-Trichlorobenzene	ND	1.0	0.25	2,4,5-Trichlorophenol	ND	1.0	0.25
2,4,6-Trichlorophenol	ND	1.0	0.25				

**Surrogate Recoveries (%)**

%SS1:	94	%SS2:	87
%SS3:	69	%SS4:	72
%SS5:	70	%SS6:	69

**Comments:**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.



Treadwell & Rollo 555 Montgomery St., Suite 1300 San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/12/12

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Lab ID	1209271-005A
Client ID	Tank1-EW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.25	Acenaphthylene	ND	1.0	0.25
Acetochlor	ND	1.0	0.25	Anthracene	ND	1.0	0.25
Benzidine	ND	1.0	1.3	Benzoic Acid	ND	1.0	2.5
Benzo (a) anthracene	ND	1.0	0.25	Benzo (b) fluoranthene	ND	1.0	0.25
Benzo (k) fluoranthene	ND	1.0	0.25	Benzo (g,h,i) perylene	ND	1.0	0.25
Benzo (a) pyrene	ND	1.0	0.25	Benzyl Alcohol	ND	1.0	1.3
1,1-Biphenyl	ND	1.0	0.25	Bis (2-chloroethoxy) Methane	ND	1.0	0.25
Bis (2-chloroethyl) Ether	ND	1.0	0.25	Bis (2-chloroisopropyl) Ether	ND	1.0	0.25
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.25	4-Bromophenyl Phenyl Ether	ND	1.0	0.25
Butylbenzyl Phthalate	ND	1.0	0.25	4-Chloroaniline	ND	1.0	0.25
4-Chloro-3-methylphenol	ND	1.0	0.25	2-Chloronaphthalene	ND	1.0	0.25
2-Chlorophenol	ND	1.0	0.25	4-Chlorophenyl Phenyl Ether	ND	1.0	0.25
Chrysene	ND	1.0	0.25	Dibenzo (a,h) anthracene	ND	1.0	0.25
Dibenzofuran	ND	1.0	0.25	Di-n-butyl Phthalate	ND	1.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.25	1,3-Dichlorobenzene	ND	1.0	0.25
1,4-Dichlorobenzene	ND	1.0	0.25	3,3-Dichlorobenzidine	ND	1.0	0.5
2,4-Dichlorophenol	ND	1.0	0.25	Diethyl Phthalate	ND	1.0	0.25
2,4-Dimethylphenol	ND	1.0	0.25	Dimethyl Phthalate	ND	1.0	0.25
4,6-Dinitro-2-methylphenol	ND	1.0	1.3	2,4-Dinitrophenol	ND	1.0	6.3
2,4-Dinitrotoluene	ND	1.0	0.25	2,6-Dinitrotoluene	ND	1.0	0.25
Di-n-octyl Phthalate	ND	1.0	0.25	1,2-Diphenylhydrazine	ND	1.0	0.25
Fluoranthene	ND	1.0	0.25	Fluorene	ND	1.0	0.25
Hexachlorobenzene	ND	1.0	0.25	Hexachlorobutadiene	ND	1.0	0.25
Hexachlorocyclopentadiene	ND	1.0	1.3	Hexachloroethane	ND	1.0	0.25
Indeno (1,2,3-cd) pyrene	ND	1.0	0.25	Isophorone	ND	1.0	0.25
2-Methylnaphthalene	ND	1.0	0.25	2-Methylphenol (o-Cresol)	ND	1.0	0.25
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.25	Naphthalene	ND	1.0	0.25
2-Nitroaniline	ND	1.0	1.3	3-Nitroaniline	ND	1.0	1.3
4-Nitroaniline	ND	1.0	1.3	Nitrobenzene	ND	1.0	0.25
2-Nitrophenol	ND	1.0	1.3	4-Nitrophenol	ND	1.0	1.3
N-Nitrosodiphenylamine	ND	1.0	0.25	N-Nitrosodi-n-propylamine	ND	1.0	0.25
Pentachlorophenol	ND	1.0	1.3	Phenanthrene	ND	1.0	0.25
Phenol	ND	1.0	0.25	Pyrene	ND	1.0	0.25
1,2,4-Trichlorobenzene	ND	1.0	0.25	2,4,5-Trichlorophenol	ND	1.0	0.25
2,4,6-Trichlorophenol	ND	1.0	0.25				

Surrogate Recoveries (%)

%SS1:	114	%SS2:	106
%SS3:	80	%SS4:	80
%SS5:	84	%SS6:	81

Comments:

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.





Treadwell & Rollo 555 Montgomery St., Suite 1300 San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/13/12

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Lab ID	1209271-006A
Client ID	Tank1-WW
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.25	Acenaphthylene	ND	1.0	0.25
Acetochlor	ND	1.0	0.25	Anthracene	ND	1.0	0.25
Benzidine	ND	1.0	1.3	Benzoic Acid	ND	1.0	2.5
Benzo (a) anthracene	ND	1.0	0.25	Benzo (b) fluoranthene	ND	1.0	0.25
Benzo (k) fluoranthene	ND	1.0	0.25	Benzo (g,h,i) perylene	ND	1.0	0.25
Benzo (a) pyrene	ND	1.0	0.25	Benzyl Alcohol	ND	1.0	1.3
1,1-Biphenyl	ND	1.0	0.25	Bis (2-chloroethoxy) Methane	ND	1.0	0.25
Bis (2-chloroethyl) Ether	ND	1.0	0.25	Bis (2-chloroisopropyl) Ether	ND	1.0	0.25
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.25	4-Bromophenyl Phenyl Ether	ND	1.0	0.25
Butylbenzyl Phthalate	ND	1.0	0.25	4-Chloroaniline	ND	1.0	0.25
4-Chloro-3-methylphenol	ND	1.0	0.25	2-Chloronaphthalene	ND	1.0	0.25
2-Chlorophenol	ND	1.0	0.25	4-Chlorophenyl Phenyl Ether	ND	1.0	0.25
Chrysene	ND	1.0	0.25	Dibenzo (a,h) anthracene	ND	1.0	0.25
Dibenzofuran	ND	1.0	0.25	Di-n-butyl Phthalate	ND	1.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.25	1,3-Dichlorobenzene	ND	1.0	0.25
1,4-Dichlorobenzene	ND	1.0	0.25	3,3-Dichlorobenzidine	ND	1.0	0.5
2,4-Dichlorophenol	ND	1.0	0.25	Diethyl Phthalate	ND	1.0	0.25
2,4-Dimethylphenol	ND	1.0	0.25	Dimethyl Phthalate	ND	1.0	0.25
4,6-Dinitro-2-methylphenol	ND	1.0	1.3	2,4-Dinitrophenol	ND	1.0	6.3
2,4-Dinitrotoluene	ND	1.0	0.25	2,6-Dinitrotoluene	ND	1.0	0.25
Di-n-octyl Phthalate	ND	1.0	0.25	1,2-Diphenylhydrazine	ND	1.0	0.25
Fluoranthene	ND	1.0	0.25	Fluorene	ND	1.0	0.25
Hexachlorobenzene	ND	1.0	0.25	Hexachlorobutadiene	ND	1.0	0.25
Hexachlorocyclopentadiene	ND	1.0	1.3	Hexachloroethane	ND	1.0	0.25
Indeno (1,2,3-cd) pyrene	ND	1.0	0.25	Isophorone	ND	1.0	0.25
2-Methylnaphthalene	ND	1.0	0.25	2-Methylphenol (o-Cresol)	ND	1.0	0.25
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.25	Naphthalene	ND	1.0	0.25
2-Nitroaniline	ND	1.0	1.3	3-Nitroaniline	ND	1.0	1.3
4-Nitroaniline	ND	1.0	1.3	Nitrobenzene	ND	1.0	0.25
2-Nitrophenol	ND	1.0	1.3	4-Nitrophenol	ND	1.0	1.3
N-Nitrosodiphenylamine	ND	1.0	0.25	N-Nitrosodi-n-propylamine	ND	1.0	0.25
Pentachlorophenol	ND	1.0	1.3	Phenanthrene	ND	1.0	0.25
Phenol	ND	1.0	0.25	Pyrene	ND	1.0	0.25
1,2,4-Trichlorobenzene	ND	1.0	0.25	2,4,5-Trichlorophenol	ND	1.0	0.25
2,4,6-Trichlorophenol	ND	1.0	0.25				

**Surrogate Recoveries (%)**

%SS1:	91	%SS2:	85
%SS3:	65	%SS4:	67
%SS5:	69	%SS6:	65

**Comments:**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.



Table with client information: Treadwell & Rollo, Client Project ID: #731047902, Date Sampled: 09/11/12, Date Received: 09/12/12, Date Extracted: 09/12/12, Date Analyzed: 09/13/12.

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

Extraction Method: SW3550B

Analytical Method: SW8270C

Work Order: 1209271

Table with Lab ID: 1209271-007A, Client ID: SP-1-4, Matrix: Soil

Main data table with columns: Compound, Concentration \*, DF, Reporting Limit, Compound, Concentration \*, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 98, %SS2: 91, %SS3: 66, %SS4: 68, %SS5: 75, %SS6: 71

Comments:

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or surrogate coelutes with another peak.

Handwritten signature



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269  
http://www.mccampbell.com / E-mail: main@mccampbell.com

Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Analyzed 09/12/12-09/13/12
		Date Extracted 09/12/12

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1209271

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	Tank1-E	S	ND	1	113	
002A	Tank1-W	S	ND	1	106	
003A	Tank1-NW	S	ND	1	107	
004A	Tank1-SW	S	ND	1	109	
005A	Tank1-EW	S	ND	1	108	
006A	Tank1-WW	S	ND	1	107	
007A	SP-1-4	S	ND	1	109	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

# cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269  
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/13/12

### LUFT 5 Metals\*

Extraction method: SW3050B

Analytical methods: SW6010B

Work Order: 1209271

Lab ID	Client ID	Matrix	Extraction Type	Cadmium	Chromium	Lead	Nickel	Zinc	DF	% SS	Comments
001A	Tank1-E	S	TOTAL	ND	58	ND	78	69	1	119	
002A	Tank1-W	S	TOTAL	ND	72	9.4	100	110	1	118	
003A	Tank1-NW	S	TOTAL	ND	64	44	46	90	1	105	
004A	Tank1-SW	S	TOTAL	ND	76	10	48	57	1	109	
005A	Tank1-EW	S	TOTAL	ND	73	19	45	70	1	108	
006A	Tank1-WW	S	TOTAL	ND	90	10	54	70	1	114	
007A	SP-1-4	S	TOTAL	ND	53	74	59	140	1	114	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA	NA	NA	NA	NA
	S	TOTAL	1.5	1.5	5.0	1.5	5.0	mg/Kg	

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.

TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.

DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager



**McC Campbell Analytical, Inc.**

*"When Quality Counts"*

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269  
http://www.mccampbell.com / E-mail: main@mccampbell.com

Treadwell & Rollo  555 Montgomery St., Suite 1300  San Francisco, CA 94111	Client Project ID: #731047902; Parkside Emeryville	Date Sampled: 09/11/12
	Client Contact: Peter Cusack	Date Received: 09/12/12
	Client P.O.:	Date Extracted: 09/12/12
		Date Analyzed: 09/12/12-09/13/12

**Total Extractable Petroleum Hydrocarbons\***

Extraction method: SW3550B

Analytical methods: SW8015B

Work Order: 1209271

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1209271-001A	Tank1-E	S	200	360	10	91	e7,e2
1209271-002A	Tank1-W	S	34	67	1	110	e7,e2
1209271-003A	Tank1-NW	S	2.7	22	1	109	e7,e2
1209271-004A	Tank1-SW	S	ND	ND	1	110	
1209271-005A	Tank1-EW	S	8.3	36	1	106	e7,e2
1209271-006A	Tank1-WW	S	ND	ND	1	106	
1209271-007A	SP-1-4	S	18	64	5	98	e7,e2

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:  
e2) diesel range compounds are significant; no recognizable pattern  
e7) oil range compounds are significant

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager





### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70593

WorkOrder: 1209271

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	0.050	72.9	75.7	3.77	78.4	56 - 94	30	50 - 135
Benzene	ND	0.050	81.6	85.1	4.23	90.1	60 - 106	30	70 - 137
t-Butyl alcohol (TBA)	ND	0.20	83.3	85.4	2.55	90.7	56 - 140	30	50 - 143
Chlorobenzene	ND	0.050	81.4	86	5.53	90.6	61 - 108	30	69 - 133
1,2-Dibromoethane (EDB)	ND	0.050	85.2	88.9	4.20	91	54 - 119	30	61 - 135
1,2-Dichloroethane (1,2-DCA)	ND	0.050	79.7	80.7	1.28	86.4	48 - 115	30	64 - 133
1,1-Dichloroethene	ND	0.050	80.7	80.8	0.0160	88.4	46 - 111	30	65 - 142
Diisopropyl ether (DIPE)	ND	0.050	76.7	80.5	4.79	84.8	53 - 111	30	65 - 134
Ethyl tert-butyl ether (ETBE)	ND	0.050	78	81.6	4.59	84.6	61 - 104	30	61 - 127
Methyl-t-butyl ether (MTBE)	ND	0.050	79.4	82.4	3.71	85.5	58 - 107	30	65 - 130
Toluene	ND	0.050	84.7	90.9	7.07	96.5	64 - 114	30	70 - 146
Trichloroethene	ND	0.050	85.2	87.6	2.86	93.1	60 - 116	30	66 - 143
%SS1:	104	0.12	106	105	0.885	105	64 - 117	30	70 - 130
%SS2:	110	0.12	107	110	2.42	111	79 - 133	30	70 - 130
%SS3:	107	0.012	106	105	0.771	109	88 - 121	30	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

#### BATCH 70593 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209271-001A	09/11/12 2:40 PM	09/12/12	09/12/12 11:45 PM	1209271-002A	09/11/12 2:42 PM	09/12/12	09/13/12 12:24 AM
1209271-003A	09/11/12 2:44 PM	09/12/12	09/13/12 1:04 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$   
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.  
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70678

WorkOrder: 1209271

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	0.050	84	81.4	3.09	85.6	56 - 94	30	50 - 135
Benzene	ND	0.050	110	106	3.65	104	60 - 130	30	70 - 137
t-Butyl alcohol (TBA)	ND	0.20	109	101	7.17	108	56 - 140	30	50 - 143
Chlorobenzene	ND	0.050	103	96.9	5.92	98	61 - 108	30	69 - 133
1,2-Dibromoethane (EDB)	ND	0.050	98.2	92.3	6.24	92	54 - 119	30	61 - 135
1,2-Dichloroethane (1,2-DCA)	ND	0.050	101	95.6	5.58	97.6	48 - 115	30	64 - 133
1,1-Dichloroethene	ND	0.050	104	100	4.28	101	46 - 111	30	65 - 142
Diisopropyl ether (DIPE)	ND	0.050	94.8	91.3	3.75	92.2	53 - 111	30	65 - 134
Ethyl tert-butyl ether (ETBE)	ND	0.050	95	91.3	4.03	91.8	61 - 104	30	61 - 127
Methyl-t-butyl ether (MTBE)	ND	0.050	90.8	88.6	2.53	87.6	58 - 107	30	65 - 130
Toluene	ND	0.050	116	109	6.19	110	64 - 130	30	70 - 146
Trichloroethene	ND	0.050	119	115	3.48	115	60 - 130	30	66 - 143
%SS1:	101	0.12	114	114	0	112	64 - 117	30	70 - 130
%SS2:	110	0.12	130	128	1.24	130	79 - 133	30	70 - 130
%SS3:	91	0.012	111	108	3.07	108	88 - 121	30	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 70678 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209271-004A	09/11/12 2:46 PM	09/12/12	09/13/12 1:43 AM	1209271-005A	09/11/12 2:48 PM	09/12/12	09/12/12 9:33 PM
1209271-006A	09/11/12 2:50 PM	09/12/12	09/13/12 2:23 AM	1209271-007A	09/11/12 1:35 PM	09/12/12	09/13/12 3:02 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$   
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.  
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



### QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70691

WorkOrder: 1209271

EPA Method: SW8270C		Extraction: SW3550B					Spiked Sample ID: 1209271-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Acenaphthene	ND	5	86	86.3	0.393	70.6	30 - 130	30	30 - 130	
4-Chloro-3-methylphenol	ND	5	116	117	0.782	91.4	30 - 130	30	30 - 130	
2-Chlorophenol	ND	5	116	119	2.69	86.7	30 - 130	30	30 - 130	
1,4-Dichlorobenzene	ND	5	82.5	82.3	0.204	70.7	30 - 130	30	30 - 130	
2,4-Dinitrotoluene	ND	5	96.5	98.5	2.01	80.7	30 - 130	30	30 - 130	
4-Nitrophenol	ND	5	110	104	5.52	79.2	30 - 130	30	30 - 130	
N-Nitrosodi-n-propylamine	ND	5	111	113	2.01	85.3	30 - 130	30	30 - 130	
Pentachlorophenol	ND	5	81.9	84.5	3.14	60.4	30 - 130	30	30 - 130	
Phenol	ND	5	113	117	3.33	81.7	30 - 130	30	30 - 130	
Pyrene	ND	5	75.9	74.5	1.86	68.6	30 - 130	30	30 - 130	
1,2,4-Trichlorobenzene	ND	5	85.6	84.9	0.812	74.4	30 - 130	30	30 - 130	
%SS1:	79	5	96	99	3.16	76	30 - 130	30	30 - 130	
%SS2:	73	5	94	97	3.79	72	30 - 130	30	30 - 130	
%SS3:	58	5	72	73	0.583	63	30 - 130	30	30 - 130	
%SS4:	59	5	72	71	1.02	64	30 - 130	30	30 - 130	
%SS5:	58	5	71	72	1.15	63	30 - 130	30	30 - 130	
%SS6:	60	5	69	68	1.82	65	30 - 130	30	30 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

#### BATCH 70691 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209271-001A	09/11/12 2:40 PM	09/12/12	09/12/12 8:43 PM	1209271-002A	09/11/12 2:42 PM	09/12/12	09/12/12 10:07 PM
1209271-003A	09/11/12 2:44 PM	09/12/12	09/12/12 10:36 PM	1209271-004A	09/11/12 2:46 PM	09/12/12	09/12/12 11:04 PM
1209271-005A	09/11/12 2:48 PM	09/12/12	09/12/12 11:32 PM	1209271-006A	09/11/12 2:50 PM	09/12/12	09/13/12
1209271-007A	09/11/12 1:35 PM	09/12/12	09/13/12 12:28 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 $\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$ ;  $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$ .  
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = matrix interference and / or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix, sample diluted due to high matrix or analyte content, or MS/MSD samples diluted due to high organic content.  
 #) surrogate diluted out of range; & = low or no recovery of surrogate or target analytes due to matrix interference.  
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70546

WorkOrder: 1209271

EPA Method: SW8015Bm		Extraction: SW5030B					Spiked Sample ID: 1209142-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) £	ND	0.60	102	106	3.91	113	70 - 130	20	70 - 130	
MTBE	ND	0.10	109	110	0.798	93.9	70 - 130	20	70 - 130	
Benzene	ND	0.10	110	117	6.16	111	70 - 130	20	70 - 130	
Toluene	ND	0.10	108	115	5.59	113	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	108	116	6.77	115	70 - 130	20	70 - 130	
Xylenes	ND	0.30	108	116	7.10	116	70 - 130	20	70 - 130	
%SS:	107	0.10	86	93	8.01	82	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

BATCH 70546 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209271-001A	09/11/12 2:40 PM	09/12/12	09/13/12 9:31 AM	1209271-002A	09/11/12 2:42 PM	09/12/12	09/12/12 10:53 PM
1209271-003A	09/11/12 2:44 PM	09/12/12	09/12/12 11:52 PM	1209271-004A	09/11/12 2:46 PM	09/12/12	09/13/12 3:48 AM
1209271-005A	09/11/12 2:48 PM	09/12/12	09/13/12 4:47 AM	1209271-006A	09/11/12 2:50 PM	09/12/12	09/13/12 5:17 AM
1209271-007A	09/11/12 1:35 PM	09/12/12	09/13/12 5:46 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$   
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 £ TPH(btex) = sum of BTEX areas from the FID.  
 # cluttered chromatogram; sample peak coelutes with surrogate peak.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR 6010B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70677

WorkOrder: 1209271

EPA Method: SW6010B		Extraction: SW3050B					Spiked Sample ID: 1209271-007A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Cadmium	ND	50	119	113	5.56	125	75 - 125	25	75 - 125	
Chromium	53	50	NR	NR	NR	123	N/A	N/A	75 - 125	
Lead	74	50	NR	NR	NR	121	N/A	N/A	75 - 125	
Nickel	59	50	NR	NR	NR	122	N/A	N/A	75 - 125	
Zinc	140	500	128, F1	125	1.97	123	75 - 125	25	75 - 125	
%SS:	114	500	115	114	0.830	120	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

F1 = MS/MSD recovery was out of acceptance criteria; LCS validated the prep batch.

#### BATCH 70677 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209271-001A	09/11/12 2:40 PM	09/12/12	09/13/12 9:24 AM	1209271-002A	09/11/12 2:42 PM	09/12/12	09/13/12 9:27 AM
1209271-003A	09/11/12 2:44 PM	09/12/12	09/13/12 9:31 AM	1209271-004A	09/11/12 2:46 PM	09/12/12	09/13/12 9:34 AM
1209271-005A	09/11/12 2:48 PM	09/12/12	09/13/12 9:37 AM	1209271-006A	09/11/12 2:50 PM	09/12/12	09/13/12 9:41 AM
1209271-007A	09/11/12 1:35 PM	09/12/12	09/13/12 9:44 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$   
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not applicable to this method.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.





**QC SUMMARY REPORT FOR SW8015B**

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70563

WorkOrder: 1209271

EPA Method: SW8015B		Extraction: SW3550B					Spiked Sample ID: 1209027-001B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	640	40	NR	NR	NR	120	N/A	N/A	70 - 130	
%SS:	111	25	NR	NR	NR	102	N/A	N/A	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

BATCH 70563 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209271-001A	09/11/12 2:40 PM	09/12/12	09/13/12 10:42 AM	1209271-002A	09/11/12 2:42 PM	09/12/12	09/13/12 12:58 PM
1209271-003A	09/11/12 2:44 PM	09/12/12	09/13/12 1:29 PM	1209271-004A	09/11/12 2:46 PM	09/12/12	09/12/12 6:58 PM
1209271-005A	09/11/12 2:48 PM	09/12/12	09/13/12 12:39 AM	1209271-006A	09/11/12 2:50 PM	09/12/12	09/13/12 12:05 PM
1209271-007A	09/11/12 1:35 PM	09/12/12	09/13/12 3:55 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$   
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.