

**RECEIVED**

By Alameda County Environmental Health 11:24 am, Jul 06, 2015

July 1, 2015

Mr. Karel Detterman, P.G.  
Hazardous Materials Specialist  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502  
San Francisco, CA 94102

Re: Soil Investigation Report  
3093 Broadway, Oakland, CA  
Site Cleanup Program Case No. Ro0000199

Dear Ms. Detterman,

Please find attached Soil Investigation Report for the Former Connell Oldsmobile site, located at 3093 Broadway in Oakland, California. The Report has been prepared by Langan Treadwell Rollo.

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

OWNER:

3093 BROADWAY HOLDINGS, L.L.C.

By:   
Name: J David Martin  
Title: Chairman, Investment Committee

1 July 2015

Ms. Karel Detterman, P.G.  
Hazardous Materials Specialist  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

**Subject:       Soil Investigation Report**  
**3093 Broadway**  
**Oakland, California**  
**Langan Project No.: 731637001**

Dear Ms. Detterman:

On behalf of 3093 Broadway Holdings, L.L.C. ("Broadway Holdings"), Langan Treadwell Rollo (Langan) has prepared this Soil Investigation Report to summarize the investigation conducted at the Former Connell Oldsmobile Site (site), located at 3093 Broadway in Oakland, California (Figure 1) in May 2015. Soil samples were collected from the site and analyzed as described in the soil investigation workplan included in Section 6.2 of the *Feasibility Study and Corrective Action Plan* dated 21 May 2015 (FSCAP). The objectives of the pre-design soil investigations were to:

1. Characterize soil prior to excavation to facilitate off-site disposal;
2. Assess residual petroleum concentrations in soil, if any, likely to remain in place post-construction; and
3. Further delineate the extent of and characterize petroleum impacts to saturated soil in the groundwater remediation target area.

Background information, soil sampling methods, laboratory analysis, results, and conclusions, are presented in this report. In addition to soil sampling, Section 6.2 of the FSCAP proposes pre-remediation groundwater sampling and pilot testing. The groundwater and pilot testing activities and results will be described in a separate report.

## **1.0 BACKGROUND INFORMATION**

On behalf of Broadway Holdings, Langan is implementing an enhanced bioremediation pilot study at the site and, pending receipt of any public comment, plans to implement the Corrective Action Plan concurrent with development of a multi-story mixed-use building that will occupy nearly the entire property. We understand the existing buildings will be demolished,

with the exception of a portion of the showroom in the northeast corner of the site. The ground floor will consist of parking and commercial space. The upper levels will include residential units. Site excavation for the development is planned to reduce existing grade by approximately 3 to 18 feet; the ground floor of the proposed development will be roughly level with Broadway.

The site is located in a mixed-use area, near commercial, medical, and residential properties. The approximately 3.4-acre site is bounded by Hawthorne Street to the north, Broadway to the east, Webster Street to the west, and a surface parking lot to the south. The site is currently occupied by a vacant, two-story concrete structure that was formerly a car dealership. Currently, the parking areas west and south of the site structure are used to store automobiles for other nearby dealerships.

Three USTs that previously contained gasoline, diesel, and waste oil were removed from beneath the Hawthorne Avenue sidewalk, north of the service bay, in December 1989. Soil and groundwater investigations have been ongoing since 1990. The chemicals of concern in groundwater at the site include benzene, toluene, ethylbenzene, and xylenes (BTEX), 1,2-dichloroethane, and naphthalene. Previous investigations concluded that methyl tertiary butyl ether (MTBE) is not present at the site.

## **1.1 Site Geology and Hydrogeology**

The site elevation ranges from approximately 52 to 68 feet above mean sea level (a-msl). The site slopes downward to the southeast, from Webster Street to Broadway, and is underlain by unconsolidated sediments ranging from silty clays to sandy gravels. Based on geotechnical sampling conducted by Langan at the site, unconsolidated sediments extend to at least 50 feet below ground surface (bgs). The site surficial geology is mapped as the Temescal Formation, which consists of quaternary age alluvial fan deposits comprised of interbedded layers of silt, sand, clay, and gravel (Radbrush, 1957). Alluvial fan deposits are characterized by laterally discontinuous and heterogeneous layers of irregular thickness. The depth to groundwater (Langan, 2014b) beneath the site ranges from approximately 16 to 27 feet bgs. Groundwater beneath the site flows toward the southeast (Langan, 2014a).

## **2.0 FIELD INVESTIGATION**

On 11 through 21 May 2015, Langan advanced 43 soil borings, two remediation borings and installed two monitoring wells in the locations shown on Figures 2 and 3. Soil samples collected from borings B-1, B-10, B-20, B-30, and B-36 through B-43 will be used to characterize soil for off-site disposal. The locations of these borings cover the entire site because the entire site will be excavated during construction. The depth of future excavation is projected to range from 3 to 18 feet bgs, so the depths of these borings vary.

Soil samples collected from borings B-1 through B-43, at depths below the future site grade, will be used to assess petroleum impacts, if any, that will remain in-place post-development. Soil borings B-1 through B-35 were advanced in the former service bay area because this area is adjacent to the former UST locations, and because UST piping may have extended into the service bay area.

Soil samples collected from remediation borings RB-2 and RB-6, monitoring well borings MW-18 and MW-19, and borings B-29 and B-30 are used in the pilot study to further characterize petroleum impacts targeted for remediation. Away from the source area (i.e., near the former UST system), impacted soil is located in a smear zone extending several feet above and below the groundwater table, so these borings were advanced deeper, to between 27 and 40 feet bgs.

Table 1 summarizes the sample depths, elevations relative to mean sea level, whether the sample represents soil at the site that will remain in place, or soil that will be excavated and removed, and the analyses performed on each sample.

## 2.1 Soil Sampling

The borings were advanced by a limited-access track mounted drill-rig operated by Cascade Drilling, LP (Cascade) of Richmond, California, a California-licensed drilling company, and observed by Langan. Copies of the required drilling permits are included in Appendix A. The soil borings were hydraulically driven dual-tube direct push borings. Each boring was initially advanced to five feet bgs with a hand auger to clear the location for buried utilities. To avoid cross contamination, the sampling equipment used during the investigation was steam-cleaned between sample locations. Soil cores were visually inspected and continuously logged by Langan personnel in general accordance with the Unified Soil Classification System (USCS) working under the supervision of a California professional geologist. Soil was screened for organic vapors using a calibrated Photoionization Detector (PID). Soil boring logs describing the materials encountered and PID readings are presented in Appendix B. After completion, the borings were backfilled with neat cement grout.

## 2.2 Laboratory Analysis

As part of this investigation, Langan submitted soil samples for the following analyses:

- Total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo) using United States Environmental Protection Agency (EPA) Method 8015B;
- Total petroleum hydrocarbons as gasoline (TPHg) and BTEX compounds using EPA Method 8021B/8015B;
- Polycyclic aromatic hydrocarbons (PAHs) (including naphthalene) using EPA Method 8270C;
- VOCs (volatile organic compounds) using EPA Method 8260B;
- Semi-volatile organic compounds (SVOCs) using EPA Method 8270C;
- Polychlorinated biphenyls (PCBs) and pesticides using EPA Method 8081A/8082;
- California Assessment Metals (CAM) 17 metals using EPA Method 3050B; and
- pH using Method 9045D.

Select soil samples with elevated total metal concentrations were analyzed using the Waste Extraction Test (WET) and Toxicity Characteristic Leaching Procedure (TCLP) where total metals exceeded the Soluble Threshold Limit Concentration (STLC) by 10 times or more. The STLC is the California hazardous waste threshold. The TCLP is the Resource Conservation and Recovery Act (RCRA) test used to evaluate federal hazardous waste.

### **3.0 RESULTS**

The investigation findings are discussed in the subsections below.

#### **3.1 Drilling Observations**

Asphalt and concrete were observed from the ground surface up to eight inches bgs at all borings advanced at the site. In general, the observed site lithology was consistent with historically observed conditions. The site is predominately underlain by unconsolidated sediments ranging from silty clays to clayey silts with occasional thin beds of silty sand and gravel. Fill material and debris were observed in the borings advanced at the site. The debris contained concrete, brick, glass and wood. Fill material was observed at up to 20 feet bgs in soil collected from borings advanced throughout the service bay. Fill material was observed in site-wide borings (B-36, B-38, B-39 B-42 and B-43) up to 12 feet bgs. Fill material was not observed in borings advanced in the showroom (B-40, MW-18 and M-19).

The depth to groundwater at the site ranges from 16 to 27 feet bgs (Langan, 2014a). Groundwater was observed in boring B-29 at a depth of 26.5 feet bgs. Perched groundwater was observed in borings B-37 and B-43 at depths ranging from 2 to 5 feet bgs. Groundwater was observed in remediation boring RB-6 at a depth of 23.3 feet bgs.

Total VOC PID concentrations ranged from 0.1 to 1,870 parts per million (ppm). The highest PID concentration was recorded from remediation boring RB-6 at 26 feet bgs. Moderate and strong olfactory petroleum odors were observed in borings B-2, B-3, MW-18, MW-19, RB-2 and RB-6. TPH staining was observed in soil in remediation borings RB-2 and RB-6 at 25 and 26 feet bgs, respectively.

#### **3.2 Analytical Results**

Current ground surface elevations, proposed future site grade elevation and sample elevations at each boring location are presented in Table 1. The soil analytical results for petroleum compounds, VOCs, PAHs, metals, pesticides, PCBs, and pH are presented in Tables 2 through 6, respectively.

##### 3.2.1 Subdivision of Results Into Depth-Specific Categories

The analytical results are organized by chemical compounds, and then subdivided into three depth-specific categories. The future site grade is projected to be 52 feet a-msl. Soil samples collected at elevations above the proposed future site grade represent soil to be removed during site development. Soil samples collected at elevations below the proposed future site grade represent soil that may remain in place post-development.

Sample results for soil that will remain in place are further divided into two categories: (1) future shallow soil (i.e., 0 to 10 feet below future site grade), and future deeper soil (i.e., >10 feet below future site grade). Samples collected at elevations greater than 42 feet a-msl (i.e. upper 10 feet) represent future shallow soil. Samples collected at elevations less than 42 feet a-msl represent future deeper soil.

### 3.2.2 Screening Levels

Tables 2 through 6 include a preliminary screening of the soil analytical results. The detected soil concentrations are compared to conservative risk-based screening levels, regulatory action levels, and waste classification levels. The screening in this report is preliminary and intended to help guide future evaluation of the results. Concentrations that exceed screening levels do not necessarily indicate a health risk or other concern.

#### Soil to be Removed

Analytical results for soil to be removed were compared to environmental screening levels (ESLs) published by the San Francisco Bay Regional Water Quality Control Board (Water Board) in December 2013. Soil concentrations were compared to Water Board residential ESLs where groundwater is a potential drinking water source (ESL Detail Table A-1) because off-site disposal facilities frequently refer to the residential ESLs in establishing their acceptance criteria. Soil concentrations were also compared to commercial ESLs (ESL Detail Table A-2) and construction worker ESLs (ESL Detail Table K-3) for reference purposes and in preparation of a Soil Management Plan (SMP) for construction, respectively. In addition, the analytical results for metals were compared to hazardous waste criteria as set forth in Title 22 of the California Code of Regulations Section 66261.24 (22CCR66261.24) for disposal purposes.

#### Soil to Remain in Place: Future Shallow Soil (0 to 10 feet below future site grade)

Analytical results for shallow soil to remain in place were compared to Table 1 of the Water Resources Control Board's (SWRCB's) Low-Threat Underground Storage Tank Case Closure Policy (LTCP) and Water Board ESLs. Shallow soil concentrations were compared to the residential, commercial and construction worker ESLs.

#### Soil to Remain in Place: Future Deeper Soil (>10 feet below future site grade)

Analytical results for deeper soil to remain in place are used in the pilot study and pre-design groundwater investigation to evaluate the light non-aqueous phase liquid (LNAPL) saturation and extent within the treatment zone. The deeper results are discussed in the pilot study technical memorandum which will be submitted to the ACEH under separate cover.

### 3.2.3 Petroleum Compounds

Table 2 presents the analytical results for TPH, BTEX, MTBE and naphthalene in soil.

### Soil to be Removed

TPH was detected above the laboratory reporting limit at concentrations from 1.1 to 700 milligrams per kilogram (mg/kg). Three samples had detectable concentrations of TPH that exceeded residential and commercial ESLs. None of the samples had detectable concentrations of TPH that exceeded construction worker ESLs. BTEX compounds, naphthalene, and MTBE were not detected above laboratory reporting limits in any of the samples analyzed.

### Soil to Remain in Place: Future Shallow Soil

TPH was detected above the laboratory reporting limit at concentrations from 1.4 to 4,000 mg/kg. The highest concentration of TPH was collected from remediation boring B-2 at a depth of 17.5 feet bgs. Sixteen samples had detectable concentrations of TPH that exceeded residential ESLs (Figures 4 and 5). Fourteen samples had detectable concentrations of TPH that exceeded commercial ESLs. Six of the samples had detectable concentrations of TPH that exceeded construction worker ESLs.

BTEX compounds were detected in thirteen samples above laboratory reporting limits with concentrations ranging from 0.0062 to 120 mg/kg. One sample collected from boring B-2 at 17.5 feet bgs had detectable concentrations of benzene, toluene, ethylbenzene and xylenes that exceeded residential and commercial ESLs (Figure 4). None of the detected concentrations of BTEX compounds exceed construction worker ESLs. None of the detected concentrations of benzene and toluene exceeded the residential LTCP criteria.

Naphthalene was detected in three samples above laboratory reporting limits with concentrations ranging from 0.023 to 22 mg/kg. One sample collected from boring B-2 had a detected concentration of naphthalene that exceeded the residential LTCP of 9.7 mg/kg and the residential and commercial ESLs of 1.2 mg/kg (Figure 4). None of detected concentrations of naphthalene exceeded construction worker ESLs.

MTBE was not detected at or above the laboratory reporting limits in any of the samples analyzed.

### 3.2.4 VOCs

Table 3 presents the analytical results for VOCs in soil.

### Soil to be Removed

No VOCs were detected above laboratory reporting limits in any of the samples analyzed.

### Soil to Remain in Place: Future Shallow Soil

No VOCs, excluding BTEX compounds summarized in section 3.2.2 above, were detected above laboratory reporting limits in any of the samples analyzed.

### 3.2.5 PAHs

Table 4 presents the analytical results for PAHs in soil.

#### Soil to be Removed

PAHs were detected above laboratory reporting limits in three shallow soil samples collected from borings B-1, B-10 and B-30, including: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-c,d)pyrene, and pyrene. Detected concentrations of PAHs ranged from 0.011 to 0.34 mg/kg. Benzo(a)pyrene was detected in one sample above the residential and commercial ESLs with a concentration of 0.33 mg/kg. None of the detected concentrations of PAHs exceeded construction worker ESLs.

#### Soil to Remain in Place: Future Shallow Soil

PAHs (1- and 2-methylnaphthalene) were detected above laboratory reporting limits in four samples collected from borings B-2, B-11, B-15 and B-34 at concentrations ranging from 0.014 to 27 mg/kg. Three of the four samples had detected concentrations of 2-methylnaphthalene above the residential and commercial ESL of 0.25 mg/kg (Figures 4 and 5). None of the detected concentrations of 1- and 2- methylnaphthalene exceeded construction worker ESLs.

None of the samples collected at the site in areas of soil to remain in place had detectable concentrations of the seven carcinogenic PAHs, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene or indeno(1,2,3-c,d)pyrene.

### 3.2.6 Metals

Table 5 presents the analytical results for metals in soil.

#### Soil to be Removed

Arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, vanadium and zinc were detected at concentrations above laboratory reporting limits in soil to be removed. Arsenic, lead and zinc were detected at concentrations above their residential ESLs with concentrations ranging from 1.7 to 1500 mg/kg. Arsenic was detected at concentrations above its commercial ESL of 1.6 mg/kg. None of the detected concentrations of metals exceeded construction worker ESLs.

In addition to a comparison to ESLs, analytical results were compared to applicable criteria for classification as a State of California hazardous waste. To meet typical landfill waste profiling requirements, ten samples were analyzed using the waste extraction test (WET) to quantify the STLC and TCLP for chromium and lead. One sample exceeded the applicable criteria for classification as California hazardous waste for lead with a concentration of 22 milligrams per liter (mg/L). No chromium STLC results exceeded the applicable criteria as California hazardous waste. No chromium or lead TCLP results exceeded the applicable criteria for classification as a federal hazardous waste.



### Soil to Remain in Place: Future Shallow Soil

Arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, thallium, vanadium and zinc were detected at concentrations above laboratory reporting limits in soil to remain in place. Arsenic, barium, cobalt, nickel and thallium were detected at concentrations above their residential ESLs (Figures 4 and 5). Barium was detected in one sample at a concentration above its commercial ESL of 1500 mg/kg. None of the detected concentrations of metals exceeded construction worker ESLs.

Arsenic was detected at concentrations that exceeded its residential and commercial ESLs in all samples analyzed in soil to remain in place. Arsenic is expected to naturally occur in site soil at concentrations above ESLs. The detected arsenic concentrations, which range from 1.6 to 8.6 mg/kg, are below the anticipated upper limit for background arsenic concentrations in Bay Area soils of 11 mg/kg (Duverge, 2011).

### 3.2.7 Pesticides, PCBs and pH

Table 6 presents the analytical results pesticides, PCBs and pH in soil. No pesticides or PCBs were detected at or above laboratory detection limits in the samples analyzed. The reported pH of the soil to be removed and soil to remain in place ranged from 6.46 to 9.51.

## **4.0 SUMMARY**

In May 2015, Langan collected soil samples to characterize soil for offsite disposal, assess petroleum concentrations that may remain in shallow soil following construction, and to assess deeper concentrations in saturated soil. Samples were collected site-wide, and in the service bay area, near the former USTs. As summarized below, certain results exceed preliminary screening levels and will be addressed in future reports.

### Soil to be Removed

Soil to be removed at boring locations B-1, B-30, B-38, B-39 and RB-6 had detected concentrations of TPH, benzo(a)pyrene and select metals (arsenic, lead and zinc) that exceeded their respective residential and commercial ESLs. The WET test results for soil sample B-30 collected at 2.5 feet bgs exceeded the California hazardous waste criteria for lead. Additional sampling will be proposed in the construction SMP to segregate potentially impacted soil prior to offsite disposal. There were no detected concentrations of BTEX compounds, naphthalene, MTBE, VOCs, pesticides or PCBs in soil to be removed.

### Soil to Remain in Place: Future Shallow Soil

The results for future shallow soil have detectable concentrations of TPH, BTEX compounds and naphthalene that exceed residential, commercial and construction worker ESLs. One sample analyzed for naphthalene exceeded the LTCP residential screening criteria. 2-methylnaphthalene was detected at concentrations that exceeded residential and commercial ESLs. Metals concentrations in soil samples also exceeded residential and commercial ESLs for arsenic, barium, copper, nickel and thallium. The detected concentrations of arsenic in soil are within the range of anticipated naturally occurring concentrations in the Bay Area. Sample

locations with one or more residential ESL exceedance in future shallow soil are shown on Figures 4 and 5. There were no detected concentrations of VOCs, MTBE, pesticides or PCBs in future shallow soil. The concentrations detected in soil to remain in place, within the post-construction upper 10 feet of the site (i.e., future shallow soil) will be addressed in the remediation completion report and the post-construction Soil Management Plan, as described in the FSCAP.

Soil to Remain in Place: Future Deeper Soil

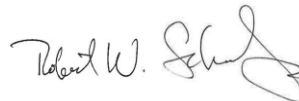
The results for future deeper soil will be considered in the final enhanced bioremediation design. The remediation design and the pilot study results will be described in a separate report.

Sincerely yours,

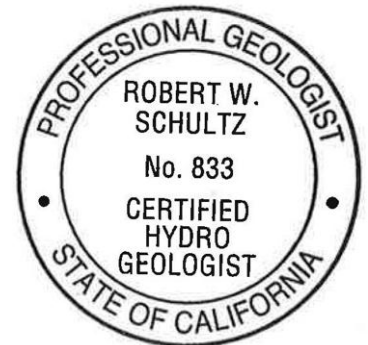
**Langan Treadwell Rollo**



Elizabeth Kimbrel, EIT  
Senior Staff Engineer



Robert W. Schultz, CHG  
Senior Project Manager



Attachments:

Table 1	Summary of Sampling and Analysis
Table 2	Soil Analytical Results for TPH, BTEX, Naphthalene and MTBE
Table 3	Soil Analytical Results for VOCs
Table 4	Soil Analytical Results for PAHs
Table 5	Soil Analytical Results for Metals
Table 6	Soil Analytical Results for Pesticides, PCBs and pH
Figure 1	Site Location Map
Figure 2	Pre-Excavation Sampling and Characterization Service Bay Area
Figure 3	Pre-Excavation Sampling and Characterization Areas Outside Service Bay
Figure 4	Comparison of Shallow (0 to 10 feet bgs) Soil Results to Residential ESLs, Service Bay Area
Figure 5	Comparison of Shallow (0 to 10 feet bgs) Soil Results to Residential ESLs, Areas Outside Service Bay
Appendix A	Permits
Appendix B	Boring Logs
Appendix C	Analytical Laboratory Reports

## REFERENCES

Duverge, 2011. *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region*, San Francisco State University Master's Degree Thesis. December.

Langan Treadwell Rollo (Langan), 2014a. Conceptual Site Model, 3093 Broadway, Oakland, California. 24 October.

Langan, 2014b. Results of May 2014 Groundwater Monitoring – Revised Transmittal, Case # RO0000199, Former Connell Oldsmobile Site, 3093 Broadway, Oakland. 30 October.

Langan, 2015. Pilot Study Technical Memorandum, 3093 Broadway, Oakland, California. June.

Radbrush, Dorothy. 1957, *Areal and Engineering Geology of the Oakland West Quadrangle*, California.

San Francisco Bay Regional Water Quality Control Board (Water Board), 2013. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final*. December.

## **TABLES**

**Table 1**  
**Summary of Soil Sampling and Analysis**  
**May 2015**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sampling Location	Sample Depth	Ground Elevation <sup>1</sup>	Future Grade Elevation	Sample Elevation	Analytes							pH
						TPH-gasoline, diesel, motor oil	BTEX	PAHs (Including, naphthalene)	VOCs	SVOCs	PCBs and Pesticides	CAM-17 metals	
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
B-1	Service Bay	2.5	64.02	52	61.52	X		X	X	X	X	X	X
		7.5	64.02	52	56.52	X		X	X	X	X	X	X
		12.5	64.02	52	51.52	X	X	X					
		17.5	64.02	52	46.52	X	X	X					
B-2	Service Bay	2.5	61.86	52	59.36								
		7.5	61.86	52	54.36								
		12.5	61.86	52	49.36	X	X	X					
		17.5	61.86	52	44.36	X	X	X					
B-3	Service Bay	2.5	61.86	52	59.36								
		7.5	61.86	52	54.36								
		12.5	61.86	52	49.36	X	X	X					
		17.5	61.86	52	44.36	X	X	X					
B-4	Service Bay	2.5	61.78	52	59.28								
		7.5	61.78	52	54.28								
		12.5	61.78	52	49.28	X	X	X					
		17.5	61.78	52	44.28	X	X	X					
B-5	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
B-6	Service Bay	2.5	61.82	52	59.32								
		7.5	61.82	52	54.32								
		12.5	61.82	52	49.32	X	X	X					
		17.5	61.82	52	44.32	X	X	X					
B-7	Service Bay	2.5	61.81	52	59.31								
		7.5	61.81	52	54.31								
		12.5	61.81	52	49.31	X	X	X					
		17.5	61.81	52	44.31	X	X	X					
B-8	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
B-9	Service Bay	2.5	61.66	52	59.16								
		7.5	61.66	52	54.16								
		12.5	61.66	52	49.16	X	X	X					
		17.5	61.66	52	44.16	X	X	X					
B-10	Service Bay	2.5	61.72	52	59.22	X		X	X	X	X	X	X
		7.5	61.72	52	54.22	X		X	X	X	X	X	X
		12.5	61.72	52	49.22	X	X	X					
		17.5	61.72	52	44.22	X	X	X					
B-11	Service Bay	2.5	61.74	52	59.24								
		7.5	61.74	52	54.24								
		12.5	61.74	52	49.24	X	X	X					
		17.5	61.74	52	44.24	X	X	X					
B-12	Service Bay	2.5	61.73	52	59.23								
		7.5	61.73	52	54.23								
		12.5	61.73	52	49.23	X	X	X					
		17.5	61.73	52	44.23	X	X	X					

**Table 1**  
**Summary of Soil Sampling and Analysis**  
**May 2015**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sampling Location	Sample Depth	Ground Elevation <sup>1</sup>	Future Grade Elevation	Sample Elevation	Analytes							pH
						TPH-gasoline, diesel, motor oil	BTEX	PAHs (Including, naphthalene)	VOCs	SVOCs	PCBs and Pesticides	CAM-17 metals	
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
B-13	Service Bay	2.5	61.76	52	59.26								
		7.5	61.76	52	54.26								
		12.5	61.76	52	49.26	X	X	X					
		17.5	61.76	52	44.26	X	X	X					
B-14	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
B-15	Service Bay	2.5	61.51	52	59.01								
		7.5	61.51	52	54.01								
		12.5	61.51	52	49.01	X	X	X					
		17.5	61.51	52	44.01	X	X	X					
B-16	Service Bay	2.5	61.76	52	59.26								
		7.5	61.76	52	54.26								
		12.5	61.76	52	49.26	X	X	X					
		17.5	61.76	52	44.26	X	X	X					
B-17	Service Bay	2.5	61.73	52	59.23								
		7.5	61.73	52	54.23								
		12.5	61.73	52	49.23	X	X	X					
		18	61.73	52	43.73	X	X	X					
B-18	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
B-19	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
B-20	Service Bay	2.5	61.73	52	59.23	X	X	X	X	X	X	X	X
		7.5	61.73	52	54.23	X	X	X	X	X	X	X	X
		12.5	61.73	52	49.23	X	X	X					
		17.5	61.73	52	44.23	X	X	X					
B-21	Service Bay	2.5	61.76	52	59.26								
		7.5	61.76	52	54.26								
		12.75	61.76	52	49.01	X	X	X					
		17.75	61.76	52	44.01	X	X	X					
B-22	Service Bay	2.5	61.76	52	59.26								
		7.5	61.76	52	54.26								
		12.5	61.76	52	49.26	X	X	X					
		17.5	61.76	52	44.26	X	X	X					
B-23	Service Bay	2.5	61.75	52	59.25								
		7.5	61.75	52	54.25								
		12.5	61.75	52	49.25	X	X	X					
		17.5	61.75	52	44.25	X	X	X					
B-24	Service Bay	2.5	61.75	52	59.25								
		7.5	61.75	52	54.25								
		12.5	61.75	52	49.25	X	X	X					
		17.5	61.75	52	44.25	X	X	X					

**Table 1**  
**Summary of Soil Sampling and Analysis**  
**May 2015**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sampling Location	Sample Depth	Ground Elevation <sup>1</sup>	Future Grade Elevation	Sample Elevation	Analytes							pH
						TPH-gasoline, diesel, motor oil	BTEX	PAHs (Including, naphthalene)	VOCs	SVOCs	PCBs and Pesticides	CAM-17 metals	
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
B-25	Service Bay	2.5	61.78	52	59.28								
		7.5	61.78	52	54.28								
		12.5	61.78	52	49.28	X	X	X					
		17.5	61.78	52	44.28	X	X	X					
B-26	Service Bay	2.5	61.72	52	59.22								
		7.5	61.72	52	54.22								
		12.5	61.72	52	49.22	X	X	X					
		17.5	61.72	52	44.22	X	X	X					
B-27	Service Bay	2.5	61.69	52	59.19								
		7.5	61.69	52	54.19								
		12.5	61.69	52	49.19	X	X	X					
		17.5	61.69	52	44.19	X	X	X					
B-28	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
B-29	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.5	61.77	52	49.27	X	X	X					
		17.5	61.77	52	44.27	X	X	X					
		28	61.77	52	33.77	X	X						
B-30	Service Bay	2.5	61.74	52	59.24	X	X	X	X	X	X	X	X
		7.5	61.74	52	54.24	X	X	X	X	X	X	X	X
		12.5	61.74	52	49.24	X	X	X					
		17.5	61.74	52	44.24	X	X	X					
		27	61.74	52	34.74	X	X						
B-31	Service Bay	2.5	61.77	52	59.27								
		7.5	61.77	52	54.27								
		12.75	61.77	52	49.02	X	X	X					
		17.75	61.77	52	44.02	X	X	X					
B-32	Service Bay	2.5	61.8	52	59.3								
		7.5	61.8	52	54.3								
		12.5	61.8	52	49.3	X	X	X					
		17.75	61.8	52	44.05	X	X	X					
B-33	Service Bay	2.5	61.78	52	59.28								
		7.5	61.78	52	54.28								
		12.5	61.78	52	49.28	X	X	X					
		17.5	61.78	52	44.28	X	X	X					
B-34	Service Bay	2.5	61.73	52	59.23								
		7.5	61.73	52	54.23								
		12.5	61.73	52	49.23	X	X	X					
		17.5	61.73	52	44.23	X	X	X					
B-35	Service Bay	2.5	61.75	52	59.25								
		7.5	61.75	52	54.25								
		12.5	61.75	52	49.25	X	X	X					
		17.5	61.75	52	44.25	X	X	X					

**Table 1**  
**Summary of Soil Sampling and Analysis**  
**May 2015**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sampling Location	Sample Depth	Ground Elevation <sup>1</sup>	Future Grade Elevation	Sample Elevation	Analytes							pH
						TPH-gasoline, diesel, motor oil	BTEX	PAHs (Including, naphthalene)	VOCs	SVOCs	PCBs and Pesticides	CAM-17 metals	
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
B-36	Site - NW Quadrant	2.5	65.57	52	63.07	X		X	X	X	X	X	X
		7.5	65.57	52	58.07	X		X	X	X	X	X	X
		12.5	65.57	52	53.07	X		X	X	X	X	X	X
		17.5	65.57	52	48.07	X		X	X	X	X	X	X
		22.5	65.57	52	43.07	X		X	X	X	X	X	X
B-37	Site - Center	2.5	63.95	52	61.45	X		X	X	X	X	X	X
		7.5	63.95	52	56.45	X		X	X	X	X	X	X
		12.5	63.95	52	51.45	X		X	X	X	X	X	X
		17.5	63.95	52	46.45	X		X	X	X	X	X	X
		22.5	63.95	52	41.45	X		X	X	X	X	X	X
B-38	Site - Center North	2.5	59.08	52	56.58	X		X	X	X	X	X	X
		7.5	59.08	52	51.58	X		X	X	X	X	X	X
		12.5	59.08	52	46.58	X		X	X	X	X	X	X
B-39	Site - Center South	2.5	57.6	52	55.10	X		X	X	X	X	X	X
		7.5	57.6	52	50.10	X		X	X	X	X	X	X
		12.5	57.6	52	45.10	X		X	X	X	X	X	X
B-40	Showroom	2.5	52.68	52	50.18	X		X	X	X	X	X	X
		7.5	52.68	52	45.18	X		X	X	X	X	X	X
		12.5	52.68	52	40.18	X		X	X	X	X	X	X
B-41	Site - NE Quadrant	2.5	54.21	52	51.71	X		X	X	X	X	X	X
		7.5	54.21	52	46.71	X		X	X	X	X	X	X
		12.5	54.21	52	41.71	X		X	X	X	X	X	X
B-42	Site - Center East	2.5	54.45	52	51.95	X		X	X	X	X	X	X
		7.5	54.45	52	46.95	X		X	X	X	X	X	X
		12.5	54.45	52	41.95	X		X	X	X	X	X	X
B-43	Site - SE Quadrant	2.5	53.33	52	50.83	X		X	X	X	X	X	X
		7.5	53.33	52	45.83	X		X	X	X	X	X	X
MW-18	Showroom	2.5	52.51	52	50.01								
		7.5	52.51	52	45.01	X <sup>2</sup>	X		X <sup>3</sup>				
		12.5	52.51	52	40.01	X <sup>2</sup>	X		X <sup>3</sup>				
		17.5	52.51	52	35.01	X <sup>2</sup>	X		X <sup>3</sup>				
		21.5	52.51	52	31.01	X <sup>2</sup>	X		X <sup>3</sup>				
		26.5	52.51	52	26.01	X <sup>2</sup>	X		X <sup>3</sup>				
		31.5	52.51	52	21.01	X <sup>2</sup>	X		X <sup>3</sup>				
MW-19	Showroom	2.5	52.35	52	49.85								
		7.5	52.35	52	44.85	X <sup>2</sup>	X		X <sup>3</sup>				
		12.5	52.35	52	39.85	X <sup>2</sup>	X		X <sup>3</sup>				
		14	52.35	52	38.35								
		17.5	52.35	52	34.85	X <sup>2</sup>	X		X <sup>3</sup>				
		22	52.35	52	30.35	X <sup>2</sup>	X		X <sup>3</sup>				
		27.5	52.35	52	24.85	X <sup>2</sup>	X		X <sup>3</sup>				



**Table 1  
Summary of Soil Sampling and Analysis  
May 2015  
3093 Broadway  
Oakland, California**

Sample ID	Sampling Location	Sample Depth	Ground Elevation <sup>1</sup>	Future Grade Elevation	Sample Elevation	Analytes							pH
						TPH-gasoline, diesel, motor oil	BTEX	PAHs (Including, naphthalene)	VOCs	SVOCs	PCBs and Pesticides	CAM-17 metals	
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
RB-2	Service Bay	22	61.78	52	39.78	X			X				
		24	61.78	52	37.78	X			X				
		26	61.78	52	35.78	X			X				
		28	61.78	52	33.78	X			X				
		30	61.78	52	31.78	X			X				
		32	61.78	52	29.78	X			X				
		34	61.78	52	27.78	X			X				
		36	61.78	52	25.78	X			X				
		38	61.78	52	23.78	X			X				
		40	61.78	52	21.78	X			X				
RB-6	Service Bay	3	61.71	52	58.71	X <sup>2</sup>	X		X <sup>3</sup>				
		22	61.71	52	39.71	X			X				
		24	61.71	52	37.71	X			X				
		26	61.71	52	35.71	X			X				
		28	61.71	52	33.71	X			X				
		30	61.71	52	31.71	X			X				
		32	61.71	52	29.71	X			X				
		34	61.71	52	27.71	X			X				
		36	61.71	52	25.71	X			X				
		38	61.71	52	23.71	X			X				
40	61.71	52	21.71	X			X						

**Notes:**

Soil samples located at elevations above 52 feet a-msl will be removed during site development

Soil samples located at elevations below 42 feet a-msl will be greater than 10 feet below the future site grade

<sup>1</sup>Ground surface and top of casing (TOC) elevations for boring and monitoring well locations, respectively, were collected by BKF on 28 May 2015

<sup>2</sup>Samples analyzed for TPHg and TPHd

<sup>3</sup>Samples analyzed for select VOCs including 1,2-dichloroethane (1,2-DCA), MTBE and naphthalene

a-msl - above mean sea level

bgs - below ground surface

BTEX - Benzene, toluene, ethylbenzene and xylenes using EPA Method 8260B

CAM-17 - California Assessment Metals using EPA Method 3050B

MTBE = Methyl tertiary butyl ether using EPA Method 8260.

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

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

TPHmo - Total Petroleum Hydrocarbons as Motor Oil using EPA Method 8015M

PAHs - Polycyclic Aromatic Hydrocarbons using EPA Method 8270C SIM

PCBs - Polychlorinated biphenyls and Pesticides using EPA Method 8081A/8082

Pesticides using EPA Method 8081A/8082

pH using method 9045D

SVOCs - Semi-Volatile Organic Compounds using EPA Method 8270C

VOCs - Volatile Organic Compounds using EPA Method 8260B

**Table 2**  
**Soil Analytical Results for TPH, BTEX, Naphthalene and MTBE**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	TPHd	TPHg	TPHmo	Benzene	Ethylbenzene	Toluene	Xylenes	MTBE	Naphthalene
			mg/kg								
Soil to be Removed <sup>1</sup>											
B-1-2.5	5/12/2015	61.52	12	1.5	76	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088
B-1-7.5	5/15/2015	56.52	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B-10-2.5	5/18/2015	59.22	21	<1	95	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083
B-10-7.5	5/18/2015	54.22	<1	<1	<5	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083
B-20-2.5	5/19/2015	59.23	1.1	<1	5.2	<0.005	<0.005	<0.005	<0.005	<0.0086	<0.0088
B-20-7.5	5/19/2015	54.23	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.0086	<0.0088
B-30-2.5	5/11/2015	59.24	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.0091	<0.0091
B-30-7.5	5/11/2015	54.24	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.0087	<0.0087
B-36-2.5	5/20/2015	63.07	3.1	<1	32	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097
B-36-7.5	5/20/2015	58.07	<1	<1	<5	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083
B-36-12.5	5/20/2015	53.07	<1	<1	<5	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091
B-37-2.5	5/20/2015	61.45	<1	<1	<5	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
B-37-7.5	5/20/2015	56.45	<1	<1	5.2	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086
B-38-2.5	5/20/2015	56.58	65	<1	<b>610</b>	<0.0092	<0.0092	<0.0092	<0.0092	<0.0092	<0.0092
B-39-2.5	5/20/2015	55.10	24	<1	<b>170</b>	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084
RB-6-3	5/15/2015	58.71	58	<b>700</b>	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Soil to Remain in Place <sup>2</sup> - Results for Future Shallow Soil (0 to 10 feet below future grade)											
B-1-12.5	5/15/2015	51.52	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-1-17.5	5/15/2015	46.52	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-2-12.5	5/15/2015	49.36	3.6	<1	6	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-2-17.5	5/15/2015	44.36	<b>1,300</b>	<b>4,000</b>	43	<b>1.4</b>	<b>7.1</b>	<b>6.3</b>	<b>120</b>	--	<b>22</b>
B-3-12.5	5/19/2015	49.36	<b>1,000</b>	6.8	<b>3,200</b>	<0.005	<0.005	<0.005	<0.005	--	<0.1
B-3-17.5	5/19/2015	44.36	<b>1,200</b>	27	<b>2,800</b>	<0.005	<0.005	<0.005	0.015	--	<0.1
B-4-12.5	5/19/2015	49.28	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-4-17.5	5/19/2015	44.28	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-5-12.5	5/15/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-5-17.5	5/15/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-6-12.5	5/15/2015	49.32	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-6-17.5	5/15/2015	44.32	48	16	<b>120</b>	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-7-12.5	5/19/2015	49.31	<b>430</b>	<1	<b>1,100</b>	<0.005	<0.005	<0.005	<0.005	--	<0.1
B-7-17.5	5/19/2015	44.31	<b>1,100</b>	10	<b>2,900</b>	<0.005	<0.005	0.072	0.0087	--	<0.1
B-8-12.5	5/19/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-8-17.5	5/19/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-9-12.5	5/12/2015	49.16	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-9-17.5	5/12/2015	44.16	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-10-12.5	5/18/2015	49.22	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-10-17.5	5/18/2015	44.22	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-11-12.5	5/19/2015	49.24	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-11-17.5	5/19/2015	44.24	51	26	86	<0.017	<0.017	<0.017	0.22	--	0.69
B-12-12.5	5/19/2015	49.23	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-12-17.5	5/19/2015	44.23	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-13-12.5	5/12/2015	49.26	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-13-17.5	5/12/2015	44.26	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-14-12.5	5/18/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-14-17.5	5/18/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-15-12.5	5/19/2015	44.01	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-15-17.5	5/19/2015	49.01	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	0.023
B-16-12.5	5/19/2015	49.26	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-16-17.5	5/19/2015	44.26	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-17-12.5	5/12/2015	49.23	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-17-18	5/12/2015	43.73	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-18-12.5	5/18/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-18-17.5	5/18/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-19-12.5	5/18/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-19-17.5	5/18/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-20-12.5	5/19/2015	49.23	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-20-17.5	5/19/2015	44.23	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-21-12.75	5/12/2015	49.01	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-21-17.75	5/12/2015	44.01	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-22-12.5	5/18/2015	49.26	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-22-17.5	5/18/2015	44.26	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-23-12.5	5/18/2015	49.25	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-23-17.5	5/18/2015	44.25	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-24-12.5	5/19/2015	49.25	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-24-17.5	5/19/2015	44.25	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-25-12.5	5/12/2015	49.28	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-25-17.5	5/12/2015	44.28	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-26-12.5	5/11/2015	49.22	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-26-17.5	5/11/2015	44.22	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-27-12.5	5/11/2015	49.19	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-27-17.5	5/11/2015	44.19	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-28-12.5	5/11/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-28-17.5	5/11/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-29-12.5	5/11/2015	49.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-29-17.5	5/11/2015	44.27	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-30-12.5	5/11/2015	49.24	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-30-17.5	5/11/2015	44.24	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-31-12.75	5/12/2015	49.02	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-31-17.75	5/12/2015	44.02	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-32-12.5	5/12/2015	49.3	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-32-17.75	5/12/2015	44.05	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-33-12.5	5/18/2015	49.28	28	<1	81	<0.005	<0.005	<0.005	<0.005	--	<0.01
B-33-17.5	5/18/2015	44.28	<b>730</b>	15	<b>1,600</b>	<0.005	0.0062	<0.005	0.0094</		

**Table 2**  
**Soil Analytical Results for TPH, BTEX, Naphthalene and MTBE**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	TPHd	TPHg	TPHmo	Benzene	Ethylbenzene	Toluene	Xylenes	MTBE	Naphthalene
B-36-17.5	5/20/2015	48.07	<1	<1	<5	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091
B-36-22.5	5/20/2015	43.07	<1	<1	<5	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083
B-37-12.5	5/20/2015	51.45	<1	<1	<5	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
B-37-17.5	5/20/2015	46.45	<1	<1	<5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
B-38-7.5	5/20/2015	51.58	<1	<1	<5	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084
B-38-12.5	5/20/2015	46.58	<1	<1	<5	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084
B-39-7.5	5/20/2015	50.1	<1	<1	<5	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089
B-39-12.5	5/20/2015	45.1	<1	<1	<5	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0082
B-40-2.5	5/13/2015	50.18	<1	<1	<5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B-40-7.5	5/13/2015	45.18	1.4	<1	<5	<0.0093	<0.0093	<0.0093	<0.0093	< 0.0093	<0.0093
B-41-2.5	5/20/2015	51.71	3.1	<1	84	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.0085
B-41-7.5	5/20/2015	46.71	<1	<1	<5	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081
B-42-2.5	5/20/2015	51.95	15	<1	93	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084
B-42-7.5	5/20/2015	46.95	<1	<1	<5	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
B-43-2.5	5/20/2015	50.83	40	<1	<b>410</b>	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
B-43-7.5	5/20/2015	45.83	5.2	<1	31	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.0085
MW-18-7.5	5/13/2015	45.01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-19-7.5	5/13/2015	44.85	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
Soil to Remain in Place <sup>2</sup> - Results for Future Deeper Soil (greater than 10 feet below future grade)											
B-29-28	5/11/2015	33.77	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	--
B-30-27	5/11/2015	34.74	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	--	--
B-37-22.5	5/20/2015	41.45	1.1	<1	<5	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0.0093
B-40-12.5	5/13/2015	40.18	<1	<1	<5	<0.0098	<0.0098	<0.0098	<0.0098	< 0.0098	<0.0098
B-41-12.5	5/20/2015	41.71	<1	<1	<5	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089
B-42-12.5	5/20/2015	41.95	<1	<1	<5	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
MW-18-12.5	5/13/2015	40.01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-18-17.5	5/13/2015	35.01	2	13	--	0.16	0.11	<0.010	0.17	<0.010	0.16
MW-18-21.5	5/13/2015	31.01	37	620	--	<0.5	2	<0.5	1.9	< 0.5	1.9
MW-18-26.5	5/13/2015	26.01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-18-31.5	5/13/2015	21.01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-19-12.5	5/13/2015	39.85	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-19-17.5	5/13/2015	34.85	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-19-22	5/13/2015	30.35	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
MW-19-27.5	5/13/2015	24.85	<1	<1	--	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
RB-2-22	5/15/2015	39.78	1,600	10,000	130	<20	160	250	940	< 20	55
RB-2-24	5/15/2015	37.78	2,500	13,000	240	120	150	640	850	< 50	57
RB-2-26	5/15/2015	35.78	7,700	22,000	560	100	140	640	770	< 100	<100
RB-2-28	5/15/2015	33.78	630	5,100	<50	11	70	150	400	< 10	24
RB-2-30	5/15/2015	31.78	160	3,100	<50	<10	28	74	160	< 10	11
RB-2-32	5/15/2015	29.78	3.2	11	<5	0.24	0.051	0.06	0.37	< 0.025	0.085
RB-2-34	5/15/2015	27.78	15	29	<5	0.1	<0.1	<0.1	0.48	< 0.1	0.26
RB-2-36	5/15/2015	25.78	52	960	<50	<2	2.1	<2	14	< 2	<2
RB-2-38	5/15/2015	23.78	1.7	16	<5	0.48	0.16	0.066	0.74	< 0.025	0.078
RB-2-40	5/15/2015	21.78	2	7.7	<5	0.68	0.066	0.34	0.29	< 0.05	<0.05
RB-6-22	5/15/2015	39.71	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
RB-6-24	5/15/2015	37.71	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
RB-6-26	5/15/2015	35.71	500	2,100	<50	<5	<5	<5	50	< 5	25
RB-6-28	5/15/2015	33.71	1,200	7,200	<25	14	77	210	390	< 10	40
RB-6-30	5/15/2015	31.71	480	1,500	<50	<5	13	<5	43	< 5	8.7
RB-6-32	5/15/2015	29.71	<1	<1	<5	0.0055	0.009	<0.005	<0.005	< 0.005	<0.005
RB-6-34	5/15/2015	27.71	<1	1	<5	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
RB-6-36	5/15/2015	25.71	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
RB-6-38	5/15/2015	23.71	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
RB-6-40	5/15/2015	21.71	<1	<1	<5	<0.005	<0.005	<0.005	<0.005	< 0.005	<0.005
Residential LTCP			--	--	--	1.9	--	21	--	--	9.7
Residential ESL			100	100	100	0.044	3.3	2.9	2.3	0.023	1.2
Commercial ESL			110	500	500	0.044	3.3	2.9	2.3	0.023	1.2
Construction Worker ESL			900	2,700	28,000	71	4,300	490	2,500	3,800	370

**Notes:**

<sup>1</sup>Soil samples located above the future site grade elevation of 52 feet a-msl

<sup>2</sup>Shallow (upper 10 feet bgs) and deep (greater than 10 feet bgs) soil samples located below the proposed future site grade elevation of 52 feet a-msl

**Results for soil to be removed and shallow soil (0 to 10 feet below future grade) to remain in place were screened against ESLs; bolded values exceed Residential ESLs.**

Results for soil to be removed and shallow soil (0 to 10 feet below future grade) to remain in place were screened against Residential LTCP criteria; shaded values exceed the Residential LTCP criteria.

a-msl - above mean sea level

bgs - below ground surface

BTEX - Benzene, toluene, ethylbenzene and xylenes using EPA Method 8260B

ESLs - Environmental Screening Levels

LTCP = Low Threat Underground Storage Tank Case Closure Policy, State Water Resources Control Board, May 2012

mg/kg - milligrams per kilogram

MTBE = Methyl tertiary butyl ether by EPA Method 8260.

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

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

TPHmo - Total Petroleum Hydrocarbons as Motor Oil using EPA Method 8015M

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

-- not analyzed, not applicable or criteria not established

Residential LTCP = Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health, State Water Resources Control Board, May 2012; the 0 to 5 feet bgs depth interval protects potential receptors from ingestion, dermal contact and inhalation of potentially contaminated soil.

Residential ESL = Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Commercial ESL = Table A-2 - Environmental Screening Levels for Shallow Soil (<3 meters), Commercial Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Construction Worker ESL = Table K-3 - Direct Exposure Soil Screening Levels, Construction/Trench Worker Exposure Scenario, as established by the San Francisco Regional Water Quality Control Board, December 2013.

**Table 3**  
**Soil Analytical Results for VOCs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1,2,4-Trimethyl- benzene	1,2-Dichloroethane (1,2-DCA)	1,3,5-Trimethyl- benzene	2-Butanone (MEK)	4-Isopropyl toluene	4-Methyl-2- pentanone (MIBK)	Isopropyl- benzene	n-Butyl benzene	n-Propyl benzene	t-Butyl alcohol (TBA)	All Other VOCs
			mg/kg										
Soil to be Removed <sup>1</sup>													
B-1-2.5	5/12/2015	61.52	<0.0088	<0.0088	<0.0088	<0.035	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.088	ND
B-1-7.5	5/15/2015	56.52	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND
B-10-2.5	5/18/2015	59.22	<0.0083	<0.0083	<0.0083	<0.033	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.083	ND
B-10-7.5	5/18/2015	54.22	<0.0083	<0.0083	<0.0083	<0.033	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.083	ND
B-20-2.5	5/19/2015	59.23	< 0.0086	< 0.0086	< 0.0086	< 0.034	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.086	ND
B-20-7.5	5/19/2015	54.23	< 0.0088	< 0.0088	< 0.0088	< 0.035	< 0.0088	< 0.0088	< 0.0088	< 0.0088	< 0.0088	< 0.088	ND
B-30-2.5	5/11/2015	59.24	<0.0091	<0.0091	<0.0091	<0.036	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.091	ND
B-30-7.5	5/11/2015	54.24	<0.0087	<0.0087	<0.0087	<0.035	<0.0087	<0.0087	<0.0087	<0.0087	<0.0087	<0.087	ND
B-36-2.5	5/20/2015	63.07	< 0.0097	< 0.0097	< 0.0097	< 0.039	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.097	ND
B-36-7.5	5/20/2015	58.07	< 0.0083	< 0.0083	< 0.0083	< 0.033	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.083	ND
B-36-12.5	5/20/2015	53.07	< 0.0091	< 0.0091	< 0.0091	< 0.036	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.091	ND
B-37-2.5	5/20/2015	61.45	< 0.008	< 0.008	< 0.008	< 0.032	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.08	ND
B-37-7.5	5/20/2015	56.45	< 0.0086	< 0.0086	< 0.0086	< 0.034	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.086	ND
B-38-2.5	5/20/2015	56.58	< 0.0092	< 0.0092	< 0.0092	< 0.037	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0.092	ND
B-39-2.5	5/20/2015	55.10	< 0.0084	< 0.0084	< 0.0084	< 0.034	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.084	ND
RB-6-3	5/15/2015	58.71	--	<0.2	--	--	--	--	--	--	--	<2.5	ND
Soil to Remain in Place <sup>2</sup> - Results for Future Shallow Soil (0 to 10 feet below future grade)													
B-36-17.5	5/20/2015	48.07	< 0.0091	< 0.0091	< 0.0091	< 0.036	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.091	ND
B-36-22.5	5/20/2015	43.07	< 0.0083	< 0.0083	< 0.0083	< 0.033	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.083	ND
B-37-12.5	5/20/2015	51.45	< 0.009	< 0.009	< 0.009	< 0.036	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.09	ND
B-37-17.5	5/20/2015	46.45	< 0.01	< 0.01	< 0.01	< 0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	ND
B-38-7.5	5/20/2015	51.58	< 0.0084	< 0.0084	< 0.0084	< 0.034	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.084	ND
B-38-12.5	5/20/2015	46.58	< 0.0084	< 0.0084	< 0.0084	< 0.034	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.084	ND
B-39-7.5	5/20/2015	50.10	< 0.0089	< 0.0089	< 0.0089	< 0.036	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.089	ND
B-39-12.5	5/20/2015	45.10	< 0.0082	< 0.0082	< 0.0082	< 0.033	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.082	ND
B-40-2.5	5/13/2015	50.18	<0.0095	<0.0095	<0.0095	<0.038	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.095	ND
B-40-7.5	5/13/2015	45.18	<0.0093	<0.0093	<0.0093	<0.037	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.093	ND
B-41-2.5	5/20/2015	51.71	< 0.0085	< 0.0085	< 0.0085	< 0.034	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.085	ND
B-41-7.5	5/20/2015	46.71	< 0.0081	< 0.0081	< 0.0081	< 0.033	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.081	ND
B-42-2.5	5/20/2015	51.95	< 0.0084	< 0.0084	< 0.0084	< 0.034	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.0084	< 0.084	ND
B-42-7.5	5/20/2015	46.95	< 0.009	< 0.009	< 0.009	< 0.036	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.09	ND
B-43-2.5	5/20/2015	50.83	< 0.009	< 0.009	< 0.009	< 0.036	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.09	ND
B-43-7.5	5/20/2015	45.83	< 0.0085	< 0.0085	< 0.0085	< 0.034	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.0085	< 0.085	ND
MW-18-7.5	5/13/2015	45.01	--	<0.004	--	--	--	--	--	--	--	--	ND
MW-19-7.5	5/13/2015	44.85	--	<0.004	--	--	--	--	--	--	--	--	ND

**Table 3**  
**Soil Analytical Results for VOCs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1,2,4-Trimethyl- benzene	1,2-Dichloroethane (1,2-DCA)	1,3,5-Trimethyl- benzene	2-Butanone (MEK)	4-Isopropyl toluene	4-Methyl-2- pentanone (MIBK)	Isopropyl- benzene	n-Butyl benzene	n-Propyl benzene	t-Butyl alcohol (TBA)	All Other VOCs
			mg/kg										
Deep Soil to Remain in Place <sup>2</sup> - Results for Future Deeper Soil (greater than 10 feet below future grade)													
B-37-22.5	5/20/2015	41.45	<0.0093	<0.0093	<0.0093	<0.037	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.093	ND
B-40-12.5	5/13/2015	40.18	<0.0098	<0.0098	<0.0098	<0.039	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.098	ND
B-41-12.5	5/20/2015	41.71	< 0.0089	< 0.0089	< 0.0089	< 0.036	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.089	ND
B-42-12.5	5/20/2015	41.95	< 0.009	< 0.009	< 0.009	< 0.036	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.09	ND
MW-18-12.5	5/13/2015	40.01	--	<0.004	--	--	--	--	--	--	--	--	ND
MW-18-17.5	5/13/2015	35.01	--	0.015	--	--	--	--	--	--	--	--	ND
MW-18-21.5	5/13/2015	31.01	--	<0.4	--	--	--	--	--	--	--	--	ND
MW-18-26.5	5/13/2015	26.01	--	0.011	--	--	--	--	--	--	--	--	ND
MW-18-31.5	5/13/2015	21.01	--	0.028	--	--	--	--	--	--	--	--	ND
MW-19-12.5	5/13/2015	39.85	--	<0.004	--	--	--	--	--	--	--	--	ND
MW-19-17.5	5/13/2015	34.85	--	<0.004	--	--	--	--	--	--	--	--	ND
MW-19-22	5/13/2015	30.35	--	<0.004	--	--	--	--	--	--	--	--	ND
MW-19-27.5	5/13/2015	24.85	--	0.0057	--	--	--	--	--	--	--	--	ND
RB-2-22	5/15/2015	39.78	460	<16	100	<80	<20	<20	<20	26	45	<200	ND
RB-2-24	5/15/2015	37.78	330	<40	76	<200	<50	<50	<50	<50	<50	<500	ND
RB-2-26	5/15/2015	35.78	260	<80	<100	<400	<100	<100	<100	<100	<100	<1000	ND
RB-2-28	5/15/2015	33.78	230	<8	52	<40	<10	<10	<10	14	22	<100	ND
RB-2-30	5/15/2015	31.78	87	<8	21	<40	<10	<10	<10	<10	11	<100	ND
RB-2-32	5/15/2015	29.78	0.36	0.034	0.11	<0.1	<0.025	0.062	<0.025	<0.025	<0.025	0.33	ND
RB-2-34	5/15/2015	27.78	1.6	<0.08	0.52	<0.4	<0.1	<0.1	<0.1	0.14	<0.1	<1	ND
RB-2-36	5/15/2015	25.78	12	<1.6	3.4	<8	<2	<2	<2	<2	<2	<20	ND
RB-2-38	5/15/2015	23.78	0.29	0.064	0.085	<0.1	<0.025	0.063	<0.025	<0.025	0.042	0.58	ND
RB-2-40	5/15/2015	21.78	0.065	0.077	<0.05	0.52	<0.05	0.086	<0.05	<0.05	<0.05	0.82	ND
RB-6-22	5/15/2015	39.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND
RB-6-24	5/15/2015	37.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND
RB-6-26	5/15/2015	35.71	130	<4	43	<20	6.2	<5	<5	17	13	<50	ND
RB-6-28	5/15/2015	33.71	220	<8	75	<40	<10	<10	10	21	40	<100	ND
RB-6-30	5/15/2015	31.71	82	<4	28	<20	<5	<5	<5	11	14	<50	ND
RB-6-32	5/15/2015	29.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	0.0072	<0.05	ND
RB-6-34	5/15/2015	27.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND

**Table 3**  
**Soil Analytical Results for VOCs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1,2,4-Trimethyl- benzene	1,2-Dichloroethane (1,2-DCA)	1,3,5-Trimethyl- benzene	2-Butanone (MEK)	4-Isopropyl toluene	4-Methyl-2- pentanone (MIBK)	Isopropyl- benzene	n-Butyl benzene	n-Propyl benzene	t-Butyl alcohol (TBA)	All Other VOCs
			mg/kg										
RB-6-36	5/15/2015	25.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND
RB-6-38	5/15/2015	23.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND
RB-6-40	5/15/2015	21.71	<0.005	<0.004	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	ND
Residential ESL			--	0.0045	--	--	--	--	--	--	--	0.075	--
Commercial ESL			--	0.0045	--	--	--	--	--	--	--	0.075	--
Construction Worker ESL			--	40	--	--	--	--	--	--	--	--	--

Notes:

<sup>1</sup>Soil samples located above the future site grade elevation of 52 feet a-msl

<sup>2</sup>Shallow (upper 10 feet bgs) and deep (greater than 10 feet bgs) soil samples located below the proposed future site grade elevation of 52 feet a-msl

a-msl - above mean sea level

bgs - below ground surface

ESLs - Environmental Screening Levels

mg/kg - milligrams per kilogram

ND - Not detected at or above the laboratory reporting limit, see laboratory analytical reports for individual compound detection limits (Appendix C)

VOCs - Volatile Organic Compounds using EPA Method SW8260B

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

-- - not analyzed, not applicable or criteria not established

Residential ESL = Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Commercial ESL = Table A-2 - Environmental Screening Levels for Shallow Soil (<3 meters), Commercial Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Construction Worker ESL = Table K-3 - Direct Exposure Soil Screening Levels, Construction/Trench Worker Exposure Scenario, as established by the San Francisco Regional Water Quality Control Board, December 2013.

**Table 4**  
**Soil Analytical Results for PAHs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1-Methyl-naphthalene	2-Methyl-naphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno (1,2,3-c,d)pyrene	Phenanthrene	Pyrene	Other PAHs
			mg/kg												
Soil to be Removed <sup>1</sup>															
B-1-2.5	5/12/2015	61.52	<0.05	<0.05	0.18	<b>0.33</b>	0.34	0.28	0.17	0.16	0.29	0.21	0.22	0.27	ND
B-1-7.5	5/15/2015	56.52	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-10-2.5	5/18/2015	59.22	<0.01	<0.01	0.014	0.022	0.019	0.018	0.012	<0.01	0.018	0.012	<0.01	0.013	ND
B-10-7.5	5/18/2015	54.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-20-2.5	5/19/2015	59.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-20-7.5	5/19/2015	54.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-30-2.5	5/11/2015	59.24	<0.01	<0.01	0.012	0.012	0.014	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.013	ND
B-30-7.5	5/11/2015	54.24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-36-2.5	5/20/2015	63.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND
B-36-7.5	5/20/2015	58.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-36-12.5	5/20/2015	53.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-37-2.5	5/20/2015	61.45	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-37-7.5	5/20/2015	56.45	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-38-2.5	5/20/2015	56.58	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	ND
B-39-2.5	5/20/2015	55.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
Shallow Soil to Remain in Place <sup>2</sup> - Results for Future Shallow Soil (0 to 10 feet below future grade)															
B-1-12.5	5/15/2015	51.52	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-1-17.5	5/15/2015	46.52	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-2-12.5	5/15/2015	49.36	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-2-17.5 <sup>a</sup>	5/15/2015	44.36	16	<b>27</b>	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
B-3-12.5	5/19/2015	49.36	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
B-3-17.5	5/19/2015	44.36	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
B-4-12.5	5/19/2015	49.28	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-4-17.5	5/19/2015	44.28	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-5-12.5	5/15/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-5-17.5	5/15/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-6-12.5	5/15/2015	49.32	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-6-17.5	5/15/2015	44.32	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-7-12.5	5/19/2015	49.31	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
B-7-17.5	5/19/2015	44.31	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
B-8-12.5	5/19/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-8-17.5	5/19/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-9-12.5	5/12/2015	49.16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND

**Table 4**  
**Soil Analytical Results for PAHs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1-Methyl-naphthalene	2-Methyl-naphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno (1,2,3-c,d)pyrene	Phenanthrene	Pyrene	Other PAHs
			mg/kg												
B-9-17.5	5/12/2015	44.16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-10-12.5	5/18/2015	49.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-10-17.5	5/18/2015	44.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-11-12.5	5/19/2015	49.24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-11-17.5	5/19/2015	44.24	0.12	<b>0.26</b>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
B-12-12.5	5/19/2015	49.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-12-17.5	5/19/2015	44.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-13-12.5	5/12/2015	49.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-13-17.5	5/12/2015	44.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-14-12.5	5/18/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-14-17.5	5/18/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-15-12.5	5/19/2015	44.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-15-17.5	5/19/2015	49.01	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-16-12.5	5/19/2015	49.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-16-17.5	5/19/2015	44.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-17-12.5	5/12/2015	49.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-17-18	5/12/2015	43.73	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-18-12.5	5/18/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-18-17.5	5/18/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-19-12.5	5/18/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-19-17.5	5/18/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-20-12.5	5/19/2015	49.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-20-17.5	5/19/2015	44.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-21-12.75	5/12/2015	49.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-21-17.75	5/12/2015	44.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-22-12.5	5/18/2015	49.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-22-17.5	5/18/2015	44.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-23-12.5	5/18/2015	49.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-23-17.5	5/18/2015	44.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-24-12.5	5/19/2015	49.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-24-17.5	5/19/2015	44.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-25-12.5	5/12/2015	49.28	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-25-17.5	5/12/2015	44.28	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-26-12.5	5/11/2015	49.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-26-17.5	5/11/2015	44.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-27-12.5	5/11/2015	49.19	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-27-17.5	5/11/2015	44.19	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND



**Table 4**  
**Soil Analytical Results for PAHs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1-Methyl-naphthalene	2-Methyl-naphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno (1,2,3-c,d)pyrene	Phenanthrene	Pyrene	Other PAHs
			mg/kg												
B-28-12.5	5/11/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-28-17.5	5/11/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-29-12.5	5/11/2015	49.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-29-17.5	5/11/2015	44.27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-30-12.5	5/11/2015	49.24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-30-17.5	5/11/2015	44.24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-31-12.75	5/12/2015	49.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-31-17.75	5/12/2015	44.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-32-12.5	5/12/2015	49.3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-32-17.75	5/12/2015	44.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-33-12.5	5/18/2015	49.28	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-33-17.5	5/18/2015	44.28	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND
B-34-12.5	5/18/2015	49.23	0.42	<b>0.27</b>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.31	<0.1	ND
B-34-17.5	5/18/2015	44.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-35-12.5	5/19/2015	49.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-35-17.5	5/19/2015	44.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-36-17.5	5/20/2015	48.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-36-22.5	5/20/2015	43.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-37-12.5	5/20/2015	51.45	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-37-17.5	5/20/2015	46.45	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-38-7.5	5/20/2015	51.58	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-38-12.5	5/20/2015	46.58	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-39-7.5	5/20/2015	50.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-39-12.5	5/20/2015	45.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-40-2.5	5/13/2015	50.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-40-7.5	5/13/2015	45.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-41-2.5	5/20/2015	51.71	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND
B-41-7.5	5/20/2015	46.71	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-42-2.5	5/20/2015	51.95	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	ND
B-42-7.5	5/20/2015	46.95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-43-2.5	5/20/2015	50.83	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	ND
B-43-7.5	5/20/2015	45.83	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND

**Table 4**  
**Soil Analytical Results for PAHs**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	1-Methyl-naphthalene	2-Methyl-naphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno (1,2,3-c,d)pyrene	Phenanthrene	Pyrene	Other PAHs
			mg/kg												
Deep Soil to Remain in Place <sup>2</sup> - Results for Future Deeper Soil (greater than 10 feet below future grade)															
B-37-22.5	5/20/2015	41.45	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-40-12.5	5/13/2015	40.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-41-12.5	5/20/2015	41.71	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
B-42-12.5	5/20/2015	41.95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
Residential ESL			--	0.25	0.38	0.04	0.38	27.0	0.38	3.80	40.0	0.38	11.0	85.0	--
Commercial ESL			--	0.25	1.30	0.13	1.30	27.0	1.30	13.0	40.0	1.30	11.0	85.0	--
Construction Worker ESL			--	570	8.30	0.83	8.30	--	8.30	83.0	5,700	8.30	--	8,600	--

Notes:

<sup>1</sup>Soil samples located above the future site grade elevation of 52 feet a-msl

<sup>2</sup>Shallow (upper 10 feet bgs) and deep (greater than 10 feet bgs) soil samples located below the proposed future site grade elevation of 52 feet a-msl

<sup>a</sup>Sample diluted by a factor of 500 during analysis

**Results for soil to be removed and shallow soil (0 to 10 feet below future grade) to remain in place were screened against ESLs; bolded values exceed Residential ESLs.**

a-msl - above mean sea level

bgs - below ground surface

ESLs - Environmental Screening Levels

mg/kg - milligrams per kilogram

ND - not detected at or above laboratory reporting limits, see laboratory analytical reports for individual compound detection limits (Appendix C)

PAHs - Polycyclic aromatic hydrocarbons using EPA Method 8270-SIM

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

-- not analyzed, not applicable or criteria not established

Residential ESL = Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Commercial ESL = Table A-2 - Environmental Screening Levels for Shallow Soil (<3 meters), Commercial Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Construction Worker ESL = Table K-3 - Direct Exposure Soil Screening Levels, Construction/Trench Worker Exposure Scenario, as established by the San Francisco Regional Water Quality Control Board, December 2013.

**Table 5**  
**Soil Analytical Results for Metals**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium (WET)	Chromium (WET)	Cobalt	Copper	Lead	Lead (WET)	Lead (WET)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			mg/kg						mg/L		mg/kg			mg/L		mg/kg							
Soils to be Removed <sup>1</sup>																							
B-1-2.5	5/12/2015	61.52	1.5	<b>5</b>	240	<0.5	1.4	52	0.16	< 0.05	7.5	37	<b>170</b>	4.0	< 0.20	0.22	0.84	34	<0.5	<0.5	<0.5	41	<b>1,500</b>
B-1-7.5	5/15/2015	56.52	<0.5	<b>4.4</b>	130	0.58	<0.25	57	< 0.05	< 0.05	12	15	7.1	--	--	<0.05	0.5	59	<0.5	<0.5	<0.5	49	29
B-10-2.5	5/18/2015	59.22	<0.5	<b>4.3</b>	130	<0.5	<0.25	37	--	--	12	11	9	--	--	<0.05	0.61	26	<0.5	<0.5	<0.5	40	21
B-10-7.5	5/18/2015	54.22	<0.5	<b>3.4</b>	150	0.57	<0.25	32	--	--	6.6	9.8	4.5	--	--	<0.05	<0.5	51	<0.5	<0.5	<0.5	30	22
B-20-2.5	5/19/2015	59.23	<0.5	<b>5.2</b>	140	0.54	<0.25	48	--	--	9.5	18	11	--	--	0.098	0.9	55	<0.5	<0.5	<0.5	43	39
B-20-7.5	5/19/2015	54.23	<0.5	<b>3.5</b>	98	<0.5	<0.25	38	--	--	7.4	11	4.9	--	--	<0.05	<0.5	26	<0.5	<0.5	<0.5	37	21
B-30-2.5	5/11/2015	59.24	0.74	<b>6.2</b>	330	<0.5	0.46	52	0.13	< 0.05	8.1	19	<b>220</b>	<b>22</b>	0.22	0.16	0.65	50	<0.5	<0.5	<0.5	45	210
B-30-7.5	5/11/2015	54.24	<0.5	<b>4.4</b>	170	0.68	<0.25	61	< 0.05	< 0.05	13	22	7.7	--	--	<0.05	<0.5	81	<0.5	<0.5	<0.5	51	56
B-36-2.5	5/20/2015	63.07	0.54	<b>3.9</b>	200	0.51	<0.25	41	--	--	8.4	20	40	--	--	0.25	<0.5	36	<0.5	<0.5	<0.5	39	61
B-36-7.5	5/20/2015	58.07	0.68	<b>17</b>	110	0.68	<0.25	130	0.14	< 0.05	6.8	22	7.5	--	--	0.1	0.57	49	<0.5	<0.5	<0.5	68	44
B-36-12.5	5/20/2015	53.07	<0.5	<b>6.7</b>	150	0.7	<0.25	57	< 0.05	< 0.05	9.2	26	8.6	--	--	0.11	<0.5	66	<0.5	<0.5	<0.5	55	58
B-37-2.5	5/20/2015	61.45	0.58	<b>9.2</b>	88	<0.5	<0.25	69	0.094	< 0.05	8.3	18	5.5	--	--	0.094	0.68	46	<0.5	<0.5	<0.5	51	29
B-37-7.5	5/20/2015	56.45	0.76	<b>6.3</b>	120	0.64	<0.25	130	0.14	< 0.05	9.2	24	21	--	--	0.14	0.99	56	<0.5	<0.5	<0.5	61	110
B-38-2.5	5/20/2015	56.58	<0.5	<b>4.1</b>	72	<0.5	<0.25	21	--	--	4.9	15	19	--	--	0.081	<0.5	14	<0.5	<0.5	<0.5	40	58
B-39-2.5	5/20/2015	55.10	<0.5	<b>3.7</b>	150	0.51	<0.25	49	--	--	9.5	13	8.8	--	--	<0.05	<0.5	32	<0.5	<0.5	<0.5	44	27
Shallow Soil to Remain in Place <sup>2</sup> - Results for Future Shallow Soil (0 to 10 feet below future grade)																							
B-36-17.5	5/20/2015	48.07	<0.5	<b>6.6</b>	200	<0.5	0.28	87	--	--	8	20	4.2	--	--	0.09	0.71	58	<0.5	<0.5	<0.5	47	44
B-36-22.5	5/20/2015	43.07	<0.5	<b>5.4</b>	170	0.71	<0.25	50	--	--	7.2	32	5	--	--	0.15	<0.5	57	<0.5	<0.5	<0.5	45	76
B-37-12.5	5/20/2015	51.45	<0.5	<b>1.7</b>	120	<0.5	<0.25	52	< 0.05	< 0.05	4.7	18	2.7	--	--	0.061	<0.5	54	<0.5	<0.5	<0.5	33	53
B-37-17.5	5/20/2015	46.45	<0.5	<b>3.4</b>	160	0.53	<0.25	50	--	--	5.6	21	4.2	--	--	0.1	<0.5	60	<0.5	<0.5	<0.5	38	65
B-38-7.5	5/20/2015	51.58	<0.5	<b>4.0</b>	100	<0.5	<0.25	41	--	--	11	12	4.2	--	--	0.056	<0.5	37	<0.5	<0.5	<0.5	36	18
B-38-12.5	5/20/2015	46.58	<0.5	<b>5.8</b>	320	0.62	0.27	50	--	--	18	24	12	--	--	0.13	0.69	88	<0.5	<0.5	<0.5	46	59
B-39-7.5	5/20/2015	50.10	<0.5	<b>3.3</b>	94	<0.5	<0.25	37	--	--	5.3	12	3.9	--	--	0.063	<0.5	47	<0.5	<0.5	<0.5	33	26
B-39-12.5	5/20/2015	45.10	<0.5	<b>8.4</b>	150	0.84	<0.25	68	--	--	<b>27</b>	18	9.1	--	--	<0.05	0.66	60	<0.5	<0.5	<0.5	56	30
B-40-2.5	5/13/2015	50.18	<0.5	<b>3.3</b>	100	0.54	<0.25	35	--	--	9.6	9.7	4.4	--	--	<0.05	<0.5	81	<0.5	<0.5	<0.5	31	22
B-40-7.5	5/13/2015	45.18	<0.5	<b>4.9</b>	130	<0.5	<0.25	48	--	--	9	17	7	--	--	0.051	1.1	55	<0.5	<0.5	<0.5	41	26
B-41-2.5	5/20/2015	51.71	<0.5	<b>5.8</b>	100	0.62	<0.25	79	0.061	0.064	5.3	22	10	--	--	0.1	0.78	48	<0.5	<0.5	<0.5	62	36
B-41-7.5	5/20/2015	46.71	<0.5	<b>8.6</b>	170	0.95	<0.25	47	--	--	<b>26</b>	21	9.2	--	--	<0.05	0.71	79	<0.5	<0.5	<0.5	62	35
B-42-2.5	5/20/2015	51.95	<0.5	<b>4.8</b>	170	<0.5	<0.25	46	--	--	18	14	21	--	--	0.084	<0.5	36	<0.5	<0.5	<0.5	41	37
B-42-7.5	5/20/2015	46.95	<0.5	<b>1.6</b>	55	<0.5	<0.25	8.6	--	--	3.1	5.5	2.3	--	--	<0.05	<0.5	12	<0.5	<0.5	<0.5	8.8	7
B-43-2.5	5/20/2015	50.83	<0.5	<b>3.8</b>	78	<0.5	<0.25	17	--	--	7.7	28	40	--	--	0.16	<0.5	21	<0.5	<0.5	<0.5	53	130
B-43-7.5	5/20/2015	45.83	<0.5	<b>8.0</b>	<b>1600</b>	0.94	3.2	54	--	--	<b>27</b>	46	17	--	--	0.34	2.1	<b>410</b>	0.61	<0.5	<b>1.6</b>	64	59
Deep Soil to Remain in Place <sup>2</sup> - Results for Future Deeper Soil (greater than 10 feet below future grade)																							
B-37-22.5	5/20/2015	41.45	<0.5	4.7	190	0.52	<0.25	42	--	--	8	21	5.3	--	--	0.086	<0.5	60	<0.5	<0.5	<0.5	38	52
B-40-12.5	5/13/2015	40.18	<0.5	4.8	160	<0.5	<0.25	36	--	--	5.7	16	6	--	--	0.11	<0.5	57	<0.5	<0.5	<0.5	39	40
B-41-12.5	5/20/2015	41.71	<0.5	6.4	340	0.51	0.41	58	--	--	12	22	5.5	--	--	0.051	1.5	92	<0.5	<0.5	<0.5	46	44
B-42-12.5	5/20/2015	41.95	<0.5	5.5	160	0.66	<0.25	70	--	--	13	24	8.9	--	--	0.055	0.53	89	<0.5	<0.5	<0.5	55	51
TTLc			500	500	10,000	75	100	2,500	--	--	8,000	2,500	1,000	--	--	20	3,500	2,000	100	500	700	2,400	5,000
STLC			--	--	--	--	--	--	5	--	--	--	--	5	--	--	--	--	--	--	--	--	--
TCLP			--	--	--	--	--	--	--	5	--	--	--	--	5	--	--	--	--	--	--	--	--
Residential ESL			20	0.39	750	4	12	1,000	--	--	23	230	80	--	--	6.7	40	150	10	20	0.78	200	600
Commercial ESL			40	1.60	1,500	8	12	2,500	--	--	80	230	320	--	--	10	40	150	10	40	10	200	600
Construction Worker ESL			120	10	61,000	180	110	--	--	--	49	12,000	320	--	--	27	1,500	6,100	1,500	1,500	3	1,500	93,000

Notes:

<sup>1</sup>Soil samples located above the future site grade elevation of 52 feet a-msl

<sup>2</sup>Shallow (upper 10 feet bgs) and deep (greater than 10 feet bgs) soil samples located below the proposed future site grade elevation of 52 feet a-msl

**Results for soil to be removed and shallow soil (0 to 10 feet below future grade) to remain in place were screened against ESLs; bolded values exceed Residential ESLs.**

Results for soil to be removed were screened against hazardous waste criteria; shaded values exceed hazardous waste criteria.

a-msl - above mean sea level

bgs - below ground surface

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

STLC - California Soluble Threshold Limit Concentration

TCLP - Federal Toxicity Characteristic Leaching Procedure

TTLc - Total Threshold Limit Concentrations

WET - California waste extraction test

-- not analyzed, not applicable or criteria not established

<0.5 - Analyte was not detected at or above the laboratory reporting limit (0.5 mg/kg)

Residential ESL = Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Commercial ESL = Table A-2 - Environmental Screening Levels for Shallow Soil (<3 meters), Commercial Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Construction Worker ESL = Table K-3 - Direct Exposure Soil Screening Levels, Construction/Trench Worker Exposure Scenario, as established by the San Francisco Regional Water Quality Control Board, December 2013.

**Table 6**  
**Soil Analytical Results for Pesticides, PCBs and pH**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	Pesticides	PCBs	pH
			mg/kg		
Soil to be Removed <sup>1</sup>					
B-1-2.5	5/12/2015	61.52	ND	ND	7.55
B-1-7.5	5/15/2015	56.52	ND	ND	6.46
B-10-2.5	5/18/2015	59.22	ND	ND	8.34
B-10-7.5	5/18/2015	54.22	ND	ND	7.12
B-20-2.5	5/19/2015	59.23	ND	ND	8.59
B-20-7.5	5/19/2015	54.23	ND	ND	7.42
B-30-2.5	5/11/2015	59.24	ND	ND	8.2
B-30-7.5	5/11/2015	54.24	ND	ND	7.2
B-36-2.5	5/20/2015	63.07	ND	ND	7.27
B-36-7.5	5/20/2015	58.07	ND	ND	8.01
B-36-12.5	5/20/2015	53.07	ND	ND	7.77
B-37-2.5	5/20/2015	61.45	ND	ND	9.21
B-37-7.5	5/20/2015	56.45	ND	ND	9.51
B-38-2.5	5/20/2015	56.58	ND	ND	8.12
B-39-2.5	5/20/2015	55.10	ND	ND	7.75
Shallow Soil to Remain in Place <sup>2</sup> - Results for Future Shallow Soil (0 to 10 feet below future grade)					
B-36-17.5	5/20/2015	48.07	ND	ND	7.82
B-36-22.5	5/20/2015	43.07	ND	ND	7.24
B-37-12.5	5/20/2015	51.45	ND	ND	7.86
B-37-17.5	5/20/2015	46.45	ND	ND	7.37
B-38-7.5	5/20/2015	51.58	ND	ND	6.7
B-38-12.5	5/20/2015	46.58	ND	ND	6.58
B-39-7.5	5/20/2015	50.10	ND	ND	6.83
B-39-12.5	5/20/2015	45.10	ND	ND	6.88
B-40-2.5	5/13/2015	50.18	ND	ND	8.37
B-40-7.5	5/13/2015	45.18	ND	ND	7.4
B-41-2.5	5/20/2015	51.71	ND	ND	6.97
B-41-7.5	5/20/2015	46.71	ND	ND	6.93
B-42-2.5	5/20/2015	51.95	ND	ND	7.83
B-42-7.5	5/20/2015	46.95	ND	ND	7.98
B-43-2.5	5/20/2015	50.83	ND	ND	8.18
B-43-7.5	5/20/2015	45.83	ND	ND	7.19

**Table 6**  
**Soil Analytical Results for Pesticides, PCBs and pH**  
**3093 Broadway**  
**Oakland, California**

Sample ID	Sample Date	Sample Elevation feet a-msl	Pesticides	PCBs	pH
			mg/kg		
Deep Soil to Remain in Place <sup>2</sup> - Results for Future Deeper Soil (greater than 10 feet below future grade)					
B-37-22.5	5/20/2015	41.45	ND	ND	7.11
B-40-12.5	5/13/2015	40.18	ND	ND	8.07
B-41-12.5	5/20/2015	41.71	ND	ND	7.85
B-42-12.5	5/20/2015	41.95	ND	ND	7.11
Residential ESL			--	--	--
Commercial ESL			--	--	--
Construction Worker ESL			--	--	--

Notes:

<sup>1</sup>Soil samples located above the future site grade elevation of 52 feet a-msl

<sup>2</sup>Shallow (upper 10 feet bgs) and deep (greater than 10 feet bgs) soil samples located below the proposed future site grade elevation of 52 feet a-msl

a-msl - above mean sea level

bgs - below ground surface

mg/kg - milligrams per kilogram

ND - Not detected at or above the laboratory reporting limit, see laboratory analytical reports for individual compound detection limits

PCBs - Polychlorinated biphenyls using EPA Method 8081A/8082

Pesticides using EPA Method 8081A/8082

pH using method SW9045D

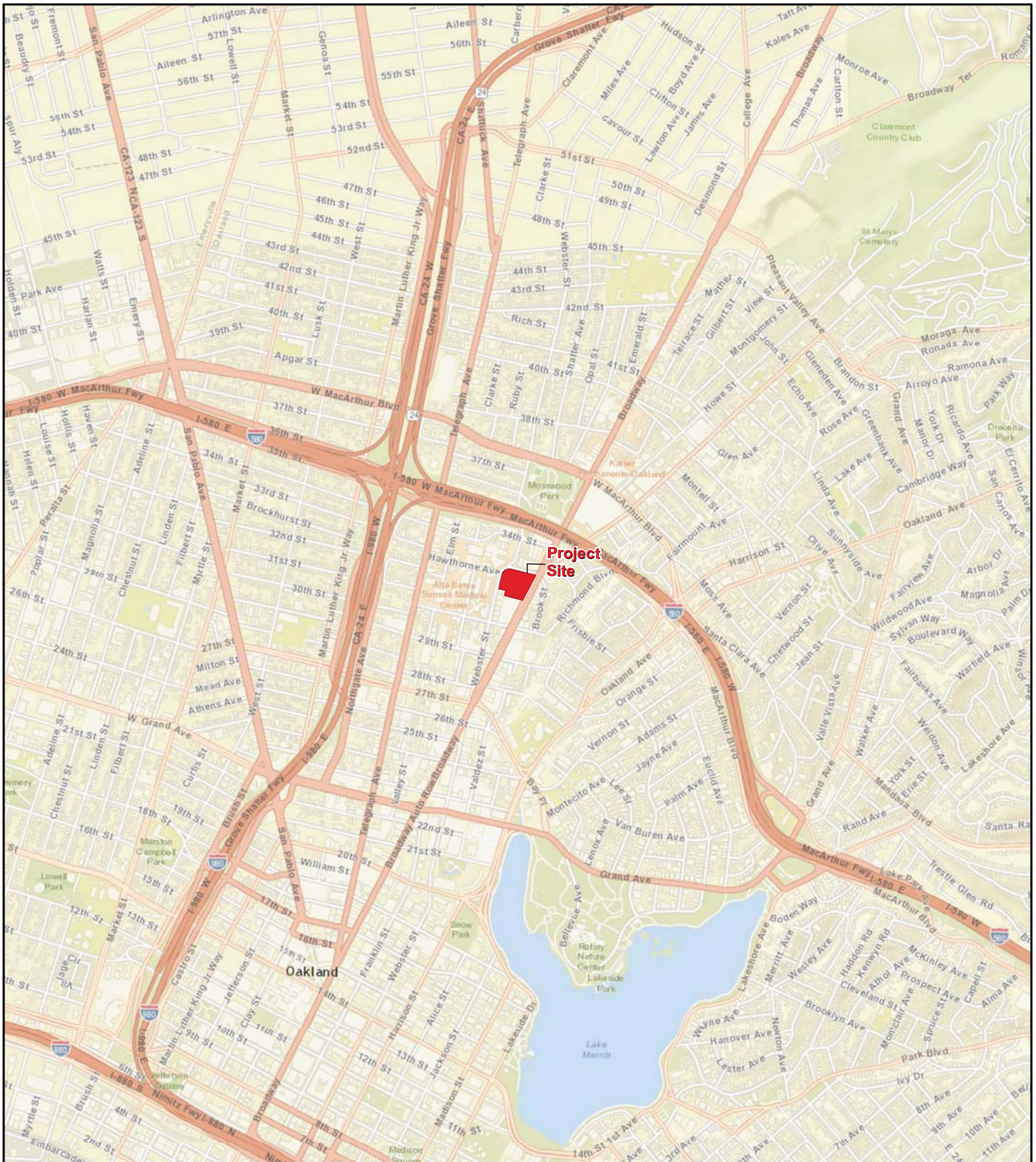
-- not analyzed, not applicable or criteria not established

Residential ESL = Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

Commercial ESL = Table A-2 - Environmental Screening Levels for Shallow Soil (<3 meters), Commercial Land Use, where groundwater is a current or potential drinking water resource, as established by the San Francisco Regional Water Quality Control Board, December 2013.

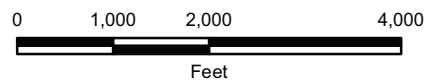
Construction Worker ESL = Table K-3 - Direct Exposure Soil Screening Levels, Construction/Trench Worker Exposure Scenario, as established by the San Francisco Regional Water Quality Control Board, December

## **FIGURES**



**Notes:**

1. World street basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, IPC, NRCAN.
2. Map displayed in California State Plane Coordinate System, Zone III, North American Datum of 1983 (NAD83), US Survey Feet.



**3093 BROADWAY**  
Oakland, California

**SITE LOCATION MAP**

**LANGAN TREADWELL ROLLO**

Date 05/01/15

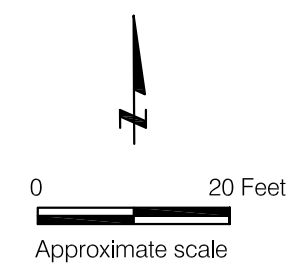
Project 7316317001

Figure 1

\\langan.com\data\SF\data\731637001\Cadd Data - 731637001\2D-DesignFiles\Environmental\731637001-N-SP0131.dwg 6/25/15



- EXPLANATION**
- SV-1 ● Soil vapor well location
  - MW-1 ● Monitoring well location
  - Site boundary
  - - - 1,000 Benzene Isoconcentration in water, queried where uncertain (May 2014)
  - B-1 ● Pre-excitation soil sampling location by Langan Treadwell Rollo, May 2015
  - RB-1 ● Remediation boring and soil sampling location by Langan Treadwell Rollo, May 2015

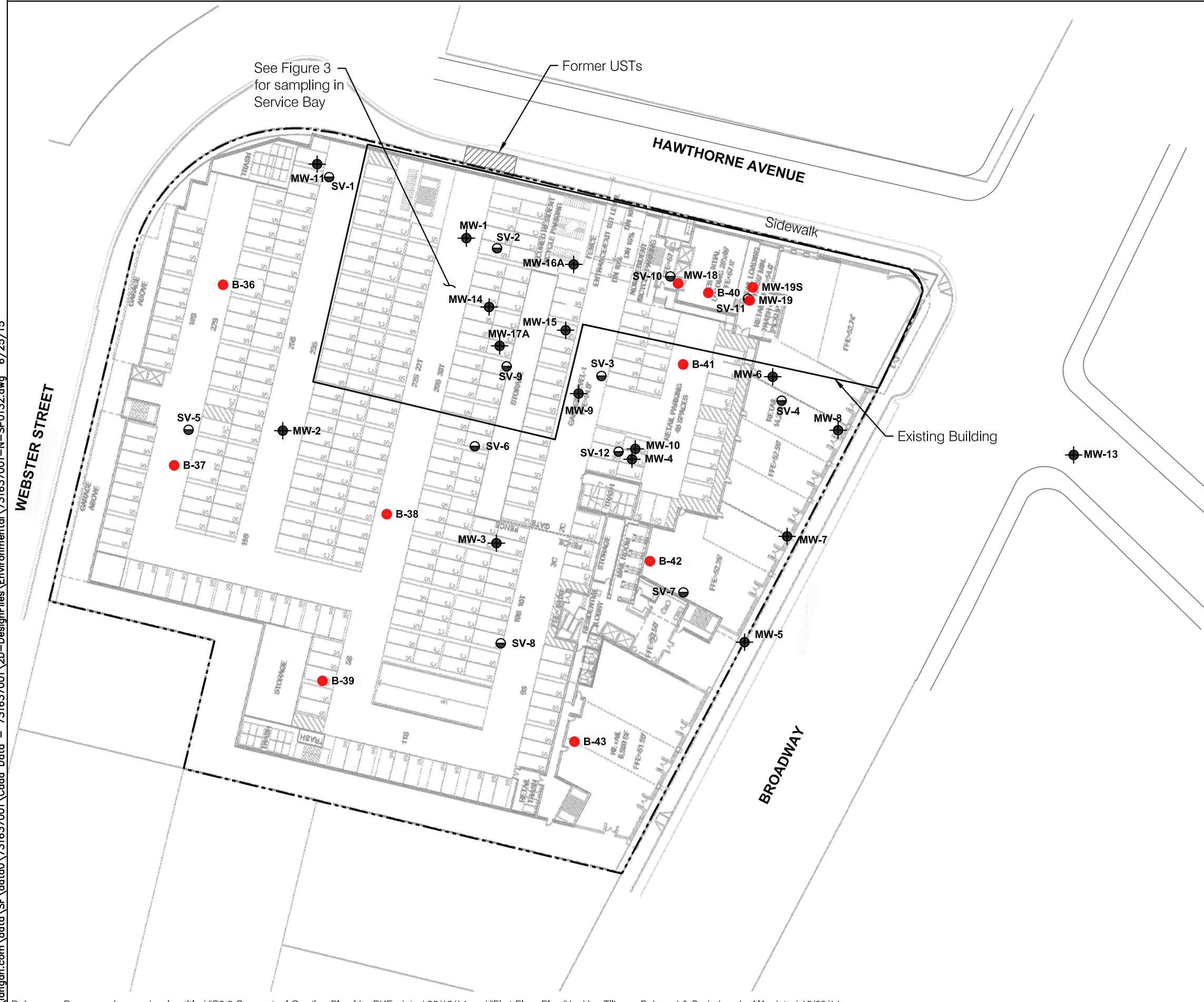


<b>3093 BROADWAY</b> Oakland, California		
<b>PRE-EXCAVATION SAMPLING AND CHARACTERIZATION SERVICE BAY AREA</b>		
Date 06/08/15	Project No. 731637001	Figure 2
<b>LANGAN TREADWELL ROLLO</b>		

Reference: Base map from a drawing titled "C2.0 Conceptual Grading Plan," by BKF, dated 08/19/14 and "Site Plan," by Van Tilburg, Babvard & Soderbergh, AIA, dated 10/03/14.



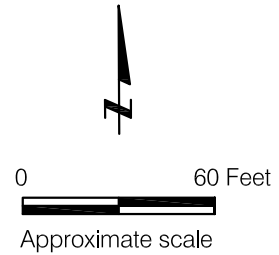
\\langan.com\data\SF\data0\731637001\Cadd Data - 731637001\2D-DesignFiles\Environmental\731637001-N-SP0132.dwg 6/25/15



**EXPLANATION**

- B-36** ● Pre-excitation soil sampling location by Langan Treadwell Rollo, May 2015
- SV-1** ● Soil vapor well location
- MW-1** ● Monitoring well location
- Site boundary
- MW-18** ● Groundwater monitoring well and soil sampling location by Langan Treadwell Rollo, May 2015

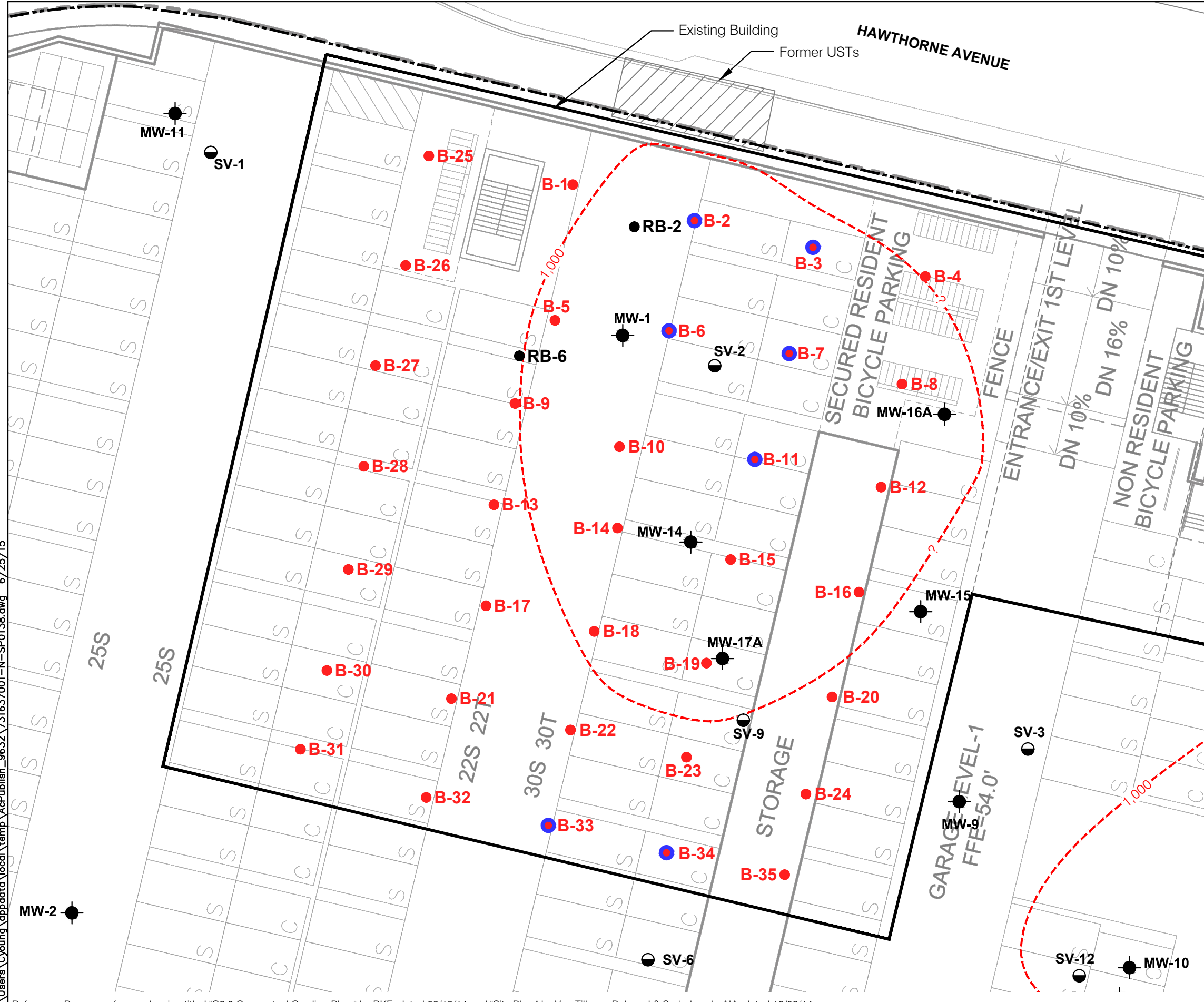
Note:  
 1. Soil sampling frequency of minimum of 1 sample every 1/2 acre in general accordance with DTSC's information advisory for clean imported fill material (2001)



<b>3093 BROADWAY</b> Oakland, California		
<b>PRE-EXCAVATION SAMPLING AND CHARACTERIZATION AREAS OUTSIDE OF SERVICE BAY</b>		
Date 06/08/15	Project No. 731637001	Figure 3
<b>LANGAN TREADWELL ROLLO</b>		

Reference: Base map from a drawing titled "C2.0 Conceptual Grading Plan," by BKF, dated 08/19/14 and "First Floor Plan," by Van Tilburg, Babvard & Soderbergh, AIA, dated 10/03/14.

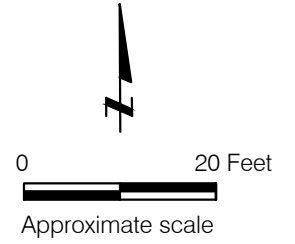
C:\Users\Cyoung\appdata\local\temp\AcPublish\_9632\731637001-N-SP0138.dwg 6/25/15



**EXPLANATION**

- SV-1 ● Soil vapor well location
- MW-1 ● Monitoring well location
- Site boundary
- - - 1,000 Benzene Isoconcentration in groundwater, queried where uncertain (May 2014)
- B-1 ● Pre-excavation soil sampling location by Langan Treadwell Rollo, May 2015
- RB-1 ● Remediation boring and soil sampling location by Langan Treadwell Rollo, May 2015
- B-2 ● One or more detected concentrations in future shallow soil are projected to exceed the Residential Environmental Screening Level (ESL)

- Notes:
1. Future shallow soil was analyzed for Total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as motor oil, benzene, toluene, ethylbenzene, xylenes (BTEX), and poly aromatic hydrocarbons (PAHs).
  2. Residential ESLs for soil are from Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, San Francisco Regional Water Quality Control Board, December 2013.
  3. Future site grade is planned to be 52 feet above Mean Sea Level (MSL), so soil samples collected at elevations between 42 and 52 feet above MSL are projected to be from future shallow soil.
  4. Arsenic is not included in the screening shown on this figure because naturally occurring arsenic exceeds the Residential ESL. Arsenic concentrations detected in site soil were within the range of anticipated naturally occurring arsenic concentrations.



**3093 BROADWAY**  
Oakland, California

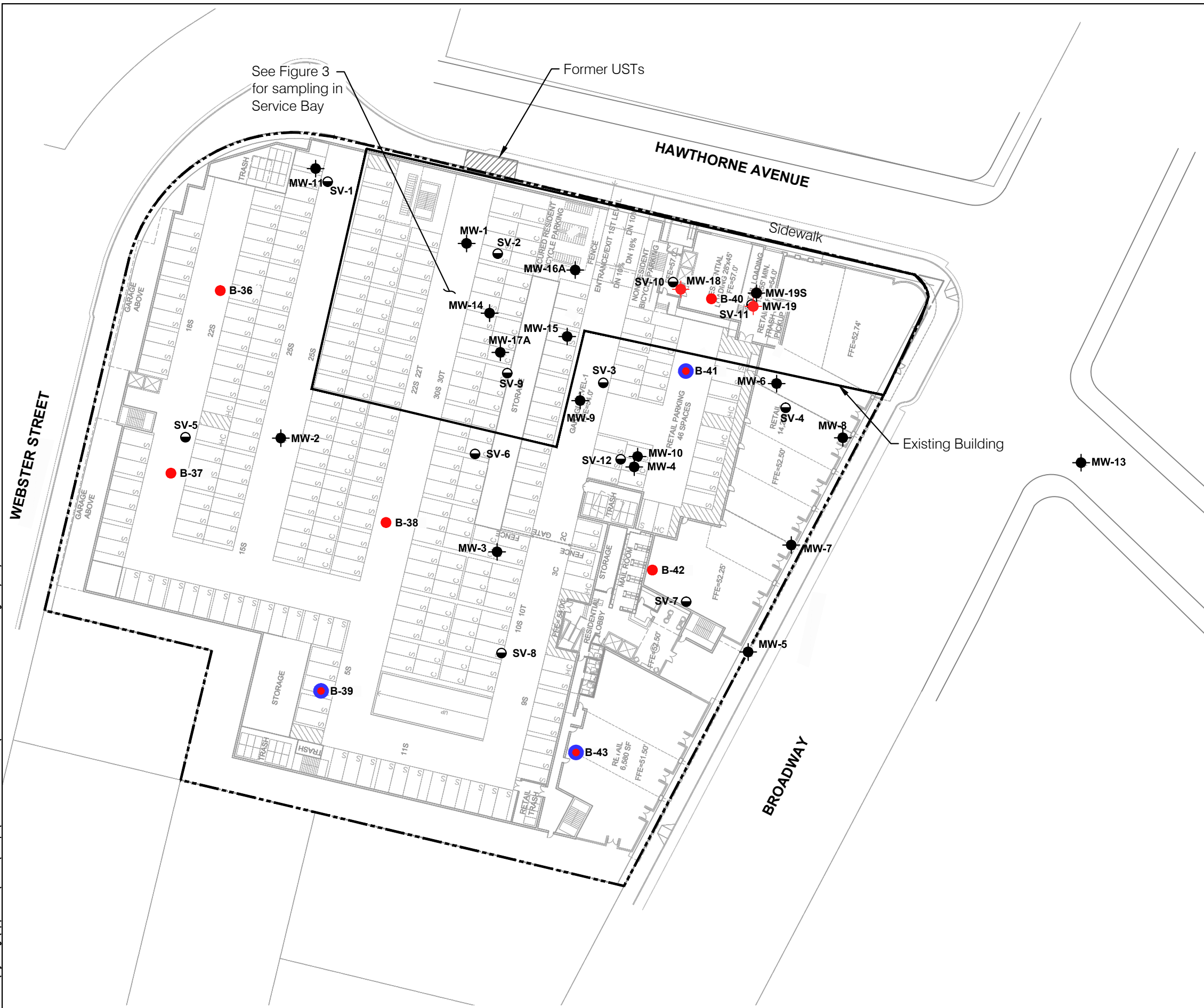
**COMPARISON OF SHALLOW (0 - 10 FEET BGS) SOIL RESULTS TO RESIDENTIAL ESLs SERVICE BAY AREA**

Date 06/08/15	Project No. 731637001	Figure 4
---------------	-----------------------	----------

**LANGAN TREADWELL ROLLO**

Reference: Base map from a drawing titled "C2.0 Conceptual Grading Plan," by BKF, dated 08/19/14 and "Site Plan," by Van Tilburg, Babvard & Soderbergh, AIA, dated 10/03/14.

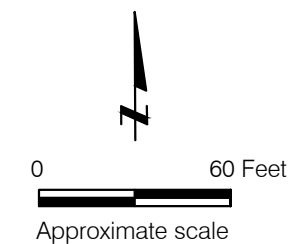
C:\Users\Cyoung\appdata\local\temp\AcPublish\_9632\731637001-N-SP0139.dwg 6/25/15



**EXPLANATION**

- B-36** ● Pre-excitation soil sampling location by Langan Treadwell Rollo, May 2015
- SV-1** ● Soil vapor well location
- MW-1** ● Monitoring well location
- Site boundary
- Analysis of future shallow soil samples from locations MW-18 and MW-19 included TPH as gasoline, TPH as diesel, TPH as motor oil, 1,2-dichloroethane, MTBE, BTEX, and naphthalene
- MW-18** ●
- B-41** ● One or more detected concentrations in shallow soil exceed the Residential Environmental Screening Level (ESL)

- Notes:
1. Future shallow soil was analyzed for Total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as motor oil, and poly aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), PCBs, pesticides, and CAM-17 Metals.
  2. Residential ESLs for soil are from Table A-1 - Environmental Screening Levels for Shallow Soil (<3 meters), Residential Land Use, where groundwater is a current or potential drinking water resource, San Francisco Regional Water Quality Control Board, December 2013.
  3. Future site grade is planned to be 52 feet above Mean Sea Level (MSL), so soil samples collected at elevations between 42 and 52 feet above MSL are projected to be from future shallow soil.
  4. Arsenic is not included in the screening shown on this figure because naturally occurring arsenic exceeds the Residential ESL. Arsenic concentrations detected in site soil were within the range of anticipated naturally occurring arsenic concentrations.

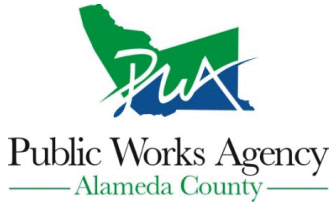


<b>3093 BROADWAY</b> Oakland, California		
<b>COMPARISON OF SHALLOW (0 - 10 FEET BGS) SOIL RESULTS TO RESIDENTIAL ESLs AREAS OUTSIDE OF SERVICE BAY</b>		
Date 06/08/15	Project No. 731637001	Figure 5
<b>LANGAN TREADWELL ROLLO</b>		

Reference: Base map from a drawing titled "C2.0 Conceptual Grading Plan," by BKF, dated 08/19/14 and "First Floor Plan," by Van Tilburg, Babvard & Soderbergh, AIA, dated 10/03/14.

**APPENDIX A  
PERMITS**

# Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street  
Hayward, CA 94544-1395  
Telephone: (510)670-6633 Fax:(510)782-1939

**Application Approved on: 05/08/2015 By jamesy**

**Permit Numbers: W2015-0389 to W2015-0392**  
**Permits Valid from 05/11/2015 to 06/03/2015**

**Application Id:** 1430776246973  
**Site Location:** 3093 Broadway, Oakland, CA 94611  
**Project Start Date:** 05/11/2015  
**Assigned Inspector:** Contact Sam Brathwaite at (925) 570-7609 or sbrathwaite@groundzonees.com

**City of Project Site:**Oakland

**Completion Date:**06/03/2015

**Applicant:** Langan Treadwell Rollo - Elizabeth Kimbrel  
501 14th St, 3rd Flr., Oakland, CA 94612  
**Property Owner:** 3093 Broadway Holdings LLC - Stephen Siri  
555 California St, 10th Flr., San Francisco, CA 94014  
**Client:** \*\* same as Property Owner \*\*

**Phone:** 510-874-7018

**Phone:** 415-262-5156

	<b>Total Due:</b>	\$1324.00
<b>Receipt Number: WR2015-0230</b>	<b>Total Amount Paid:</b>	\$1324.00
<b>Payer Name : Langan Treadwell Rollo</b>	<b>Paid By: CHECK</b>	<b>PAID IN FULL</b>

**Works Requesting Permits:**

Well Construction-Monitoring-Monitoring - 2 Wells  
Driller: Cascade - Lic #: 938110 - Method: other

**Work Total: \$794.00**

**Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0389	05/08/2015	08/09/2015	MW18	8.00 in.	2.00 in.	19.00 ft	40.00 ft
W2015-0390	05/08/2015	08/09/2015	MW19	8.00 in.	2.00 in.	19.00 ft	40.00 ft

**Specific Work Permit Conditions**

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755

## Alameda County Public Works Agency - Water Resources Well Permit

(Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
8. Minimum surface seal thickness is two inches of cement grout placed by tremie.
9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.
10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

---

Remediation Well Construction-Injection - 7 Wells

Driller: Cascade - Lic #: 938110 - Method: other

**Work Total: \$265.00**

### Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0391	05/08/2015	08/09/2015	RB1	8.00 in.	0.00 in.	25.00 ft	40.00 ft
W2015-0391	05/08/2015	08/09/2015	RB2	8.00 in.	0.00 in.	25.00 ft	40.00 ft
W2015-0391	05/08/2015	08/09/2015	RB3	8.00 in.	0.00 in.	25.00 ft	40.00 ft
W2015-0391	05/08/2015	08/09/2015	RB4	8.00 in.	0.00 in.	25.00 ft	40.00 ft
W2015-0391	05/08/2015	08/09/2015	RB5	8.00 in.	0.00 in.	25.00 ft	40.00 ft
W2015-0391	05/08/2015	08/09/2015	RB6	8.00 in.	0.00 in.	25.00 ft	40.00 ft
W2015-0391	05/08/2015	08/09/2015	RB7	8.00 in.	0.00 in.	25.00 ft	40.00 ft

### Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or

# Alameda County Public Works Agency - Water Resources Well Permit

waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.
4. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
7. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).
8. Minimum surface seal thickness is two inches of cement grout placed by tremie.
9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
10. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

---

Borehole(s) for Investigation-Environmental/Monitorinig Study - 43 Boreholes

Driller: Cascade - Lic #: 938110 - Method: other

**Work Total: \$265.00**

## Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-0392	05/08/2015	08/09/2015	43	2.00 in.	22.50 ft

## Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend

## Alameda County Public Works Agency - Water Resources Well Permit

and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

6. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

---



**APPENDIX B  
BORING LOGS**

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-1

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							9 inches concrete
2	B-1-2.5	•			0.1	CL	SILTY CLAY with SAND (CL) dark brown with orange streaks, medium stiff, dry, plastic, no odor
3						CL	CLAY with GRAVEL (CL) light brown, soft, wet, subangular gravel up to 1/4 inch in diameter, plastic, brick debris, very wet, no odor
4						CL	GRAVELLY CLAY with SAND (CL) gray, very soft, wet, subangular gravel up to 1 inch in diameter, slightly plastic, no odor
5							
6							
7	B-1-7.5	•		36/36	0.2		CLAY with GRAVEL (CL) yellow-brown, soft, moist, subangular gravel up to 1/4 inch in diameter, slightly plastic, no odor
8							
9							
10						CL/ML	
11							
12	B-1-12.5	•		36/36	0.1		
13							
14							
15							
16							
17	B-1-17.5	•		36/36	0.9		SANDY CLAY with GRAVEL (CL) red-brown and brown, soft, dry to moist, slightly plastic, rock and brick fragments, no odor
18							CL
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 20 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-1

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-2

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/15/15

Date finished: 5/15/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.9	CL	5 inches concrete
2							SILTY CLAY with GRAVEL (CL) dark brown, medium stiff, dry, subangular gravel up to 1 inch in diameter, plastic, no odor
3					0.4		
4					0.3	CL/ML	SILTY CLAY (CL/ML) dark to light brown, moist, plastic, no odor
5							
6				36/36			
7							
8							
9				36/36		CL	SANDY CLAY with GRAVEL (CL) light brown, red gravel, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
10							
11							
12	B-2-12.5	•		36/36			SANDY CLAY (CL) yellow-brown to olive-brown, medium stiff, dry, slightly plastic, weak to moderate odor
13							
14							
15				24/24	12.1	CL	
16					158		
17	B-2-17.5	•		24/24	344		gravel
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-3

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.3	CL	6 inches concrete
2					0.3		SILTY CLAY with GRAVEL (CL) red-brown, soft, dry, slightly plastic, no odor
3					0.3		SILTY CLAY (CL/ML) yellow-brown to dark brown, medium stiff, dry, plastic, weak odor black mottling
4					0.3		
5					0.6	CL/ ML	stiff
6			36/36		0.3		
7					7.1		
8			36/36		8.4	CL	SANDY CLAY with GRAVEL (CL) red-brown, stiff, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, moderate odor
9					19.3		
10	B-3-12.5	•	36/36		2.1		SILTY CLAY with GRAVEL (CL) olive-brown, medium stiff, moist, subangular gravel up to 1/4 inch in diameter, plastic, moderate odor
11					2.5		
12			24/24		1.2	CL	
13					0.8		
14	B-3-17.5	•	24/24		2.5		strong odor
15					18.5		
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-3

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-4

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.8		5 inches concrete
2					0.4		SILTY CLAY with GRAVEL (CL) dark brown, medium stiff, dry to moist, subangular gravel up to 1/2 inch in diameter, plastic, no odor
3							
4							
5					0.3	CL	no gravel, black mottling
6				28/36	1		
7					0.5		
8					0.5		
9							
10				36/36	0.4	CL	SANDY CLAY with GRAVEL (CL) red-brown, medium stiff, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
11					0.5		SILTY CLAY (CL/ML) light brown, stiff, moist, black mottling, plastic, no odor
12	B-4-12.5	•		36/36		CL/ML	
13					0.3		
14					0.4	CL	SANDY CLAY with GRAVEL (CL) red-brown, dry, plastic, subangular gravel up to 1/4 inch in diameter
15				24/24		CL	SILTY CLAY with SAND (CL) light brown, medium stiff, dry, plastic, no odor
16					0.2		
17	B-4-17.5	•		24/24	0.3	CL	SANDY CLAY with GRAVEL (CL) light brown to red-brown, soft, dry to moist, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
18					0.2		moist at 17.5 feet
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-4

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-5

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							7 inches concrete
2					0.6	CL	SILTY CLAY with GRAVEL (CL) yellow-brown to orange, soft, dry, subangular gravel up to 1/2 inch in diameter, plastic, no odor
3				0.1			
4							
5					0.1	CL/ML	SILTY CLAY (CL/ML) light brown, soft, dry, slightly plastic, no odor
6				36/36			
7							
8						SC	SILTY SAND with CLAY (SC) light brown, medium dense, dry, slightly plastic, no odor
9				36/36			
10					3.0		
11					0.8	CL	SILTY CLAY with GRAVEL (CL) yellow-brown, soft, dry, trace brick, no odor
12	B-5-12.5	•		36/36			
13					0.3		
14						CL	SANDY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, weathered rock fragments, trace brick, no odor
15				24/24			
16					0.4		
17	B-5-17.5	•		24/24			
18					0.2		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-5

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-6

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/15/15

Date finished: 5/15/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						CL	5 inches concrete
2						CL	SILTY CLAY with GRAVEL (CL) black, soft, dry, slightly plastic, no odor brown and dark brown
3							4 inch thick concrete slab
4						CL/ML	SILTY CLAY (CL/ML) light brown, soft, dry, slightly plastic, no odor
5						CL/ML	
6				36/36			
7							
8							
9						SM	SILTY SAND with CLAY (SM) brown, medium dense, dry, slightly plastic, no odor
10				36/36			
11							
12	B-6-12.5	•		36/36	0.2	CL	SILTY CLAY with SAND (CL) light brown and brown, soft, dry to moist, slightly plastic, rock fragments, no odor
13							
14					0.1	CL	
15				24/24			
16							
17	B-6-17.5	•		24/24	4.4		
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-6

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-7

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2						CL	SILTY CLAY with GRAVEL (CL) dark brown, soft, dry, slightly plastic, no odor
3							
4							
5							
6				36/36	0.1		SILTY CLAY (CL/ML) brown, soft, dry, slightly plastic, no odor
7							
8					0.3	CL/ML	
9							
10				36/36	0.2		
11							
12	B-7-12.5	•		36/36	0.1		SANDY CLAY with GRAVEL (CL) red-brown, soft, dry, slightly plastic, rock fragments, trace brick, no to weak odor
13					1.8		
14							
15				24/24	4.3	CL	
16					7.2		
17	B-7-17.5	•		24/24			
18					12.6		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-7



PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring B-8**

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1							5 inches concrete
2						ML	SANDY SILT with GRAVEL (ML) yellow-brown, very soft, dry, subangular gravel up to 1/4 inch in diameter, no odor
3							
4							SILTY CLAY (CL/ML) dark brown to brown, soft, dry, slightly plastic, no odor
5					0.1		
6						CL/ML	
7			36/36		0.1		
8							
9							
10			36/36		0.2	CL	SILTY CLAY with SAND (CL) brown, soft, dry, slightly plastic, no odor
11							
12	B-8-12.5	•		36/36	0.6		SILTY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, brick and rock fragments, no odor
13							
14							
15			24/24		0.8	CL	
16							
17	B-8-17.5	•		24/24	0.9		
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-9

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1							6 inches concrete
2						CL	SILTY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, no odor
3							
4							
5						CL/ ML	SILTY CLAY (CL/ML) light brown, soft, dry, slightly plastic, no odor
6				36/36			
7							
8							
9				36/36		SC	CLAYEY SAND with GRAVEL (SC) brown, medium dense, dry, slightly plastic, rock and brick fragments, no odor
10							
11							
12	B-9-12.5	•		36/36			
13						SC	CLAYEY SAND with GRAVEL (SC) brown, medium dense, dry, slightly plastic, rock and brick fragments, no odor
14							
15				24/24			
16						SC	CLAYEY SAND with GRAVEL (SC) brown, medium dense, dry, slightly plastic, rock and brick fragments, no odor
17	B-9-17.5	•		24/24			
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-9

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-10

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OVN (ppm)		
1							7 inches concrete
2	B-10-2.5	•				CL	CLAY with GRAVEL (CL) dark brown, soft, dry, subangular gravel up to 1/2 inch in diameter, plastic, no odor
3							SILTY CLAY with GRAVEL and SAND (CL) yellow-brown, soft, dry, subrounded gravel up to 1/4 inch in diameter, plastic, no odor
4							
5							
6				36/36			
7	B-10-7.5	•				CL	
8							
9				36/36			
10							
11							
12	B-10-12.5	•		36/36		CL	SANDY CLAY with GRAVEL (CL) yellow-brown, soft, dry, slightly plastic, brick debris, no odor
13							
14							
15				24/24			
16							SILTY CLAY with SAND and GRAVEL (CL) yellow-brown, medium stiff, dry, plastic, no odor
17	B-10-17.5	•		24/24		CL	
18					0.2		weak odor
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-10

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-11

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2						CL	SILTY CLAY with GRAVEL (CL) dark brown, soft, dry, slightly plastic, black gravel with concrete, no odor no black gravel or concrete after 1 foot
3							
4							
5							
6				36/36			SILTY CLAY (CL/ML) brown, soft, dry, slightly plastic, no odor
7							
8							
9				36/36	0.3	CL/ ML	
10							
11					1.3		
12	B-11-12.5	•		36/36	1.8		
13							
14					1.4	SC	SILTY SAND with CLAY (SC) brown, medium dense, dry, slightly plastic, no odor
15				24/24	3.4		
16				24/24	7.2	CL	SILTY CLAY with GRAVEL (CL) light brown, soft, dry, slightly plastic, rock fragments, no to weak odor
17	B-11-17.5	•			7.8		
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-11

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-12

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2							SILTY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, rock and concrete fragments, no odor
3					0.1	CL	
4							
5							
6					0.2		SILTY CLAY (CL/ML) brown, soft, slightly plastic, dry, no odor
7			36/36			CL/ML	
8					0.3		
9							
10			36/36			CL	SILTY CLAY with SAND (CL) brown, soft, slightly plastic, dry, no odor
11					0.1		
12	B-12-12.5	•		36/36	0.2		SILTY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, brick fragments, no odor
13							
14							
15				24/24	0.1	CL	
16							
17	B-12-17.5	•		24/24			
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-12

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-13

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							6 inches concrete
2						CL	SILTY CLAY with GRAVEL (CL) brown, stiff, dry, slightly plastic, no odor
3							
4							
5							
6				36/36		CL/ML	SILTY CLAY (CL/ML) light brown, soft, dry, slightly plastic, some brick fragments and gravel, no odor
7							
8							
9				36/36			
10							
11							
12	B-13-12.5	•		36/36			
13							
14							
15				24/24		SC	CLAYEY SAND with GRAVEL (SC) yellow-brown, medium dense, dry, slightly plastic, rock fragments, no odor
16							
17	B-13-17.5	•		24/24			
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001	Figure: A-13
---------------------------	-----------------

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-14

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						CL	4 inches concrete
2							CLAY with GRAVEL (CL) dark brown, soft, dry, slightly plastic, no odor
3							SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
4							
5					0.2		
6				36/36		CL/ML	
7					0.3		
8							
9				36/36	0.2		
10					0.2		
11							
12	B-14-12.5	•		36/36	0.2	CL	SANDY CLAY with GRAVEL (CL) red-brown, soft, dry, slightly plastic, subangular gravel up to 1/4 inch in diameter
13						CL	SILTY CLAY with GRAVEL and SAND (CL) light brown, medium stiff, dry, plastic, subangular gravel up to 1/4 inches in diameter, no odor
14					0.3		
15				24/24			SANDY CLAY with GRAVEL (CL) light brown, soft, dry, slightly plastic, no odor
16					0.2	CL	
17	B-14-17.5	•		24/24	0.2		
18					0.3		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-15

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						CL	5 inches concrete
2					0.4		GRAVELLY CLAY (CL) dark brown, medium stiff, dry, slightly plastic, subangular gravel up to 1 inch in diameter, no odor
3					0.4		SILTY CLAY (CL/ML) dark brown to yellow-brown, medium stiff, dry, plastic, no odor
4					0.3	CL	
5							
6				36/36			black mottling
7							
8							
9				36/36	0.1		SILTY CLAY with SAND (CL) yellow-brown, stiff, dry, slightly plastic, no odor
10					0.1		
11					0.2	CL	
12	B-15-12.5	•		36/36	0.2		
13					0.2		
14					0.1		SANDY CLAY with GRAVEL (CL) red-brown, medium stiff, dry, subangular gravel up to 1/4 inch in diameter, slightly plastic, no odor
15				24/24	0.4	CL	
16					0.7		
17	B-15-17.5	•		24/24	1.8		
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-15



PROJECT: **3093 BROADWAY**  
Oakland, California

# Log of Boring B-16

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2							SILTY CLAY with GRAVEL (CL) dark brown, soft, dry, slightly plastic, glass fragments, no odor
3					0.1	CL	
4							
5							
6					0.1	CL/ML	SILTY CLAY (CL/ML) dark brown, medium stiff, dry, slightly plastic, no odor
7				36/36			
8							
9							SILTY CLAY with SAND (CL) light brown, soft, dry, slightly plastic, no odor
10				36/36			
11					0.2	CL	
12	B-16-12.5	•		36/36			
13					0.1		
14							SILTY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, weathered rock fragments, no odor
15				24/24			
16					0.2	CL	
17	B-16-17.5	•		24/24			
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-16

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-17

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							6 inches concrete
2							SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, slightly plastic, no odor
3							
4							
5						CL/ML	
6							
7				18/36			
8					0.1		
9							
10				36/36		SC	CLAYEY SAND with GRAVEL (SC) brown, medium dense, dry, slightly plastic, trace brick, no odor
11						CL	SANDY CLAY with GRAVEL (CL) light brown, soft to medium stiff, dry, slightly plastic, with brick debris, no odor
12	B-17-12.5	•		36/36			
13						CL/ML	SILTY CLAY (CL/ML) yellow-brown, stiff, dry, slightly plastic, no odor
14							
15				24/24		CL	SANDY CLAY with GRAVEL (CL) light brown, soft, dry, slightly plastic, subangular gravel up to 1/4 inch in diameter, no odor
16							
17				6/24			
18	B-17-18	•				CL/ML	SILTY CLAY (CL/ML) yellow-brown, medium stiff, moist, plastic, no odor
19				24/24			
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 20 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-17

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-18

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1						CL	5 inches concrete
2						CL	CLAY with GRAVEL (CL) dark brown, soft, dry, subangular gravel up to 1/4 inch in diameter, plastic, brick debris, no odor
3							SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
4							
5							
6				36/36	0.2	CL/ML	
7							
8					0.1		
9				36/36	0.1		
10							
11						CL	
12	B-18-12.5	•		36/36	0.3	CL/ML	SANDY CLAY with GRAVEL (CL) light brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic
13						CL/ML	SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
14					0.5	CL	
15				24/24	0.8	CL	SANDY CLAY with GRAVEL (CL) light brown, soft, dry, slightly plastic, brick debris, no odor
16							SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
17	B-18-17.5	•		24/24	0.9	CL/ML	
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-18

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-19

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					1.6		5 inches concrete
2							SILTY CLAY (CL/ML) dark to yellow-brown, medium stiff, dry, plastic, no odor
3					0.9		
4							
5					0.3	CL/ML	
6					0.3		
7			36/36				
8					0.4		
9							
10			36/36		0.2		SILTY CLAY with SAND (CL) yellow-brown, medium stiff, dry, slightly plastic, no odor
11					0.2	CL	
12	B-19-12.5	•			0.1		
13			36/36		0.1		SANDY CLAY with GRAVEL (CL) red-brown, soft, dry, subangular gravel up to 1/4 inch in diameter, slightly plastic, no odor
14					0.1	CL	
15			24/24				
16					0.2		SILTY CLAY (CL/ML) yellow-brown, medium stiff, moist, plastic, black mottling, no odor
17	B-19-17.5	•			0.2	CL/ML	
18			24/24		0.4		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-19

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-20

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1							6 inches concrete
2	B-20-2.5	•				CL/ ML	SILTY CLAY (CL/ML) dark brown to yellow-brown, medium stiff, dry, plastic, black mottling, no odor
3							
4							
5					0.1		
6				28/36			
7	B-20-7.5	•					
8							
9							
10				36/36		CL	SANDY CLAY with GRAVEL (CL) red-brown, medium stiff, dry, slightly plastic, subangular gravel up to 1/2 inch in diameter, no odor
11							
12	B-20-12.5	•		36/36			
13							
14							
15				24/24	0.1		
16							red gravel up to 1 inch in diameter
17	B-20-17.5	•		24/24	0.1		
18					0.1		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-20

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-21

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							6 inches concrete
2						CL	CLAY with GRAVEL (CL) red-brown, soft, dry, slightly plastic, brick debris, no odor
3					grades less brick debris and gravel		
4							
5							
6				36/36		CL/ ML	SILTY CLAY (CL/ML) brown, soft, dry, slightly plastic, trace brick, no odor
7							
8							
9				36/36			
10						SP- SC	CLAYEY SAND with GRAVEL (SP-SC) red-brown and brown, medium dense, moist, slightly plastic, brick fragments, no odor
11							
12				24/24			
13	B-21-12.75	•					
14				36/36		CL	SILTY CLAY with GRAVEL (CL) red-brown and brown, soft, dry to moist, slightly plastic, trace brick and gravel fragments, no odor
15							
16							
17	B-21-17.75	•		24/24			
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-21

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-22

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							6 inches concrete
2						SC	SILTY SAND with GRAVEL (SC) red-gray, loose, subangular gravel up to 1/2 inch in diameter, brick and concrete debris, no odor brown, brick debris
3							SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
4							
5							
6					0.9		
7				36/36	0.7	CL/ML	
8					0.6		
9							
10				36/36	0.5		
11							
12	B-22-12.5	•		36/36	0.4	CL	SANDY CLAY with GRAVEL (CL) light red-brown, soft, moist, subangular gravel up to 1/4 inch in diameter, slightly plastic, no odor
13							SILTY CLAY (CL/ML) yellow-brown, medium dense, dry, plastic, no odor
14					0.4		
15				24/24		CL/ML	
16					0.3		olive-green
17	B-22-17.5	•		24/24	0.5		yellow-brown
18					0.5		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-22

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-23

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						CL	5 inches concrete
2					1.1	CL	CLAY with GRAVEL (CL) dark brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
3					0.4	CL	CLAY (CL) dark brown to light brown, soft, moist, very plastic, no odor
4					0.3	CL/ML	SILTY CLAY (CL/ML) yellow-brown, medium stiff, moist, plastic, no odor
5					1.1		
6				36/36			
7					0.8	CL/ML	dry
8							moist
9				36/36	0.9		black mottling
10							
11					0.9		
12	B-23-12.5	•		36/36	0.7		
13					0.6	CL	SANDY CLAY with SAND and GRAVEL (CL) yellow-brown, stiff, dry, subangular gravel up to 1/4 inch in diameter, plastic, black mottling, no odor weak odor
14					7.3		
15				24/24			
16					26.2		
17	B-23-17.5	•		24/24	13.2	CL/ML	SILTY CLAY (CL/ML) yellow-brown, soft, dry, slightly plastic, black mottling, no to weak odor
18					2		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-23



PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-24

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2					0.2		SILTY CLAY (CL) dark brown, soft, moist, slightly plastic, black mottling, no odor
3					0.2		
4							
5					0.1		
6				24/36	0.1	CL	
7							
8					0.1		medium stiff
9							
10				36/36			
11					0.1	CL	
12	B-24-12.5	•		36/36	0.1	CL	SANDY CLAY with GRAVEL (CL) light brown to red-brown, medium stiff, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
13					0.1	CL/ML	SILTY CLAY (CL/ML) light brown, stiff, dry
14					0.3		
15				24/24	0.9	CL	SANDY CLAY with GRAVEL (CL) light brown, stiff, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
16							
17	B-24-17.5	•		24/24	10.1	CL	CLAY (CL) olive-green to light brown, medium stiff, dry, plastic, no odor
18					1.1		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-24

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-25

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.1	CL	6 inches concrete
2							SANDY CLAY with GRAVEL (CL) dark brown with light brown streaks, soft, moist, subangular gravel up to 1/4 inch in diameter, plastic, no odor
3							SILTY CLAY (CL/ML) light brown, medium stiff, dry, plastic, brick debris, black mottling
4							
5							no brick debris
6						CL/ML	
7				36/36			
8							
9							
10				36/36			
11							
12	B-25-12.5	•		6/6	0.1		
13				36/36		CL	SANDY CLAY with GRAVEL (CL) yellow-brown, soft, dry, slightly plastic, subangular gravel up to 1/4 inch in diameter brick debris
14						SC	CLAYEY SAND (SC) yellow-brown, loose, dry, no odor
15							SILTY CLAY with SAND (CL) yellow-brown, medium stiff, dry, plastic, no odor
16				36/36		CL	
17	B-25-17.5	•					
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 17.5 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-25

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring B-26**

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/11/15

Date finished: 5/11/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OMV (ppm)		
1							6 inches concrete
2						CL	SILT CLAY (CL) yellow-brown, soft, dry, slightly plastic, trace sand, no odor
3							
4							CLAY with GRAVEL and SAND (CL) yellow-brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, black mottling, no odor
5							
6				36/36			
7							
8							
9							
10				48/48		CL	
11							
12	B-26-12.5	•					
13							
14				48/48			
15							
16							
17	B-26-17.5	•		24/24			
18						SC	CLAYEY SAND (SC) light brown, loose, dry, no odor
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-26

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-27

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/11/15

Date finished: 5/11/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						CL	6 inches concrete
2						CL	CLAY (CL) black and dark brown, medium stiff, dry, plastic, no odor
3						CL	SANDY CLAY with GRAVEL (CL) yellow-brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
4							
5							
6						CL/ML	SILTY CLAY (CL/ML) light brown, very stiff, dry, slightly plastic, no odor
7			36/36				
8							
9						CL	CLAY (CL) light brown, medium stiff, dry, plastic, no odor
10							
11			48/48				
12	B-27-12.5	•				CL	SANDY CLAY with SILT (CL) light brown with orange-brown streaks, medium stiff, dry, slightly plastic, no odor
13							
14						CL	
15			48/48				
16						SC	CLAYEY SAND with GRAVEL (SC) light brown and red, loose, dry, subangular gravel up to 1/4 inch in diameter, no odor
17	B-27-17.5	•					
18			24/24				
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-27

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-28

PAGE 1 OF 1

Boring location: Service Bay

Logged by: Z. Trabzada

Date started: 5/11/15

Date finished: 5/11/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1						CL	6 inches concrete
2						CL/ML	CLAY with GRAVEL (CL) dark gray and black, soft, dry, slightly plastic, no odor
3						CL/ML	SILTY CLAY (CL/ML) yellow-brown, soft, dry, slightly plastic, no odor
4							
5						CL	CLAY (CL) brown, soft, dry, slightly plastic, with black mottling, no odor
6				48/48			
7							
8							
9						CL/ML	SILTY CLAY (CL/ML) brown, soft, dry, slightly plastic, trace sand, no odor
10				48/48			
11							
12	B-28-12.5	•					
13							
14				48/48		SP	SANDY CLAY with GRAVEL (SP) yellow-brown and brown, white gravel, soft, dry, slightly plastic, no odor
15							
16							
17	B-28-17.5	•		24/24		SC	CLAYEY SAND with GRAVEL (SC) brown, medium dense, dry, slightly plastic, no odor
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-28

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-29

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/11/15

Date finished: 5/11/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OVN (ppm)		
1						CL	6 inches concrete
2						CL	SANDY CLAY with GRAVEL (CL) dark brown to light brown, medium stiff, dry, subangular gravel up to 1/4 inch in diameter, plastic, no odor
3							SILTY CLAY (CL/ML) yellow to light brown, soft, dry, slightly plastic, no odor
4							
5						CL/ML	
6							
7				36/36			
8							
9							
10				48/48			
11						CL	
12	B-29-12.5	•					
13							
14				36/48			
15						CL	
16							
17	B-29-17.5	•					CLAY (CL) light brown, medium stiff, dry, plastic, no odor
18						CL	
19							
20							
21							
22						CL	
23							
24							
25							
26							▽ (05/11/15)
27						CL	
28	B-29-28	•					moist
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 28 feet.  
Boring backfilled with cement grout.  
Groundwater encountered at 26.5 feet below ground surface during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: <b>731637001</b>	Figure: <b>A-29</b>
----------------------------------	------------------------

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-30

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/11/15

Date finished: 5/11/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1							6 inches concrete
2	B-30-2.5	•				CL	SANDY CLAY with GRAVEL (CL) dark brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, brick debris, no odor
3						CL	SILTY CLAY with GRAVEL (CL) light brown, soft, brick debris
4						CL	SILTY CLAY (CL/ML) light brown, medium stiff, dry, slightly plastic, no odor
5						CL/ML	
6				36/36		CL/ML	
7	B-30-7.5	•				CL/ML	
8						CL/ML	
9						CL/ML	
10				48/48		CL/ML	
11						CL/ML	
12	B-30-12.5	•				CL	SANDY CLAY (CL) yellow-brown, medium stiff, moist, slightly plastic, no odor
13				30/48		CL	CLAY (CL) light brown, stiff, moist, plastic, no odor
14						CL	
15						CL	
16						CL	
17	B-30-17.5	•		24/24		CL	
18						CL	
19				24/24		CL	
20						CL	
21				24/24		CL	
22						CL	
23				24/24		CL	
24						CL	
25				24/24		CL	
26						CL	
27	B-30-27	•		24/24		CL	
28						CL	
29						CL	
30						CL	

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 28 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-30

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-31

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/11/15

Date finished: 5/11/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							6 inches concrete
2						CL	SANDY CLAY with GRAVEL (CL) red-brown, very soft, dry, slightly plastic, subangular gravel up to 1/2 inch in diameter, brick fragments, no odor
3							SILTY CLAY (CL/ML) brown, soft, dry, slightly plastic, trace brick and fine gravel
4							
5							
6							
7				48/48		CL/ML	
8							
9							
10							
11				48/48			
12	B-31-12.75	•					
13							
14						CL	SILTY CLAY with SAND and GRAVEL (CL) brown and dark brown, soft, slightly plastic, dry, brick fragments, no odor
15				48/48			
16							
17	B-31-17.75	•					
18				12/12			
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001	Figure: A-31
---------------------------	-----------------



PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-32

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/12/15

Date finished: 5/12/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.1	CL	6 inches concrete
2							SANDY CLAY with GRAVEL (CL) red-brown, soft, dry, subangular gravel up to 1/4 inch in diameter, slightly plastic, brick debris, no odor
3							SILTY CLAY with SAND (CL) yellow-brown, soft, dry, plastic, no odor
4							
5							
6					36/36		
7							
8						CL	
9					24/24		
10							
11					36/36		
12	B-32-12.5	•					
13							
14					36/36		
15						CL	SANDY CLAY with GRAVEL (CL) light brown, soft, dry, subangular gravel up to 1/4 inch in diameter, black mottling, plastic, no odor
16							
17	B-32-17.75	•			24/24	CL	CLAY (CL) yellow-brown with black mottling, soft, moist, plastic, no odor
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001	Figure: A-32
---------------------------	-----------------

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-33

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.2	SC	6 inches concrete CLAYEY SAND with GRAVEL (SC) gray-brown, brick debris
2							
3					0.3		SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
4							
5					0.2		
6				36/36	0.1		
7							
8						CL/ ML	
9				24/24			
10							
11				24/24			
12	B-33-12.5	•					
13				36/36			
14					21.1		olive-green
15					2.1	CL	SANDY CLAY with GRAVEL (CL) olive-green, soft, dry, subangular gravel up to 1/8 inch in diameter, weak odor
16				36/36			
17	B-33-17.5	•			1.4	CL/ ML	SILTY CLAY (CL/ML) olive-green, stiff, moist, plastic, weak odor
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-33

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-34

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/18/15

Date finished: 5/18/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.1	CL	5 inches concrete
2					0.1	CL	CLAY with GRAVEL (CL) dark brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
3					0.1		metal sharded brick fragments
4					0.1		SILTY CLAY (CL/ML) dark brown to yellow-brown
5							
6			24/36		0.5	CL	
7					0.5		olive green
8							
9					0.5	CL/ML	SANDY CLAY with GRAVEL (CL/ML) dark brown to yellow-brown, medium stiff, dry, slightly plastic, subangular gravel up to 1/4 inch in diameter, no odor
10			36/36		2.2	ML	dark brown to yellow-brown
11							SILTY CLAY with SAND (CL/ML) olive-green, stiff, moist, plastic, no odor
12	B-34-12.5	•	36/36		3.6	CL/ML	
13							
14					4.2	CL/ML	SANDY CLAY with GRAVEL (CL/ML) olive-green, stiff, dry, subangular gravel up to 1 inch in diameter, slightly plastic, large rock fragment, no odor
15			24/24		3.3		
16						CL/ML	SILTY CLAY (CL/ML) olive-green, medium stiff, moist, plastic, no odor
17	B-34-17.5	•	24/24		2.2	ML	
18					2.3		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-34

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring B-35**

PAGE 1 OF 1

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/19/15

Date finished: 5/19/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2						CL	SILTY CLAY with GRAVEL (CL) dark brown and black, soft, dry, slightly plastic, brick fragment, no odor
3							
4							
5							
6				36/36	0.1		SILTY CLAY (CL/ML) brown, soft, moist, slightly plastic, no odor
7							
8					0.2	CL/ML	
9				36/36	0.1		
10							
11					1.2		
12	B-35-12.5	•		36/36	1.8		SILTY CLAY with GRAVEL (CL) green-brown, soft, dry, slightly plastic, rock fragments, trace brick, weak odor
13							
14					3.2		
15				24/24	8.2	CL	
16					28.9		
17	B-35-17.5	•		24/24	87.2	CL/ML	SILTY CLAY (CL/ML) light brown, soft, moist, slightly plastic, weak odor
18					130		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 18 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-35

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-36

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.1	CL	6 inches concrete
2	B-36-2.5	•				CL	SILTY CLAY with GRAVEL (CL) red-brown, soft, dry, slightly plastic, brick, no odor
3						CL/ML	SILTY CLAY (CL/ML) dark brown, soft, slightly plastic, dry, brick, no odor
4						CL/ML	
5						CL	SANDY CLAY with GRAVEL (CL) yellow-brown, medium stiff, moist, subangular gravel up to 1/2 inch in diameter, plastic, no odor
6				36/36		CL	
7	B-36-7.5	•				CL	
8						CL	
9				36/36		CL	SILTY CLAY with SAND (CL) light brown, medium stiff, moist, plastic, no odor
10						CL	
11						CL	SANDY CLAY with GRAVEL (CL) light brown to yellow-brown, soft, moist, slightly plastic, no odor
12	B-36-12.5	•		36/36		CL/ML	SILTY CLAY (CL/ML) light brown, stiff, moist, plastic, black mottling, no odor
13						CL/ML	
14				36/36		CL/ML	
15						CL	SANDY CLAY (CL) light brown, soft, moist, plastic, no odor
16				36/36		CL	
17	B-36-17.5	•				CL	
18				36/36		CL	
19						CL/ML	SILTY CLAY (CL/ML) brown, stiff, moist, plastic, no odor
20				24/24		CL/ML	
21						CL/ML	
22	B-36-22.5	•		12/12		CL/ML	
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 23 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-36

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring B-37**

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							2 inches asphalt concrete
2	B-37-2.5	•				CL	SILTY CLAY with GRAVEL (CL) yellow-brown, medium stiff, dry to moist, subangular gravel up to 1 1/2 inches in diameter, slightly plastic, no odor pooling water at 2 to 5 feet
3							
4							concrete
5							SANDY CLAY with GRAVEL (CL) yellow-brown, medium stiff, wet, subangular gravel up to 1/2 inch in diameter, plastic, no odor
6				36/36	0.1	CL	
7	B-37-7.5	•					
8							
9				36/36	0.1	CL	SILTY CLAY (CL/ML) light brown, medium stiff, moist, plastic, no odor
10							
11				36/36	0.1	CL/ML	
12	B-37-12.5	•					
13							
14				36/36	0.1	CL/ML	
15							
16				36/36	0.1	CL/ML	
17	B-37-17.5	•					
18							
19				36/36	0.1	CL/ML	
20							
21				36/36	0.1	CL/ML	
22	B-37-22.5	•					
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 23 feet.  
Boring backfilled with cement grout.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-37

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-38

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OWM (ppm)		
1							3 inches asphalt concrete
2	B-38-2.5	•				CL	SANDY CLAY with GRAVEL (CL) light brown, soft, dry, slightly plastic, brick fragments, no odor
3							
4							
5							
6						CL	SANDY CLAY (CL) light brown
7	B-38-7.5	•		36/36			
8							
9						CL	SANDY CLAY with GRAVEL (CL) red-brown, soft, dry, slightly plastic, trace brick, no odor
10							
11							
12	B-38-12.5	•		36/36		CL/ ML	SILTY CLAY (CL/ML) light brown, soft, slightly plastic, moist, no odor
13				24/24			
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 13 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-38

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-39

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1					0.1	CL	6 inches asphalt concrete
2	B-39-2.5	●				CL	SILTY CLAY with GRAVEL (CL) yellow-brown, soft, dry, plastic, no odor
3							
4							
5					0.1	CL	SANDY CLAY with GRAVEL (CL) red-brown, medium stiff, dry, slightly plastic, subangular gravel up to 1/4 inch in diameter, no odor
6				36/36			
7	B-39-7.5	●				CL	SILTY CLAY with SAND (CL) light brown, medium stiff, dry, slightly plastic, no odor
8							
9				36/36			
10						CL	
11							
12	B-39-12.5	●		24/24		SC	gravel up to 1 inch in diameter, debris CLAYEY SAND with GRAVEL (SC) red-brown, loose, moist, no odor
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 13 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-39



PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-40

PAGE 1 OF 1

Boring location: Showroom

Logged by: Z. Trabzada

Date started: 5/13/15

Date finished: 5/13/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2	B-40-2.5	●				CL	SILTY CLAY with SAND (CL) red-brown/brown, soft, dry, slightly plastic, fine gravel fragments, no odor
3							
4							
5							
6				36/36		SC	CLAYEY SAND with GRAVEL (SC) red-brown, medium dense, moist, slightly plastic, rock fragments, no odor
7	B-40-7.5	●					
8							
9				24/24			SILTY CLAY (CL/ML) gray-brown, soft, moist, slightly plastic, no odor
10					3	CL/ML	
11				24/24			dark gray layers
12	B-40-12.5	●		12/12			
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 13 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-40

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-41

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						CL	5 inches asphalt concrete
2	B-41-2.5	•				CL	SILTY CLAY with GRAVEL (CL) dark brown, soft, slightly plastic, moist, no odor
3							SANDY CLAY with GRAVEL (CL) yellow-brown, medium stiff to stiff, dry, subangular gravel up to 1 inch in diameter, slightly plastic, weathered rock, no odor
4							
5							
6							
7	B-41-7.5	•		36/36		CL	
8							
9							
10				36/36			
11							
12	B-41-12.5	•		24/24			olive-green and gray
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 13 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-41

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring B-42**

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							3 inches asphalt concrete
2	B-42-2.5	●				CL/ML	SILTY CLAY (CL/ML) brown, medium stiff, dry, plastic, trace sand
3							olive-green
4							
5							
6				36/36			
7	B-42-7.5	●				CL	SANDY CLAY with GRAVEL (CL) red-brown, medium stiff, moist, subangular gravel up to 1/2 inch in diameter, slightly plastic, no odor
8							brick
9							
10				36/36			
11							
12	B-42-12.5	●		24/24		CL/ML	SILTY CLAY (CL/ML) light brown, medium stiff, moist, plastic, no odor
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 13 feet.  
Boring backfilled with cement grout.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-42

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring B-43

PAGE 1 OF 1

Boring location: Outside the Service Bay

Logged by: E. Kimbrel

Date started: 5/20/15

Date finished: 5/20/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)	OVN (ppm)		
1						CL	3 inches asphalt concrete
2	B-43-2.5	●				CL	SANDY CLAY (CL) red-brown, medium stiff, dry, slightly plastic, no odor
3						CL/ML	SILTY CLAY (CL/ML) dark brown, stiff, wet, slightly plastic to plastic, no odor
4							
5							
6							
7	B-43-7.5	●		36/36		CL	SANDY CLAY with GRAVEL (CL) light brown, medium dense, soft, wet, slightly plastic, trace brick, no odor
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 8 feet.  
Boring backfilled with cement grout.  
Groundwater encountered at 2 feet below ground surface during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.: 731637001      Figure: A-43

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring MW-18

PAGE 1 OF 2

Boring location: Showroom

Logged by: Z. Trabzada

Date started: 5/13/15

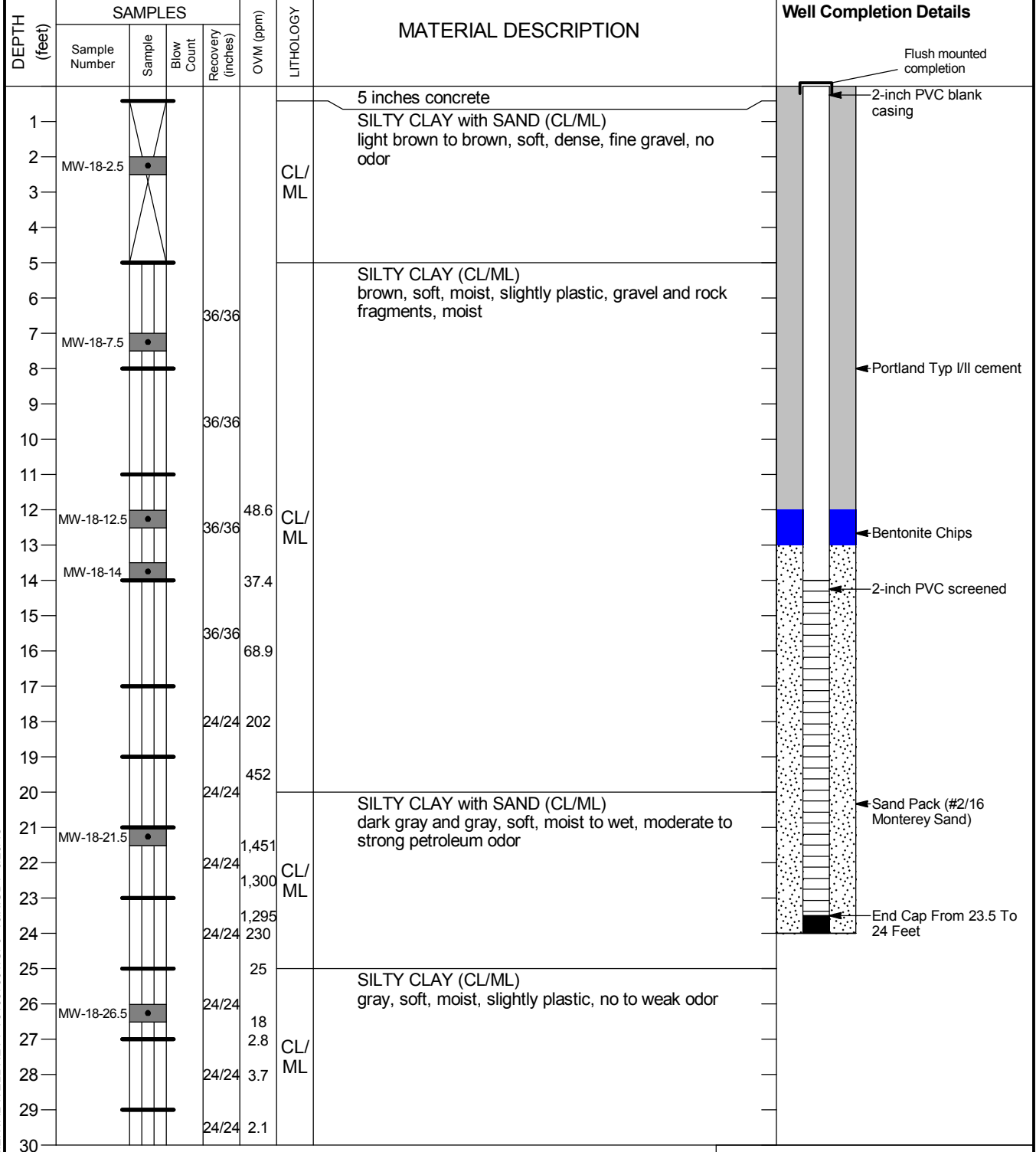
Date finished: 5/13/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube



TEST ENVIRONMENTAL WELL REV1 731637001.GPJ J&R.GDT 6/26/15

**LANGAN TREADWELL ROLLO**

Project No.: 731637001

Figure: A-44a

PROJECT:

3093 BROADWAY  
Oakland, California

Log of Boring MW-18

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details	
	Sample Number	Sample	Blow Count	Recovery (inches)					
31	MW-18-31.5	•		24/24	1.6	CL/ ML	SILTY CLAY (CL/ML) (continued)		
32				24/24	0.7				
33					0.4				
34				24/24					
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									

TEST ENVIRONMENTAL WELL REV1 731637001.GPJ JT&R.GDT 6/26/15

Boring terminated at a depth of 35 feet.  
Boring completed with well installation using 8-inch hollow stem augers.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-44b

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring MW-19

PAGE 1 OF 2

Boring location: Showroom

Logged by: Z. Trabzada

Date started: 5/13/15

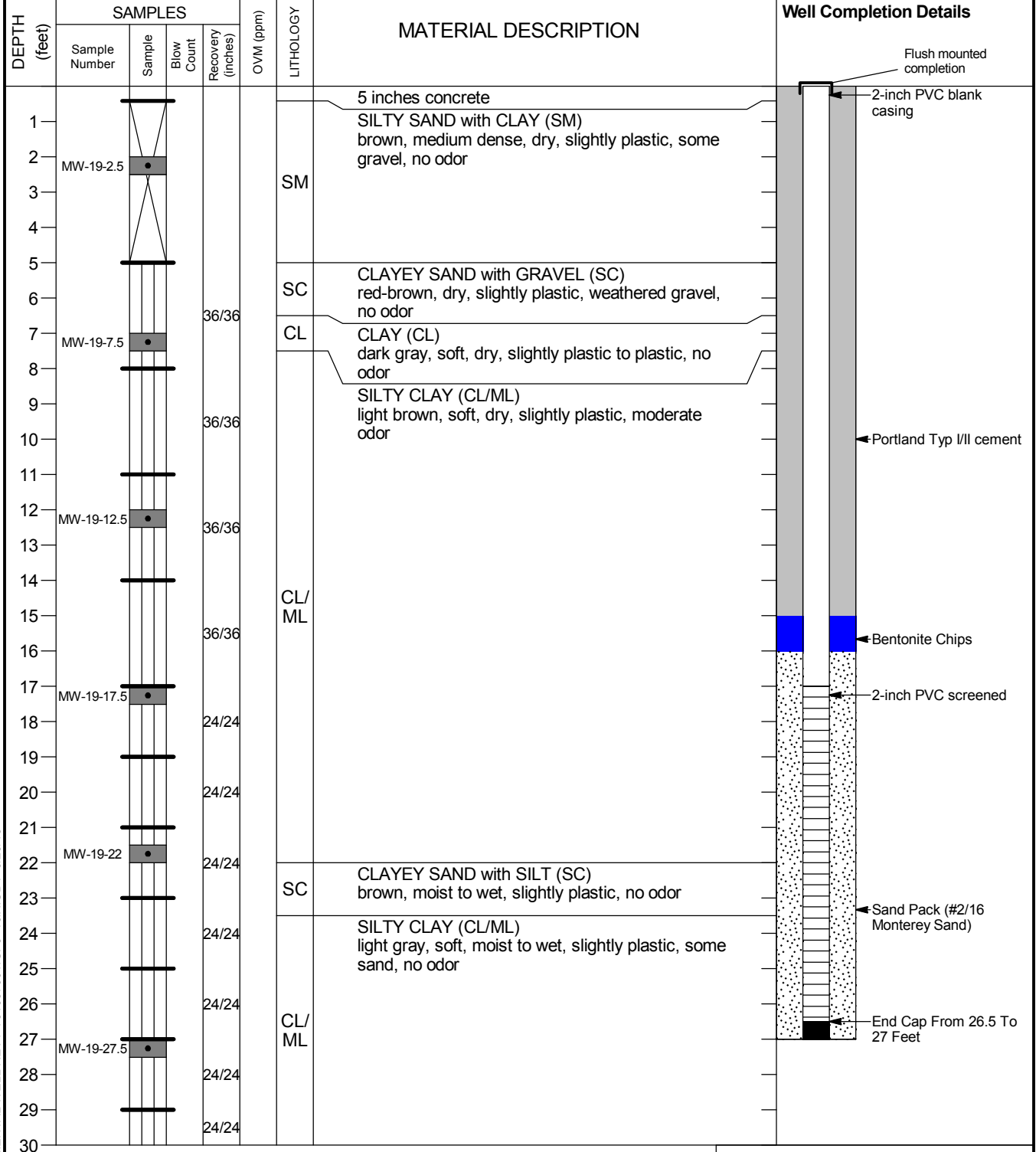
Date finished: 5/13/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube



TEST ENVIRONMENTAL WELL REV1 731637001.GPJ T&R.GDT 6/26/15

**LANGAN TREADWELL ROLLO**

Project No.: 731637001

Figure: A-45a

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring MW-19**

PAGE 2 OF 2

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details	
	Sample Number	Sample	Blow Count	Recovery (inches)					
31				24/24		CL/ ML	SILTY CLAY (CL/ML) (continued)		
32	MW-19-32.5	•		24/24					
33									
34				24/24					
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									

TEST ENVIRONMENTAL WELL REV1 731637001.GPJ JT&R.GDT 6/26/15

Boring terminated at a depth of 35 feet.  
Boring completed with well installation using 8-inch hollow stem augers.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-45b



PROJECT:

3093 BROADWAY  
Oakland, California

# Log of Boring MW-19S

PAGE 1 OF 1

Boring location: Showroom

Logged by: E. Kimbrel

Date started: 5/13/15

Date finished: 5/13/15

Drilling method: Hollow Stem Auger

Hammer weight/drop: NA

Hammer type: NA

Sampler: NA

DEPTH (feet)	SAMPLES					LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details
	Sample Number	Sample	Blow Count	Recovery (inches)	OVM (ppm)			
1								<p>Flush mounted completion</p> <p>2-inch PVC blank casing</p> <p>Portland Typ I/II cement</p> <p>Bentonite Chips</p> <p>2-inch PVC screened</p> <p>Sand Pack (#2/16 Monterey Sand)</p> <p>End Cap From 22.5 To 23 Feet</p>
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

TEST ENVIRONMENTAL WELL REV1 731637001.GPJ JT&R.GDT 6/26/15

Boring terminated at a depth of 23 feet.  
Boring completed with well installation using 8-inch hollow stem augers.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-46

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring RB-2**

PAGE 1 OF 2

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/15/15

Date finished: 5/15/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1							5 inches concrete
2						CL	SANDY CLAY with SILT (CL) black, soft, dry, slightly plastic, no odor brown and light brown
3							
4							
5							
6							SILTY CLAY (CL/ML) light brown, soft, dry, slightly plastic, no odor
7			36/36		0.2	CL/ML	
8							
9			36/36		0.1		
10							
11							
12			36/36		0.3	SC	SILTY SAND with CLAY (SC) brown, medium dense, dry, slightly plastic, no odor
13							
14					4	CL	SILTY CLAY with GRAVEL (CL) brown, soft, dry, slightly plastic, no odor
15			36/36		7.2	CL	SANDY CLAY with GRAVEL (CL) yellow-brown, soft, dry, slightly plastic, strong odor
16							
17					4.2	CL	GRAVELLY CLAY with SAND (CL) olive-brown, moist, subrounded gravel up to 1/4 inch in diameter, brick debris, slightly plastic, moderate odor
18			36/36		47.5		
19					159		SILTY CLAY (CL/ML) yellow-brown to dark brown, medium stiff, moist, plastic, moderate odor
20	RB-2-20	•			314		
21							
22	RB-2-22	•	36/36		1,498		
23							
24	RB-2-24	•			1,304	CL/ML	wet
25			36/36		1,583		staining
26	RB-2-26	•			1,283		
27					1,648		
28	RB-2-28	•	24/24		937		
29					758		
30	RB-2-30	•	24/24				

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring RB-2**

PAGE 2 OF 2

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
31				24/24	1,572		SILTY CLAY (CL/ML) (continued)
32	RB-2-32	•			994		
33				24/24	597		
34	RB-2-34	•			251		
35				24/24	119		
36	RB-2-36	•			251	CL/ML	
37				24/24	10.2		
38	RB-2-38	•			9.0		
39				24/24	9.4		
40	RB-2-40	•			9.8	▽ (5/15/15)	
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 40 feet.  
Boring backfilled with cement grout.  
Groundwater encountered 39.9 feet below ground surface during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-478b

PROJECT:

**3093 BROADWAY**  
Oakland, California

# Log of Boring RB-6

PAGE 1 OF 2

Boring location: Service Bay

Logged by: E. Kimbrel

Date started: 5/15/15

Date finished: 5/15/15

Drilling method: Direct Push

Hammer weight/drop: NA

Hammer type: Pneumatic

Sampler: Dual Tube

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1	RB-6-1.0	•			125	CL	5 inches concrete
2					61.8		SANDY CLAY with SILT (CL) dark brown and black, soft, moist, slightly plastic, moderate odor
3	RB-6-3	•			277		SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, weak odor
4					101		
5					23.4		
6			36/36		0.6	CL/ ML	moist
7					0.7		
8					0.1		
9			36/36		0.1		
10							
11					0.5		
12			36/36		0.2	CL	SANDY CLAY with GRAVEL (CL)
13						CL/ ML	yellow-brown, medium stiff, dry, subangular gravel up to 1/4 inch in diameter, slightly plastic, orange and black mottling, brick and rock fragments, no odor
14					0.1	CL	SILTY CLAY (CL/ML) yellow-brown, medium stiff, dry, plastic, no odor
15			36/36				SANDY CLAY with GRAVEL (CL)
16						CL	yellow-brown to red-brown, soft, dry, subangular gravel up to 1/2 inch in diameter, slightly plastic, large white gravel fragments and brick, no odor
17							CLAY (CL) yellow to light brown, very stiff, dry, plastic, no odor
18			36/36			SC	SILTY SAND with GRAVEL (SC) yellow-brown, loose, dry, subrounded gravel up to 1/8 inch in diameter, no odor
19							
20	RB-6-20	•					SANDY CLAY with GRAVEL (CL) dark brown, soft, moist, slightly plastic, no odor
21			36/36				
22	RB-6-22	•					
23					0.1		▽ (05/15/15)
24	RB-6-24	•		24/24		CL	
25					0.1		wet, staining
26	RB-6-26	•			1,870		strong odor
27			36/36		1,459		
28	RB-6-28	•					CLAYEY SAND (SC)
29			36/36			SC	olive-brown and green, medium dense, wet, strong odor
30	RB-6-30	•					

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

**LANGAN TREADWELL ROLLO**

Project No.:  
731637001

Figure:  
A-48a

PROJECT:

**3093 BROADWAY**  
Oakland, California

**Log of Boring RB-6**

PAGE 2 OF 2

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
31				36/36	1,659	SC	CLAYEY SAND (SC) (continued)
32	RB-6-32	●		24/24	230	SC	
33							
34	RB-6-34	●		36/36	110	CL	SANDY CLAY with GRAVEL (CL) olive-green, soft, moist, slightly plastic, moderate to strong odor
35							
36	RB-6-36	●			130	SC	CLAYEY SAND with GRAVEL (SC) olive-green, medium dense, moist, moderate to strong odor
37				24/24	95	SC	
38	RB-6-38	●			38	CL	SILTY CLAY with SAND (CL) yellow-brown, medium stiff, moist, plastic, moderate odor
39				24/24			
40	RB-6-40	●			49	CL	CLAY (CL) light brown, soft, moist, plastic, weak odor
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							

TEST ENVIRONMENTAL INCHES 731637001.GPJ T&R.GDT 6/26/15

Boring terminated at a depth of 40 feet.  
Boring backfilled with cement grout and tremie PVC pipe.  
Groundwater not encountered during drilling.  
Expansive clays.

**LANGAN TREADWELL ROLLO**

Project No.:	Figure:
731637001	A-48b

**APPENDIX C**  
**ANALYTICAL LABORATORY REPORTS**



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505412

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/12/2015

Analytical Report reviewed & approved for release on 05/20/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505412

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC22	104717

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/18/2015 20:59
a-BHC	ND	0.0010	1	05/18/2015 20:59
b-BHC	ND	0.0010	1	05/18/2015 20:59
d-BHC	ND	0.0010	1	05/18/2015 20:59
g-BHC	ND	0.0010	1	05/18/2015 20:59
Chlordane (Technical)	ND	0.025	1	05/18/2015 20:59
a-Chlordane	ND	0.0010	1	05/18/2015 20:59
g-Chlordane	ND	0.0010	1	05/18/2015 20:59
p,p-DDD	ND	0.0010	1	05/18/2015 20:59
p,p-DDE	ND	0.0010	1	05/18/2015 20:59
p,p-DDT	ND	0.0010	1	05/18/2015 20:59
Dieldrin	ND	0.0010	1	05/18/2015 20:59
Endosulfan I	ND	0.0010	1	05/18/2015 20:59
Endosulfan II	ND	0.0010	1	05/18/2015 20:59
Endosulfan sulfate	ND	0.0010	1	05/18/2015 20:59
Endrin	ND	0.0010	1	05/18/2015 20:59
Endrin aldehyde	ND	0.0010	1	05/18/2015 20:59
Endrin ketone	ND	0.0010	1	05/18/2015 20:59
Heptachlor	ND	0.0010	1	05/18/2015 20:59
Heptachlor epoxide	ND	0.0010	1	05/18/2015 20:59
Hexachlorobenzene	ND	0.010	1	05/18/2015 20:59
Hexachlorocyclopentadiene	ND	0.020	1	05/18/2015 20:59
Methoxychlor	ND	0.0010	1	05/18/2015 20:59
Toxaphene	ND	0.050	1	05/18/2015 20:59
Aroclor1016	ND	0.050	1	05/18/2015 20:59
Aroclor1221	ND	0.050	1	05/18/2015 20:59
Aroclor1232	ND	0.050	1	05/18/2015 20:59
Aroclor1242	ND	0.050	1	05/18/2015 20:59
Aroclor1248	ND	0.050	1	05/18/2015 20:59
Aroclor1254	ND	0.050	1	05/18/2015 20:59
Aroclor1260	ND	0.050	1	05/18/2015 20:59
PCBs, total	ND	0.050	1	05/18/2015 20:59

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	99	70-130	05/18/2015 20:59

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC22	104717
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Aldrin	ND		0.0010	1	05/18/2015 21:32
a-BHC	ND		0.0010	1	05/18/2015 21:32
b-BHC	ND		0.0010	1	05/18/2015 21:32
d-BHC	ND		0.0010	1	05/18/2015 21:32
g-BHC	ND		0.0010	1	05/18/2015 21:32
Chlordane (Technical)	ND		0.025	1	05/18/2015 21:32
a-Chlordane	ND		0.0010	1	05/18/2015 21:32
g-Chlordane	ND		0.0010	1	05/18/2015 21:32
p,p-DDD	ND		0.0010	1	05/18/2015 21:32
p,p-DDE	ND		0.0010	1	05/18/2015 21:32
p,p-DDT	ND		0.0010	1	05/18/2015 21:32
Dieldrin	ND		0.0010	1	05/18/2015 21:32
Endosulfan I	ND		0.0010	1	05/18/2015 21:32
Endosulfan II	ND		0.0010	1	05/18/2015 21:32
Endosulfan sulfate	ND		0.0010	1	05/18/2015 21:32
Endrin	ND		0.0010	1	05/18/2015 21:32
Endrin aldehyde	ND		0.0010	1	05/18/2015 21:32
Endrin ketone	ND		0.0010	1	05/18/2015 21:32
Heptachlor	ND		0.0010	1	05/18/2015 21:32
Heptachlor epoxide	ND		0.0010	1	05/18/2015 21:32
Hexachlorobenzene	ND		0.010	1	05/18/2015 21:32
Hexachlorocyclopentadiene	ND		0.020	1	05/18/2015 21:32
Methoxychlor	ND		0.0010	1	05/18/2015 21:32
Toxaphene	ND		0.050	1	05/18/2015 21:32
Aroclor1016	ND		0.050	1	05/18/2015 21:32
Aroclor1221	ND		0.050	1	05/18/2015 21:32
Aroclor1232	ND		0.050	1	05/18/2015 21:32
Aroclor1242	ND		0.050	1	05/18/2015 21:32
Aroclor1248	ND		0.050	1	05/18/2015 21:32
Aroclor1254	ND		0.050	1	05/18/2015 21:32
Aroclor1260	ND		0.050	1	05/18/2015 21:32
PCBs, total	ND		0.050	1	05/18/2015 21:32
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Decachlorobiphenyl	99		70-130		05/18/2015 21:32
<u>Analyst(s):</u>	CK				



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010B	Soil	05/11/2015 11:40	GC16	104765

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/13/2015 22:16
tert-Amyl methyl ether (TAME)	ND	0.0091	1	05/13/2015 22:16
Benzene	ND	0.0091	1	05/13/2015 22:16
Bromobenzene	ND	0.0091	1	05/13/2015 22:16
Bromochloromethane	ND	0.0091	1	05/13/2015 22:16
Bromodichloromethane	ND	0.0091	1	05/13/2015 22:16
Bromoform	ND	0.0091	1	05/13/2015 22:16
Bromomethane	ND	0.0091	1	05/13/2015 22:16
2-Butanone (MEK)	ND	0.036	1	05/13/2015 22:16
t-Butyl alcohol (TBA)	ND	0.091	1	05/13/2015 22:16
n-Butyl benzene	ND	0.0091	1	05/13/2015 22:16
sec-Butyl benzene	ND	0.0091	1	05/13/2015 22:16
tert-Butyl benzene	ND	0.0091	1	05/13/2015 22:16
Carbon Disulfide	ND	0.0091	1	05/13/2015 22:16
Carbon Tetrachloride	ND	0.0091	1	05/13/2015 22:16
Chlorobenzene	ND	0.0091	1	05/13/2015 22:16
Chloroethane	ND	0.0091	1	05/13/2015 22:16
Chloroform	ND	0.0091	1	05/13/2015 22:16
Chloromethane	ND	0.0091	1	05/13/2015 22:16
2-Chlorotoluene	ND	0.0091	1	05/13/2015 22:16
4-Chlorotoluene	ND	0.0091	1	05/13/2015 22:16
Dibromochloromethane	ND	0.0091	1	05/13/2015 22:16
1,2-Dibromo-3-chloropropane	ND	0.0072	1	05/13/2015 22:16
1,2-Dibromoethane (EDB)	ND	0.0072	1	05/13/2015 22:16
Dibromomethane	ND	0.0091	1	05/13/2015 22:16
1,2-Dichlorobenzene	ND	0.0091	1	05/13/2015 22:16
1,3-Dichlorobenzene	ND	0.0091	1	05/13/2015 22:16
1,4-Dichlorobenzene	ND	0.0091	1	05/13/2015 22:16
Dichlorodifluoromethane	ND	0.0091	1	05/13/2015 22:16
1,1-Dichloroethane	ND	0.0091	1	05/13/2015 22:16
1,2-Dichloroethane (1,2-DCA)	ND	0.0091	1	05/13/2015 22:16
1,1-Dichloroethene	ND	0.0091	1	05/13/2015 22:16
cis-1,2-Dichloroethene	ND	0.0091	1	05/13/2015 22:16
trans-1,2-Dichloroethene	ND	0.0091	1	05/13/2015 22:16
1,2-Dichloropropane	ND	0.0091	1	05/13/2015 22:16
1,3-Dichloropropane	ND	0.0091	1	05/13/2015 22:16
2,2-Dichloropropane	ND	0.0091	1	05/13/2015 22:16
1,1-Dichloropropene	ND	0.0091	1	05/13/2015 22:16

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010B	Soil	05/11/2015 11:40	GC16	104765

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0091	1	05/13/2015 22:16
trans-1,3-Dichloropropene	ND	0.0091	1	05/13/2015 22:16
Diisopropyl ether (DIPE)	ND	0.0091	1	05/13/2015 22:16
Ethylbenzene	ND	0.0091	1	05/13/2015 22:16
Ethyl tert-butyl ether (ETBE)	ND	0.0091	1	05/13/2015 22:16
Freon 113	ND	0.0091	1	05/13/2015 22:16
Hexachlorobutadiene	ND	0.0091	1	05/13/2015 22:16
Hexachloroethane	ND	0.0091	1	05/13/2015 22:16
2-Hexanone	ND	0.0091	1	05/13/2015 22:16
Isopropylbenzene	ND	0.0091	1	05/13/2015 22:16
4-Isopropyl toluene	ND	0.0091	1	05/13/2015 22:16
Methyl-t-butyl ether (MTBE)	ND	0.0091	1	05/13/2015 22:16
Methylene chloride	ND	0.0091	1	05/13/2015 22:16
4-Methyl-2-pentanone (MIBK)	ND	0.0091	1	05/13/2015 22:16
Naphthalene	ND	0.0091	1	05/13/2015 22:16
n-Propyl benzene	ND	0.0091	1	05/13/2015 22:16
Styrene	ND	0.0091	1	05/13/2015 22:16
1,1,1,2-Tetrachloroethane	ND	0.0091	1	05/13/2015 22:16
1,1,2,2-Tetrachloroethane	ND	0.0091	1	05/13/2015 22:16
Tetrachloroethene	ND	0.0091	1	05/13/2015 22:16
Toluene	ND	0.0091	1	05/13/2015 22:16
1,2,3-Trichlorobenzene	ND	0.0091	1	05/13/2015 22:16
1,2,4-Trichlorobenzene	ND	0.0091	1	05/13/2015 22:16
1,1,1-Trichloroethane	ND	0.0091	1	05/13/2015 22:16
1,1,2-Trichloroethane	ND	0.0091	1	05/13/2015 22:16
Trichloroethene	ND	0.0091	1	05/13/2015 22:16
Trichlorofluoromethane	ND	0.0091	1	05/13/2015 22:16
1,2,3-Trichloropropane	ND	0.0091	1	05/13/2015 22:16
1,2,4-Trimethylbenzene	ND	0.0091	1	05/13/2015 22:16
1,3,5-Trimethylbenzene	ND	0.0091	1	05/13/2015 22:16
Vinyl Chloride	ND	0.0091	1	05/13/2015 22:16
Xylenes, Total	ND	0.0091	1	05/13/2015 22:16

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010B	Soil	05/11/2015 11:40	GC16	104765

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	81	70-130		05/13/2015 22:16
Toluene-d8	94	70-130		05/13/2015 22:16
4-BFB	96	70-130		05/13/2015 22:16
Benzene-d6	72	60-140		05/13/2015 22:16
Ethylbenzene-d10	86	60-140		05/13/2015 22:16
1,2-DCB-d4	66	60-140		05/13/2015 22:16

Analyst(s): KF

Analytical Comments: a9



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011B	Soil	05/11/2015 15:00	GC16	104765

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/13/2015 22:59
tert-Amyl methyl ether (TAME)	ND	0.0087	1	05/13/2015 22:59
Benzene	ND	0.0087	1	05/13/2015 22:59
Bromobenzene	ND	0.0087	1	05/13/2015 22:59
Bromochloromethane	ND	0.0087	1	05/13/2015 22:59
Bromodichloromethane	ND	0.0087	1	05/13/2015 22:59
Bromoform	ND	0.0087	1	05/13/2015 22:59
Bromomethane	ND	0.0087	1	05/13/2015 22:59
2-Butanone (MEK)	ND	0.035	1	05/13/2015 22:59
t-Butyl alcohol (TBA)	ND	0.087	1	05/13/2015 22:59
n-Butyl benzene	ND	0.0087	1	05/13/2015 22:59
sec-Butyl benzene	ND	0.0087	1	05/13/2015 22:59
tert-Butyl benzene	ND	0.0087	1	05/13/2015 22:59
Carbon Disulfide	ND	0.0087	1	05/13/2015 22:59
Carbon Tetrachloride	ND	0.0087	1	05/13/2015 22:59
Chlorobenzene	ND	0.0087	1	05/13/2015 22:59
Chloroethane	ND	0.0087	1	05/13/2015 22:59
Chloroform	ND	0.0087	1	05/13/2015 22:59
Chloromethane	ND	0.0087	1	05/13/2015 22:59
2-Chlorotoluene	ND	0.0087	1	05/13/2015 22:59
4-Chlorotoluene	ND	0.0087	1	05/13/2015 22:59
Dibromochloromethane	ND	0.0087	1	05/13/2015 22:59
1,2-Dibromo-3-chloropropane	ND	0.0069	1	05/13/2015 22:59
1,2-Dibromoethane (EDB)	ND	0.0069	1	05/13/2015 22:59
Dibromomethane	ND	0.0087	1	05/13/2015 22:59
1,2-Dichlorobenzene	ND	0.0087	1	05/13/2015 22:59
1,3-Dichlorobenzene	ND	0.0087	1	05/13/2015 22:59
1,4-Dichlorobenzene	ND	0.0087	1	05/13/2015 22:59
Dichlorodifluoromethane	ND	0.0087	1	05/13/2015 22:59
1,1-Dichloroethane	ND	0.0087	1	05/13/2015 22:59
1,2-Dichloroethane (1,2-DCA)	ND	0.0087	1	05/13/2015 22:59
1,1-Dichloroethene	ND	0.0087	1	05/13/2015 22:59
cis-1,2-Dichloroethene	ND	0.0087	1	05/13/2015 22:59
trans-1,2-Dichloroethene	ND	0.0087	1	05/13/2015 22:59
1,2-Dichloropropane	ND	0.0087	1	05/13/2015 22:59
1,3-Dichloropropane	ND	0.0087	1	05/13/2015 22:59
2,2-Dichloropropane	ND	0.0087	1	05/13/2015 22:59
1,1-Dichloropropene	ND	0.0087	1	05/13/2015 22:59

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011B	Soil	05/11/2015 15:00	GC16	104765

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0087	1	05/13/2015 22:59
trans-1,3-Dichloropropene	ND	0.0087	1	05/13/2015 22:59
Diisopropyl ether (DIPE)	ND	0.0087	1	05/13/2015 22:59
Ethylbenzene	ND	0.0087	1	05/13/2015 22:59
Ethyl tert-butyl ether (ETBE)	ND	0.0087	1	05/13/2015 22:59
Freon 113	ND	0.0087	1	05/13/2015 22:59
Hexachlorobutadiene	ND	0.0087	1	05/13/2015 22:59
Hexachloroethane	ND	0.0087	1	05/13/2015 22:59
2-Hexanone	ND	0.0087	1	05/13/2015 22:59
Isopropylbenzene	ND	0.0087	1	05/13/2015 22:59
4-Isopropyl toluene	ND	0.0087	1	05/13/2015 22:59
Methyl-t-butyl ether (MTBE)	ND	0.0087	1	05/13/2015 22:59
Methylene chloride	ND	0.0087	1	05/13/2015 22:59
4-Methyl-2-pentanone (MIBK)	ND	0.0087	1	05/13/2015 22:59
Naphthalene	ND	0.0087	1	05/13/2015 22:59
n-Propyl benzene	ND	0.0087	1	05/13/2015 22:59
Styrene	ND	0.0087	1	05/13/2015 22:59
1,1,1,2-Tetrachloroethane	ND	0.0087	1	05/13/2015 22:59
1,1,2,2-Tetrachloroethane	ND	0.0087	1	05/13/2015 22:59
Tetrachloroethene	ND	0.0087	1	05/13/2015 22:59
Toluene	ND	0.0087	1	05/13/2015 22:59
1,2,3-Trichlorobenzene	ND	0.0087	1	05/13/2015 22:59
1,2,4-Trichlorobenzene	ND	0.0087	1	05/13/2015 22:59
1,1,1-Trichloroethane	ND	0.0087	1	05/13/2015 22:59
1,1,2-Trichloroethane	ND	0.0087	1	05/13/2015 22:59
Trichloroethene	ND	0.0087	1	05/13/2015 22:59
Trichlorofluoromethane	ND	0.0087	1	05/13/2015 22:59
1,2,3-Trichloropropane	ND	0.0087	1	05/13/2015 22:59
1,2,4-Trimethylbenzene	ND	0.0087	1	05/13/2015 22:59
1,3,5-Trimethylbenzene	ND	0.0087	1	05/13/2015 22:59
Vinyl Chloride	ND	0.0087	1	05/13/2015 22:59
Xylenes, Total	ND	0.0087	1	05/13/2015 22:59

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011B	Soil	05/11/2015 15:00	GC16	104765

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/13/2015 22:59
Toluene-d8	96	70-130		05/13/2015 22:59
4-BFB	92	70-130		05/13/2015 22:59
Benzene-d6	68	60-140		05/13/2015 22:59
Ethylbenzene-d10	81	60-140		05/13/2015 22:59
1,2-DCB-d4	63	60-140		05/13/2015 22:59

Analyst(s): KF

Analytical Comments: a9





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-26-12.5	1505412-001A	Soil	05/11/2015 09:55	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 00:28
Acenaphthylene	ND	0.010	1	05/14/2015 00:28
Anthracene	ND	0.010	1	05/14/2015 00:28
Benzo (a) anthracene	ND	0.010	1	05/14/2015 00:28
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 00:28
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 00:28
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 00:28
Benzo (a) pyrene	ND	0.010	1	05/14/2015 00:28
Chrysene	ND	0.010	1	05/14/2015 00:28
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 00:28
Fluoranthene	ND	0.010	1	05/14/2015 00:28
Fluorene	ND	0.010	1	05/14/2015 00:28
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 00:28
1-Methylnaphthalene	ND	0.010	1	05/14/2015 00:28
2-Methylnaphthalene	ND	0.010	1	05/14/2015 00:28
Naphthalene	ND	0.010	1	05/14/2015 00:28
Phenanthrene	ND	0.010	1	05/14/2015 00:28
Pyrene	ND	0.010	1	05/14/2015 00:28

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	91	30-130	05/14/2015 00:28
2-Fluorobiphenyl	88	30-130	05/14/2015 00:28

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-26-17.5	1505412-002A	Soil	05/11/2015 10:05	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 00:57
Acenaphthylene	ND	0.010	1	05/14/2015 00:57
Anthracene	ND	0.010	1	05/14/2015 00:57
Benzo (a) anthracene	ND	0.010	1	05/14/2015 00:57
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 00:57
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 00:57
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 00:57
Benzo (a) pyrene	ND	0.010	1	05/14/2015 00:57
Chrysene	ND	0.010	1	05/14/2015 00:57
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 00:57
Fluoranthene	ND	0.010	1	05/14/2015 00:57
Fluorene	ND	0.010	1	05/14/2015 00:57
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 00:57
1-Methylnaphthalene	ND	0.010	1	05/14/2015 00:57
2-Methylnaphthalene	ND	0.010	1	05/14/2015 00:57
Naphthalene	ND	0.010	1	05/14/2015 00:57
Phenanthrene	ND	0.010	1	05/14/2015 00:57
Pyrene	ND	0.010	1	05/14/2015 00:57
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	93	30-130		05/14/2015 00:57
2-Fluorobiphenyl	89	30-130		05/14/2015 00:57

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-27-12.5	1505412-003A	Soil	05/11/2015 10:30	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 01:25
Acenaphthylene	ND	0.010	1	05/14/2015 01:25
Anthracene	ND	0.010	1	05/14/2015 01:25
Benzo (a) anthracene	ND	0.010	1	05/14/2015 01:25
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 01:25
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 01:25
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 01:25
Benzo (a) pyrene	ND	0.010	1	05/14/2015 01:25
Chrysene	ND	0.010	1	05/14/2015 01:25
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 01:25
Fluoranthene	ND	0.010	1	05/14/2015 01:25
Fluorene	ND	0.010	1	05/14/2015 01:25
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 01:25
1-Methylnaphthalene	ND	0.010	1	05/14/2015 01:25
2-Methylnaphthalene	ND	0.010	1	05/14/2015 01:25
Naphthalene	ND	0.010	1	05/14/2015 01:25
Phenanthrene	ND	0.010	1	05/14/2015 01:25
Pyrene	ND	0.010	1	05/14/2015 01:25

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	90	30-130	05/14/2015 01:25
2-Fluorobiphenyl	86	30-130	05/14/2015 01:25

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-27-17.5	1505412-004A	Soil	05/11/2015 10:35	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 01:54
Acenaphthylene	ND	0.010	1	05/14/2015 01:54
Anthracene	ND	0.010	1	05/14/2015 01:54
Benzo (a) anthracene	ND	0.010	1	05/14/2015 01:54
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 01:54
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 01:54
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 01:54
Benzo (a) pyrene	ND	0.010	1	05/14/2015 01:54
Chrysene	ND	0.010	1	05/14/2015 01:54
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 01:54
Fluoranthene	ND	0.010	1	05/14/2015 01:54
Fluorene	ND	0.010	1	05/14/2015 01:54
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 01:54
1-Methylnaphthalene	ND	0.010	1	05/14/2015 01:54
2-Methylnaphthalene	ND	0.010	1	05/14/2015 01:54
Naphthalene	ND	0.010	1	05/14/2015 01:54
Phenanthrene	ND	0.010	1	05/14/2015 01:54
Pyrene	ND	0.010	1	05/14/2015 01:54

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	91	30-130	05/14/2015 01:54
2-Fluorobiphenyl	89	30-130	05/14/2015 01:54

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-28-12.5	1505412-005A	Soil	05/11/2015 11:15	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 02:22
Acenaphthylene	ND	0.010	1	05/14/2015 02:22
Anthracene	ND	0.010	1	05/14/2015 02:22
Benzo (a) anthracene	ND	0.010	1	05/14/2015 02:22
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 02:22
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 02:22
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 02:22
Benzo (a) pyrene	ND	0.010	1	05/14/2015 02:22
Chrysene	ND	0.010	1	05/14/2015 02:22
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 02:22
Fluoranthene	ND	0.010	1	05/14/2015 02:22
Fluorene	ND	0.010	1	05/14/2015 02:22
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 02:22
1-Methylnaphthalene	ND	0.010	1	05/14/2015 02:22
2-Methylnaphthalene	ND	0.010	1	05/14/2015 02:22
Naphthalene	ND	0.010	1	05/14/2015 02:22
Phenanthrene	ND	0.010	1	05/14/2015 02:22
Pyrene	ND	0.010	1	05/14/2015 02:22

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	92	30-130	05/14/2015 02:22
2-Fluorobiphenyl	91	30-130	05/14/2015 02:22

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-28-17.5	1505412-006A	Soil	05/11/2015 11:25	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 02:50
Acenaphthylene	ND	0.010	1	05/14/2015 02:50
Anthracene	ND	0.010	1	05/14/2015 02:50
Benzo (a) anthracene	ND	0.010	1	05/14/2015 02:50
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 02:50
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 02:50
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 02:50
Benzo (a) pyrene	ND	0.010	1	05/14/2015 02:50
Chrysene	ND	0.010	1	05/14/2015 02:50
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 02:50
Fluoranthene	ND	0.010	1	05/14/2015 02:50
Fluorene	ND	0.010	1	05/14/2015 02:50
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 02:50
1-Methylnaphthalene	ND	0.010	1	05/14/2015 02:50
2-Methylnaphthalene	ND	0.010	1	05/14/2015 02:50
Naphthalene	ND	0.010	1	05/14/2015 02:50
Phenanthrene	ND	0.010	1	05/14/2015 02:50
Pyrene	ND	0.010	1	05/14/2015 02:50
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	93	30-130		05/14/2015 02:50
2-Fluorobiphenyl	89	30-130		05/14/2015 02:50

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-12.5	1505412-007A	Soil	05/11/2015 13:10	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 03:19
Acenaphthylene	ND	0.010	1	05/14/2015 03:19
Anthracene	ND	0.010	1	05/14/2015 03:19
Benzo (a) anthracene	ND	0.010	1	05/14/2015 03:19
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 03:19
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 03:19
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 03:19
Benzo (a) pyrene	ND	0.010	1	05/14/2015 03:19
Chrysene	ND	0.010	1	05/14/2015 03:19
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 03:19
Fluoranthene	ND	0.010	1	05/14/2015 03:19
Fluorene	ND	0.010	1	05/14/2015 03:19
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 03:19
1-Methylnaphthalene	ND	0.010	1	05/14/2015 03:19
2-Methylnaphthalene	ND	0.010	1	05/14/2015 03:19
Naphthalene	ND	0.010	1	05/14/2015 03:19
Phenanthrene	ND	0.010	1	05/14/2015 03:19
Pyrene	ND	0.010	1	05/14/2015 03:19

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	91	30-130	05/14/2015 03:19
2-Fluorobiphenyl	88	30-130	05/14/2015 03:19

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-17.5	1505412-008A	Soil	05/11/2015 13:15	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 03:47
Acenaphthylene	ND	0.010	1	05/14/2015 03:47
Anthracene	ND	0.010	1	05/14/2015 03:47
Benzo (a) anthracene	ND	0.010	1	05/14/2015 03:47
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 03:47
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 03:47
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 03:47
Benzo (a) pyrene	ND	0.010	1	05/14/2015 03:47
Chrysene	ND	0.010	1	05/14/2015 03:47
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 03:47
Fluoranthene	ND	0.010	1	05/14/2015 03:47
Fluorene	ND	0.010	1	05/14/2015 03:47
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 03:47
1-Methylnaphthalene	ND	0.010	1	05/14/2015 03:47
2-Methylnaphthalene	ND	0.010	1	05/14/2015 03:47
Naphthalene	ND	0.010	1	05/14/2015 03:47
Phenanthrene	ND	0.010	1	05/14/2015 03:47
Pyrene	ND	0.010	1	05/14/2015 03:47

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	94	30-130	05/14/2015 03:47
2-Fluorobiphenyl	91	30-130	05/14/2015 03:47

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 04:16
Acenaphthylene	ND	0.010	1	05/14/2015 04:16
Anthracene	ND	0.010	1	05/14/2015 04:16
Benzo (a) anthracene	<b>0.012</b>	0.010	1	05/14/2015 04:16
Benzo (b) fluoranthene	<b>0.014</b>	0.010	1	05/14/2015 04:16
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 04:16
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 04:16
Benzo (a) pyrene	<b>0.012</b>	0.010	1	05/14/2015 04:16
Chrysene	ND	0.010	1	05/14/2015 04:16
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 04:16
Fluoranthene	<b>0.011</b>	0.010	1	05/14/2015 04:16
Fluorene	ND	0.010	1	05/14/2015 04:16
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 04:16
1-Methylnaphthalene	ND	0.010	1	05/14/2015 04:16
2-Methylnaphthalene	ND	0.010	1	05/14/2015 04:16
Naphthalene	ND	0.010	1	05/14/2015 04:16
Phenanthrene	ND	0.010	1	05/14/2015 04:16
Pyrene	<b>0.013</b>	0.010	1	05/14/2015 04:16
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	90	30-130		05/14/2015 04:16
2-Fluorobiphenyl	87	30-130		05/14/2015 04:16

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 04:44
Acenaphthylene	ND	0.010	1	05/14/2015 04:44
Anthracene	ND	0.010	1	05/14/2015 04:44
Benzo (a) anthracene	ND	0.010	1	05/14/2015 04:44
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 04:44
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 04:44
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 04:44
Benzo (a) pyrene	ND	0.010	1	05/14/2015 04:44
Chrysene	ND	0.010	1	05/14/2015 04:44
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 04:44
Fluoranthene	ND	0.010	1	05/14/2015 04:44
Fluorene	ND	0.010	1	05/14/2015 04:44
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 04:44
1-Methylnaphthalene	ND	0.010	1	05/14/2015 04:44
2-Methylnaphthalene	ND	0.010	1	05/14/2015 04:44
Naphthalene	ND	0.010	1	05/14/2015 04:44
Phenanthrene	ND	0.010	1	05/14/2015 04:44
Pyrene	ND	0.010	1	05/14/2015 04:44

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	90	30-130	05/14/2015 04:44
2-Fluorobiphenyl	89	30-130	05/14/2015 04:44

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-12.5	1505412-012A	Soil	05/11/2015 15:10	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 13:10
Acenaphthylene	ND	0.010	1	05/14/2015 13:10
Anthracene	ND	0.010	1	05/14/2015 13:10
Benzo (a) anthracene	ND	0.010	1	05/14/2015 13:10
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 13:10
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 13:10
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 13:10
Benzo (a) pyrene	ND	0.010	1	05/14/2015 13:10
Chrysene	ND	0.010	1	05/14/2015 13:10
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 13:10
Fluoranthene	ND	0.010	1	05/14/2015 13:10
Fluorene	ND	0.010	1	05/14/2015 13:10
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 13:10
1-Methylnaphthalene	ND	0.010	1	05/14/2015 13:10
2-Methylnaphthalene	ND	0.010	1	05/14/2015 13:10
Naphthalene	ND	0.010	1	05/14/2015 13:10
Phenanthrene	ND	0.010	1	05/14/2015 13:10
Pyrene	ND	0.010	1	05/14/2015 13:10

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	90	30-130	05/14/2015 13:10
2-Fluorobiphenyl	88	30-130	05/14/2015 13:10

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-17.5	1505412-013A	Soil	05/11/2015 15:15	GC17	104799

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 13:39
Acenaphthylene	ND	0.010	1	05/14/2015 13:39
Anthracene	ND	0.010	1	05/14/2015 13:39
Benzo (a) anthracene	ND	0.010	1	05/14/2015 13:39
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 13:39
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 13:39
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 13:39
Benzo (a) pyrene	ND	0.010	1	05/14/2015 13:39
Chrysene	ND	0.010	1	05/14/2015 13:39
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 13:39
Fluoranthene	ND	0.010	1	05/14/2015 13:39
Fluorene	ND	0.010	1	05/14/2015 13:39
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 13:39
1-Methylnaphthalene	ND	0.010	1	05/14/2015 13:39
2-Methylnaphthalene	ND	0.010	1	05/14/2015 13:39
Naphthalene	ND	0.010	1	05/14/2015 13:39
Phenanthrene	ND	0.010	1	05/14/2015 13:39
Pyrene	ND	0.010	1	05/14/2015 13:39

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	90	30-130	05/14/2015 13:39
2-Fluorobiphenyl	91	30-130	05/14/2015 13:39

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC21	104772

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/13/2015 21:16
Acenaphthylene	ND	0.25	1	05/13/2015 21:16
Acetochlor	ND	0.25	1	05/13/2015 21:16
Anthracene	ND	0.25	1	05/13/2015 21:16
Benzidine	ND	1.3	1	05/13/2015 21:16
Benzo (a) anthracene	ND	0.25	1	05/13/2015 21:16
Benzo (b) fluoranthene	ND	0.25	1	05/13/2015 21:16
Benzo (k) fluoranthene	ND	0.25	1	05/13/2015 21:16
Benzo (g,h,i) perylene	ND	0.25	1	05/13/2015 21:16
Benzo (a) pyrene	ND	0.25	1	05/13/2015 21:16
Benzyl Alcohol	ND	1.3	1	05/13/2015 21:16
1,1-Biphenyl	ND	0.25	1	05/13/2015 21:16
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/13/2015 21:16
Bis (2-chloroethyl) Ether	ND	0.25	1	05/13/2015 21:16
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/13/2015 21:16
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/13/2015 21:16
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/13/2015 21:16
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/13/2015 21:16
Butylbenzyl Phthalate	ND	0.25	1	05/13/2015 21:16
4-Chloroaniline	ND	0.50	1	05/13/2015 21:16
4-Chloro-3-methylphenol	ND	0.25	1	05/13/2015 21:16
2-Chloronaphthalene	ND	0.25	1	05/13/2015 21:16
2-Chlorophenol	ND	0.25	1	05/13/2015 21:16
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/13/2015 21:16
Chrysene	ND	0.25	1	05/13/2015 21:16
Dibenzo (a,h) anthracene	ND	0.25	1	05/13/2015 21:16
Dibenzofuran	ND	0.25	1	05/13/2015 21:16
Di-n-butyl Phthalate	ND	0.25	1	05/13/2015 21:16
1,2-Dichlorobenzene	ND	0.25	1	05/13/2015 21:16
1,3-Dichlorobenzene	ND	0.25	1	05/13/2015 21:16
1,4-Dichlorobenzene	ND	0.25	1	05/13/2015 21:16
3,3-Dichlorobenzidine	ND	0.50	1	05/13/2015 21:16
2,4-Dichlorophenol	ND	0.25	1	05/13/2015 21:16
Diethyl Phthalate	ND	0.25	1	05/13/2015 21:16
2,4-Dimethylphenol	ND	0.25	1	05/13/2015 21:16
Dimethyl Phthalate	ND	0.25	1	05/13/2015 21:16
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/13/2015 21:16
2,4-Dinitrophenol	ND	6.3	1	05/13/2015 21:16

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC21	104772

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/13/2015 21:16
2,6-Dinitrotoluene	ND	0.25	1	05/13/2015 21:16
Di-n-octyl Phthalate	ND	0.50	1	05/13/2015 21:16
1,2-Diphenylhydrazine	ND	0.25	1	05/13/2015 21:16
Fluoranthene	ND	0.25	1	05/13/2015 21:16
Fluorene	ND	0.25	1	05/13/2015 21:16
Hexachlorobenzene	ND	0.25	1	05/13/2015 21:16
Hexachlorobutadiene	ND	0.25	1	05/13/2015 21:16
Hexachlorocyclopentadiene	ND	1.3	1	05/13/2015 21:16
Hexachloroethane	ND	0.25	1	05/13/2015 21:16
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/13/2015 21:16
Isophorone	ND	0.25	1	05/13/2015 21:16
2-Methylnaphthalene	ND	0.25	1	05/13/2015 21:16
2-Methylphenol (o-Cresol)	ND	0.25	1	05/13/2015 21:16
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/13/2015 21:16
Naphthalene	ND	0.25	1	05/13/2015 21:16
2-Nitroaniline	ND	1.3	1	05/13/2015 21:16
3-Nitroaniline	ND	1.3	1	05/13/2015 21:16
4-Nitroaniline	ND	1.3	1	05/13/2015 21:16
Nitrobenzene	ND	0.25	1	05/13/2015 21:16
2-Nitrophenol	ND	1.3	1	05/13/2015 21:16
4-Nitrophenol	ND	1.3	1	05/13/2015 21:16
N-Nitrosodiphenylamine	ND	0.25	1	05/13/2015 21:16
N-Nitrosodi-n-propylamine	ND	0.25	1	05/13/2015 21:16
Pentachlorophenol	ND	1.3	1	05/13/2015 21:16
Phenanthrene	ND	0.25	1	05/13/2015 21:16
Phenol	ND	0.25	1	05/13/2015 21:16
Pyrene	ND	0.25	1	05/13/2015 21:16
1,2,4-Trichlorobenzene	ND	0.25	1	05/13/2015 21:16
2,4,5-Trichlorophenol	ND	0.25	1	05/13/2015 21:16
2,4,6-Trichlorophenol	ND	0.25	1	05/13/2015 21:16

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC21	104772

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
2-Fluorophenol	139	S	30-130		05/13/2015 21:16
Phenol-d5	132	S	30-130		05/13/2015 21:16
Nitrobenzene-d5	98		30-130		05/13/2015 21:16
2-Fluorobiphenyl	98		30-130		05/13/2015 21:16
2,4,6-Tribromophenol	67		16-130		05/13/2015 21:16
4-Terphenyl-d14	109		30-130		05/13/2015 21:16

**Analyst(s):** HK

**Analytical Comments:** c11



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC21	104772

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/13/2015 20:49
Acenaphthylene	ND	0.25	1	05/13/2015 20:49
Acetochlor	ND	0.25	1	05/13/2015 20:49
Anthracene	ND	0.25	1	05/13/2015 20:49
Benzidine	ND	1.3	1	05/13/2015 20:49
Benzo (a) anthracene	ND	0.25	1	05/13/2015 20:49
Benzo (b) fluoranthene	ND	0.25	1	05/13/2015 20:49
Benzo (k) fluoranthene	ND	0.25	1	05/13/2015 20:49
Benzo (g,h,i) perylene	ND	0.25	1	05/13/2015 20:49
Benzo (a) pyrene	ND	0.25	1	05/13/2015 20:49
Benzyl Alcohol	ND	1.3	1	05/13/2015 20:49
1,1-Biphenyl	ND	0.25	1	05/13/2015 20:49
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/13/2015 20:49
Bis (2-chloroethyl) Ether	ND	0.25	1	05/13/2015 20:49
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/13/2015 20:49
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/13/2015 20:49
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/13/2015 20:49
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/13/2015 20:49
Butylbenzyl Phthalate	ND	0.25	1	05/13/2015 20:49
4-Chloroaniline	ND	0.50	1	05/13/2015 20:49
4-Chloro-3-methylphenol	ND	0.25	1	05/13/2015 20:49
2-Chloronaphthalene	ND	0.25	1	05/13/2015 20:49
2-Chlorophenol	ND	0.25	1	05/13/2015 20:49
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/13/2015 20:49
Chrysene	ND	0.25	1	05/13/2015 20:49
Dibenzo (a,h) anthracene	ND	0.25	1	05/13/2015 20:49
Dibenzofuran	ND	0.25	1	05/13/2015 20:49
Di-n-butyl Phthalate	ND	0.25	1	05/13/2015 20:49
1,2-Dichlorobenzene	ND	0.25	1	05/13/2015 20:49
1,3-Dichlorobenzene	ND	0.25	1	05/13/2015 20:49
1,4-Dichlorobenzene	ND	0.25	1	05/13/2015 20:49
3,3-Dichlorobenzidine	ND	0.50	1	05/13/2015 20:49
2,4-Dichlorophenol	ND	0.25	1	05/13/2015 20:49
Diethyl Phthalate	ND	0.25	1	05/13/2015 20:49
2,4-Dimethylphenol	ND	0.25	1	05/13/2015 20:49
Dimethyl Phthalate	ND	0.25	1	05/13/2015 20:49
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/13/2015 20:49
2,4-Dinitrophenol	ND	6.3	1	05/13/2015 20:49

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC21	104772

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/13/2015 20:49
2,6-Dinitrotoluene	ND	0.25	1	05/13/2015 20:49
Di-n-octyl Phthalate	ND	0.50	1	05/13/2015 20:49
1,2-Diphenylhydrazine	ND	0.25	1	05/13/2015 20:49
Fluoranthene	ND	0.25	1	05/13/2015 20:49
Fluorene	ND	0.25	1	05/13/2015 20:49
Hexachlorobenzene	ND	0.25	1	05/13/2015 20:49
Hexachlorobutadiene	ND	0.25	1	05/13/2015 20:49
Hexachlorocyclopentadiene	ND	1.3	1	05/13/2015 20:49
Hexachloroethane	ND	0.25	1	05/13/2015 20:49
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/13/2015 20:49
Isophorone	ND	0.25	1	05/13/2015 20:49
2-Methylnaphthalene	ND	0.25	1	05/13/2015 20:49
2-Methylphenol (o-Cresol)	ND	0.25	1	05/13/2015 20:49
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/13/2015 20:49
Naphthalene	ND	0.25	1	05/13/2015 20:49
2-Nitroaniline	ND	1.3	1	05/13/2015 20:49
3-Nitroaniline	ND	1.3	1	05/13/2015 20:49
4-Nitroaniline	ND	1.3	1	05/13/2015 20:49
Nitrobenzene	ND	0.25	1	05/13/2015 20:49
2-Nitrophenol	ND	1.3	1	05/13/2015 20:49
4-Nitrophenol	ND	1.3	1	05/13/2015 20:49
N-Nitrosodiphenylamine	ND	0.25	1	05/13/2015 20:49
N-Nitrosodi-n-propylamine	ND	0.25	1	05/13/2015 20:49
Pentachlorophenol	ND	1.3	1	05/13/2015 20:49
Phenanthrene	ND	0.25	1	05/13/2015 20:49
Phenol	ND	0.25	1	05/13/2015 20:49
Pyrene	ND	0.25	1	05/13/2015 20:49
1,2,4-Trichlorobenzene	ND	0.25	1	05/13/2015 20:49
2,4,5-Trichlorophenol	ND	0.25	1	05/13/2015 20:49
2,4,6-Trichlorophenol	ND	0.25	1	05/13/2015 20:49

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC21	104772

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	134	S	30-130	05/13/2015 20:49
Phenol-d5	126		30-130	05/13/2015 20:49
Nitrobenzene-d5	95		30-130	05/13/2015 20:49
2-Fluorobiphenyl	91		30-130	05/13/2015 20:49
2,4,6-Tribromophenol	73		16-130	05/13/2015 20:49
4-Terphenyl-d14	104		30-130	05/13/2015 20:49

**Analyst(s):** HK

**Analytical Comments:** c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	ICP-MS1	105048

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.74	0.50	1	05/20/2015 09:02
Arsenic	6.2	0.50	1	05/20/2015 09:02
Barium	330	5.0	1	05/20/2015 09:02
Beryllium	ND	0.50	1	05/20/2015 09:02
Cadmium	0.46	0.25	1	05/20/2015 09:02
Chromium	52	0.50	1	05/20/2015 09:02
Cobalt	8.1	0.50	1	05/20/2015 09:02
Copper	19	0.50	1	05/20/2015 09:02
Lead	220	0.50	1	05/20/2015 09:02
Mercury	0.16	0.050	1	05/20/2015 09:02
Molybdenum	0.65	0.50	1	05/20/2015 09:02
Nickel	50	0.50	1	05/20/2015 09:02
Selenium	ND	0.50	1	05/20/2015 09:02
Silver	ND	0.50	1	05/20/2015 09:02
Thallium	ND	0.50	1	05/20/2015 09:02
Vanadium	45	0.50	1	05/20/2015 09:02
Zinc	210	5.0	1	05/20/2015 09:02
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	100	70-130		05/20/2015 09:02

Analyst(s): DB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	ICP-MS1	105048

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/20/2015 09:08
Arsenic	4.4	0.50	1	05/20/2015 09:08
Barium	170	5.0	1	05/20/2015 09:08
Beryllium	0.68	0.50	1	05/20/2015 09:08
Cadmium	ND	0.25	1	05/20/2015 09:08
Chromium	61	0.50	1	05/20/2015 09:08
Cobalt	13	0.50	1	05/20/2015 09:08
Copper	22	0.50	1	05/20/2015 09:08
Lead	7.7	0.50	1	05/20/2015 09:08
Mercury	ND	0.050	1	05/20/2015 09:08
Molybdenum	ND	0.50	1	05/20/2015 09:08
Nickel	81	0.50	1	05/20/2015 09:08
Selenium	ND	0.50	1	05/20/2015 09:08
Silver	ND	0.50	1	05/20/2015 09:08
Thallium	ND	0.50	1	05/20/2015 09:08
Vanadium	51	0.50	1	05/20/2015 09:08
Zinc	56	5.0	1	05/20/2015 09:08
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	98	70-130		05/20/2015 09:08

**Analyst(s):** DB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-26-12.5	1505412-001A	Soil	05/11/2015 09:55	GC7	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 06:46
MTBE	---	0.050	1	05/14/2015 06:46
Benzene	ND	0.0050	1	05/14/2015 06:46
Toluene	ND	0.0050	1	05/14/2015 06:46
Ethylbenzene	ND	0.0050	1	05/14/2015 06:46
Xylenes	ND	0.0050	1	05/14/2015 06:46
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	87	70-130		05/14/2015 06:46

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-26-17.5	1505412-002A	Soil	05/11/2015 10:05	GC7	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 07:17
MTBE	---	0.050	1	05/14/2015 07:17
Benzene	ND	0.0050	1	05/14/2015 07:17
Toluene	ND	0.0050	1	05/14/2015 07:17
Ethylbenzene	ND	0.0050	1	05/14/2015 07:17
Xylenes	ND	0.0050	1	05/14/2015 07:17
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	96	70-130		05/14/2015 07:17

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-27-12.5	1505412-003A	Soil	05/11/2015 10:30	GC7	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 07:47
MTBE	---	0.050	1	05/14/2015 07:47
Benzene	ND	0.0050	1	05/14/2015 07:47
Toluene	ND	0.0050	1	05/14/2015 07:47
Ethylbenzene	ND	0.0050	1	05/14/2015 07:47
Xylenes	ND	0.0050	1	05/14/2015 07:47

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	98	70-130	05/14/2015 07:47

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-27-17.5	1505412-004A	Soil	05/11/2015 10:35	GC7	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 08:17
MTBE	---	0.050	1	05/14/2015 08:17
Benzene	ND	0.0050	1	05/14/2015 08:17
Toluene	ND	0.0050	1	05/14/2015 08:17
Ethylbenzene	ND	0.0050	1	05/14/2015 08:17
Xylenes	ND	0.0050	1	05/14/2015 08:17

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	85	70-130	05/14/2015 08:17

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-28-12.5	1505412-005A	Soil	05/11/2015 11:15	GC7	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 08:47
MTBE	---	0.050	1	05/14/2015 08:47
Benzene	ND	0.0050	1	05/14/2015 08:47
Toluene	ND	0.0050	1	05/14/2015 08:47
Ethylbenzene	ND	0.0050	1	05/14/2015 08:47
Xylenes	ND	0.0050	1	05/14/2015 08:47

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	05/14/2015 08:47

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-28-17.5	1505412-006A	Soil	05/11/2015 11:25	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/13/2015 23:08
MTBE	---	0.050	1	05/13/2015 23:08
Benzene	ND	0.0050	1	05/13/2015 23:08
Toluene	ND	0.0050	1	05/13/2015 23:08
Ethylbenzene	ND	0.0050	1	05/13/2015 23:08
Xylenes	ND	0.0050	1	05/13/2015 23:08

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	89	70-130	05/13/2015 23:08

Analyst(s): DP

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-12.5	1505412-007A	Soil	05/11/2015 13:10	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/13/2015 23:38
MTBE	---	0.050	1	05/13/2015 23:38
Benzene	ND	0.0050	1	05/13/2015 23:38
Toluene	ND	0.0050	1	05/13/2015 23:38
Ethylbenzene	ND	0.0050	1	05/13/2015 23:38
Xylenes	ND	0.0050	1	05/13/2015 23:38
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	89	70-130		05/13/2015 23:38

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-17.5	1505412-008A	Soil	05/11/2015 13:15	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 00:07
MTBE	---	0.050	1	05/14/2015 00:07
Benzene	ND	0.0050	1	05/14/2015 00:07
Toluene	ND	0.0050	1	05/14/2015 00:07
Ethylbenzene	ND	0.0050	1	05/14/2015 00:07
Xylenes	ND	0.0050	1	05/14/2015 00:07
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	92	70-130		05/14/2015 00:07

Analyst(s): DP





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-28	1505412-009A	Soil	05/11/2015 14:37	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 00:37
MTBE	---	0.050	1	05/14/2015 00:37
Benzene	ND	0.0050	1	05/14/2015 00:37
Toluene	ND	0.0050	1	05/14/2015 00:37
Ethylbenzene	ND	0.0050	1	05/14/2015 00:37
Xylenes	ND	0.0050	1	05/14/2015 00:37
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	88	70-130		05/14/2015 00:37

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 02:37
MTBE	---	0.050	1	05/14/2015 02:37
Benzene	ND	0.0050	1	05/14/2015 02:37
Toluene	ND	0.0050	1	05/14/2015 02:37
Ethylbenzene	ND	0.0050	1	05/14/2015 02:37
Xylenes	ND	0.0050	1	05/14/2015 02:37
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	88	70-130		05/14/2015 02:37

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 03:06
MTBE	---	0.050	1	05/14/2015 03:06
Benzene	ND	0.0050	1	05/14/2015 03:06
Toluene	ND	0.0050	1	05/14/2015 03:06
Ethylbenzene	ND	0.0050	1	05/14/2015 03:06
Xylenes	ND	0.0050	1	05/14/2015 03:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	70-130	05/14/2015 03:06

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-12.5	1505412-012A	Soil	05/11/2015 15:10	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 03:36
MTBE	---	0.050	1	05/14/2015 03:36
Benzene	ND	0.0050	1	05/14/2015 03:36
Toluene	ND	0.0050	1	05/14/2015 03:36
Ethylbenzene	ND	0.0050	1	05/14/2015 03:36
Xylenes	ND	0.0050	1	05/14/2015 03:36

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	93	70-130	05/14/2015 03:36

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-17.5	1505412-013A	Soil	05/11/2015 15:15	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 04:06
MTBE	---	0.050	1	05/14/2015 04:06
Benzene	ND	0.0050	1	05/14/2015 04:06
Toluene	ND	0.0050	1	05/14/2015 04:06
Ethylbenzene	ND	0.0050	1	05/14/2015 04:06
Xylenes	ND	0.0050	1	05/14/2015 04:06
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	90	70-130		05/14/2015 04:06

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-27	1505412-014A	Soil	05/11/2015 15:30	GC3	104755

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 04:36
MTBE	---	0.050	1	05/14/2015 04:36
Benzene	ND	0.0050	1	05/14/2015 04:36
Toluene	ND	0.0050	1	05/14/2015 04:36
Ethylbenzene	ND	0.0050	1	05/14/2015 04:36
Xylenes	ND	0.0050	1	05/14/2015 04:36
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	86	70-130		05/14/2015 04:36

Analyst(s): DP



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

## pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	WetChem	104758

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.19	0.1	1	05/12/2015 21:01

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	WetChem	104758

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.24	0.1	1	05/12/2015 21:04

Analyst(s): RB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-26-12.5	1505412-001A	Soil	05/11/2015 09:55	GC6B	104747

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/18/2015 18:44
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/18/2015 18:44

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	111	70-130	05/18/2015 18:44

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-26-17.5	1505412-002A	Soil	05/11/2015 10:05	GC11A	104747

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 09:18
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 09:18

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	97	70-130	05/15/2015 09:18

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-27-12.5	1505412-003A	Soil	05/11/2015 10:30	GC11A	104747

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 08:09
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 08:09

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	98	70-130	05/15/2015 08:09

Analyst(s): HD

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-27-17.5	1505412-004A	Soil	05/11/2015 10:35	GC11A	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 10:26
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 10:26

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	70-130	05/15/2015 10:26

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-28-12.5	1505412-005A	Soil	05/11/2015 11:15	GC11A	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/16/2015 10:22
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/16/2015 10:22

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	70-130	05/16/2015 10:22

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-28-17.5	1505412-006A	Soil	05/11/2015 11:25	GC11A	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 05:52
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 05:52

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	70-130	05/15/2015 05:52

Analyst(s): HD

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-12.5	1505412-007A	Soil	05/11/2015 13:10	GC11A	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 07:00
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 07:00

Surrogates	REC (%)	Limits	Date Analyzed
C9	96	70-130	05/15/2015 07:00

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-17.5	1505412-008A	Soil	05/11/2015 13:15	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/18/2015 19:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/18/2015 19:56

Surrogates	REC (%)	Limits	Date Analyzed
C9	110	70-130	05/18/2015 19:56

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-29-28	1505412-009A	Soil	05/11/2015 14:37	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 09:49
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 09:49

Surrogates	REC (%)	Limits	Date Analyzed
C9	110	70-130	05/15/2015 09:49

Analyst(s): HD

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 08:37
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 08:37

Surrogates	REC (%)	Limits	Date Analyzed
C9	110	70-130	05/15/2015 08:37

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/18/2015 21:07
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/18/2015 21:07

Surrogates	REC (%)	Limits	Date Analyzed
C9	110	70-130	05/18/2015 21:07

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-12.5	1505412-012A	Soil	05/11/2015 15:10	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 07:25
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 07:25

Surrogates	REC (%)	Limits	Date Analyzed
C9	107	70-130	05/15/2015 07:25

Analyst(s): HD

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 5/12/15

**WorkOrder:** 1505412  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-17.5	1505412-013A	Soil	05/11/2015 15:15	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/18/2015 22:18
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/18/2015 22:18

Surrogates	REC (%)	Limits	Date Analyzed
C9	114	70-130	05/18/2015 22:18

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-27	1505412-014A	Soil	05/11/2015 15:30	GC6B	104747

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 11:01
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 11:01

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/15/2015 11:01

Analyst(s): HD



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/11/15  
**Date Analyzed:** 5/12/15 - 5/13/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104717  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104717  
 1505375-009AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0548	0.0010	0.050	-	110	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0539	0.0010	0.050	-	108	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0457	0.0010	0.050	-	91	70-130
Dieldrin	ND	0.0541	0.0010	0.050	-	108	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0623	0.0010	0.050	-	125	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0529	0.0010	0.050	-	106	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-
<b>Surrogate Recovery</b>							
Decachlorobiphenyl	0.0361	0.0532		0.050	72	106	70-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/11/15  
**Date Analyzed:** 5/12/15 - 5/13/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104717  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104717  
 1505375-009AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	NR	NR		ND<0.05	NR	NR	-	NR	
g-BHC	NR	NR		ND<0.05	NR	NR	-	NR	
p,p-DDT	NR	NR		ND<0.05	NR	NR	-	NR	
Dieldrin	NR	NR		ND<0.05	NR	NR	-	NR	
Endrin	NR	NR		ND<0.05	NR	NR	-	NR	
Heptachlor	NR	NR		ND<0.05	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	NR	NR			NR	NR	-	NR	



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/13/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104765  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104765

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0735	0.010	0.10	-	74	70-130
Benzene	ND	0.0836	0.010	0.10	-	84	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.282	0.10	0.40	-	70	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0906	0.010	0.10	-	91	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0845	0.0080	0.10	-	84	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0795	0.010	0.10	-	80	70-130
1,1-Dichloroethene	ND	0.0798	0.010	0.10	-	80	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/13/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104765  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104765

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0790	0.010	0.10	-	79	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0778	0.010	0.10	-	78	70-130
Freon 113	ND	-	0.010	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0732	0.010	0.10	-	73	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.102	0.010	0.10	-	102	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0866	0.010	0.10	-	87	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.203	0.207		0.25	81	83	70-130
Toluene-d8	0.256	0.249		0.25	103	100	70-130
4-BFB	0.0204	0.0229		0.025	82	91	70-130
Benzene-d6	0.190	0.173		0.20	95	87	60-140
Ethylbenzene-d10	0.227	0.211		0.20	114	106	60-140
1,2-DCB-d4	0.186	0.155		0.20	93	78	60-140



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/13/15  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104799  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104799  
 1505412-006AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.260	0.010	0.20	-	130	30-130
Chrysene	ND	0.199	0.010	0.20	-	100	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.209	0.010	0.20	-	104	30-130
2-Methylnaphthalene	ND	0.202	0.010	0.20	-	101	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.198	0.010	0.20	-	99	30-130
Pyrene	ND	0.205	0.010	0.20	-	102	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.405	0.408		0.50	81	82	30-130
2-Fluorobiphenyl	0.392	0.395		0.50	78	79	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	0.259	0.257	0.20	ND	129	128	30-130	0.693	30
Chrysene	0.211	0.215	0.20	ND	106	108	30-130	1.86	30
1-Methylnaphthalene	0.217	0.221	0.20	ND	108	110	30-130	1.88	30
2-Methylnaphthalene	0.212	0.215	0.20	ND	106	108	30-130	1.67	30
Phenanthrene	0.213	0.218	0.20	ND	106	109	30-130	2.24	30
Pyrene	0.199	0.203	0.20	ND	99	101	30-130	1.92	30

### Surrogate Recovery

1-Fluoronaphthalene	0.441	0.451	0.50		88	90	30-130	2.41	30
2-Fluorobiphenyl	0.442	0.438	0.50		88	88	30-130	0	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/12/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104772  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104772  
 1505421-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.75	0.25	5	-	95	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	5.56	0.25	5	-	111	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	4.87	0.25	5	-	97	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.46	0.25	5	-	89	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	5.47	0.25	5	-	109	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/12/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104772  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104772  
 1505421-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	4.05	1.3	5	-	81	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.92	0.25	5	-	98	30-130
Pentachlorophenol	ND	3.76	1.3	5	-	75	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	5.06	0.25	5	-	101	30-130
Pyrene	ND	4.70	0.25	5	-	94	30-130
1,2,4-Trichlorobenzene	ND	4.88	0.25	5	-	98	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

### Surrogate Recovery

2-Fluorophenol	5.16	5.42		5	103	108	30-130
Phenol-d5	4.94	5.26		5	99	105	30-130
Nitrobenzene-d5	4.48	4.71		5	90	94	30-130
2-Fluorobiphenyl	4.29	4.63		5	86	93	30-130
2,4,6-Tribromophenol	1.93	3.19		5	39	64	16-130
4-Terphenyl-d14	4.56	4.66		5	91	93	30-130

(Cont.)





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/12/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104772  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104772  
 1505421-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<20	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<20	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<20	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<20	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<20	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<100	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<20	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<100	NR	NR	-	NR	
Phenol	NR	NR		ND<20	NR	NR	-	NR	
Pyrene	NR	NR		ND<20	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<20	NR	NR	-	NR	

**Surrogate Recovery**

2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/19/15  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 105048  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105048

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	50.1	0.50	50	-	100	75-125
Arsenic	ND	50.4	0.50	50	-	101	75-125
Barium	ND	484	5.0	500	-	97	75-125
Beryllium	ND	51.9	0.50	50	-	104	75-125
Cadmium	ND	49.3	0.25	50	-	99	75-125
Chromium	ND	50.7	0.50	50	-	101	75-125
Cobalt	ND	51.4	0.50	50	-	103	75-125
Copper	ND	53.2	0.50	50	-	106	75-125
Lead	ND	53.4	0.50	50	-	107	75-125
Mercury	ND	1.13	0.050	1.25	-	91	75-125
Molybdenum	ND	49.2	0.50	50	-	98	75-125
Nickel	ND	52.4	0.50	50	-	105	75-125
Selenium	ND	51.1	0.50	50	-	102	75-125
Silver	ND	49.3	0.50	50	-	99	75-125
Thallium	ND	51.6	0.50	50	-	103	75-125
Vanadium	ND	50.6	0.50	50	-	101	75-125
Zinc	ND	519	5.0	500	-	104	75-125
<b>Surrogate Recovery</b>							
Terbium	490	500		500	98	100	70-130



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/13/15  
**Instrument:** GC3  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104755  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104755  
 1505404-018AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.683	0.40	0.60	-	114	70-130
MTBE	ND	0.0973	0.050	0.10	-	97	70-130
Benzene	ND	0.105	0.0050	0.10	-	105	70-130
Toluene	ND	0.109	0.0050	0.10	-	109	70-130
Ethylbenzene	ND	0.109	0.0050	0.10	-	109	70-130
Xylenes	ND	0.333	0.0050	0.30	-	111	70-130

### Surrogate Recovery

2-Fluorotoluene	0.107	0.0995		0.10	107	99	70-130
-----------------	-------	--------	--	------	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.604	0.594	0.60	ND	101	99	70-130	1.76	20
MTBE	0.0785	0.0816	0.10	ND	79	82	70-130	3.78	20
Benzene	0.0862	0.0881	0.10	ND	86	88	70-130	2.20	20
Toluene	0.0924	0.0928	0.10	ND	92	93	70-130	0.349	20
Ethylbenzene	0.0932	0.0919	0.10	ND	93	92	70-130	1.35	20
Xylenes	0.280	0.279	0.30	ND	93	93	70-130	0	20

### Surrogate Recovery

2-Fluorotoluene	0.0824	0.0819	0.10		82	82	70-130	0	20
-----------------	--------	--------	------	--	----	----	--------	---	----



# Quality Control Report

**Client:** Treadwell & Rollo

**WorkOrder:** 1505412

**Date Prepared:** 5/12/15

**BatchID:** 104758

**Date Analyzed:** 5/12/15

**Extraction Method:** SW9045D

**Instrument:** WetChem

**Analytical Method:** SW9045D

**Matrix:** Soil

**Unit:** ±, pH units @ 25°C

**Project:** #731637001; 3093 Broadway

## QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505356-001A	7.78	1	7.77	1	0.01	0.1



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/12/15 - 5/13/15  
**Instrument:** GC11B, GC2A  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 104747  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104747  
 1505400-003AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	40.7	1.0	40	-	102	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	26.5	27.9		25	106	112	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	43.3	48.3	40	6.281	93	105	70-130	10.8	30

**Surrogate Recovery**

C9	27.8	27.8	25		111	111	70-130	0	30
----	------	------	----	--	-----	-----	--------	---	----

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505412

ClientCode: TWRK

WaterTrax    WriteOn    EDF    Excel    EQUIS    Email    HardCopy    ThirdParty    J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500   FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

**Date Received: 05/12/2015**

**Date Printed: 05/13/2015**

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
1505412-001	B-26-12.5	Soil	5/11/2015 9:55	<input type="checkbox"/>			A			A		A				
1505412-002	B-26-17.5	Soil	5/11/2015 10:05	<input type="checkbox"/>			A			A		A				
1505412-003	B-27-12.5	Soil	5/11/2015 10:30	<input type="checkbox"/>			A			A		A				
1505412-004	B-27-17.5	Soil	5/11/2015 10:35	<input type="checkbox"/>			A			A		A				
1505412-005	B-28-12.5	Soil	5/11/2015 11:15	<input type="checkbox"/>			A			A		A				
1505412-006	B-28-17.5	Soil	5/11/2015 11:25	<input type="checkbox"/>			A			A		A				
1505412-007	B-29-12.5	Soil	5/11/2015 13:10	<input type="checkbox"/>			A			A		A				
1505412-008	B-29-17.5	Soil	5/11/2015 13:15	<input type="checkbox"/>			A			A		A				
1505412-009	B-29-28	Soil	5/11/2015 14:37	<input type="checkbox"/>						A		A				
1505412-010	B-30-2.5	Soil	5/11/2015 11:40	<input type="checkbox"/>	A	B	A	A	A	A	A	A				
1505412-011	B-30-7.5	Soil	5/11/2015 15:00	<input type="checkbox"/>	A	B	A	A	A	A	A	A				
1505412-012	B-30-12.5	Soil	5/11/2015 15:10	<input type="checkbox"/>			A			A		A				
1505412-013	B-30-17.5	Soil	5/11/2015 15:15	<input type="checkbox"/>			A			A		A				
1505412-014	B-30-27	Soil	5/11/2015 15:30	<input type="checkbox"/>						A		A				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

Prepared by: Maria Venegas

**Comments:**

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505412  
**Date Received:** 5/12/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505412-001A	B-26-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 9:55	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-002A	B-26-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 10:05	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-003A	B-27-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 10:30	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-004A	B-27-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 10:35	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-005A	B-28-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 11:15	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-006A	B-28-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 11:25	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505412  
**Date Received:** 5/12/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505412-006A	B-28-17.5	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 11:25	5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-007A	B-29-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 13:10	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-008A	B-29-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 13:15	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505412-009A	B-29-28	Soil	SW8015B (Diesel & Motor Oil)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/11/2015 14:37	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
1505412-010A	B-30-2.5	Soil	SW8015B (Diesel & Motor Oil)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/11/2015 11:40	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>		5 days			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days			
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			

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

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





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505412  
**Date Received:** 5/12/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505412-010A	B-30-2.5	Soil	SW8081A/8082 (OC Pesticides+PCBs)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/11/2015 11:40	5 days		<input type="checkbox"/>	
1505412-010B	B-30-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/11/2015 11:40	5 days		<input type="checkbox"/>	
1505412-011A	B-30-7.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 15:00	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505412-011B	B-30-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/11/2015 15:00	5 days		<input type="checkbox"/>	
1505412-012A	B-30-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 15:10	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input type="checkbox"/>	
1505412-013A	B-30-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 15:15	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505412  
**Date Received:** 5/12/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505412-013A	B-30-17.5	Soil	SW8270C (PAHs/PNAs)	1	Acetate Liner	<input type="checkbox"/>	5/11/2015 15:15	5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input type="checkbox"/>	
1505412-014A	B-30-27	Soil	SW8015B (Diesel & Motor Oil)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/11/2015 15:30	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)		<input type="checkbox"/>	5 days				<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

please email the work order summary to:

- ① Elizabeth Kimbrel: ekimbrel@langan.com
- ② Christina Rain: crain@langan.com thank you!

008370

1505412

**Treadwell & Rollo**  
Environmental and Geotechnical Consultant

**CHAIN OF CUSTODY RECORD**

Page 1 of 1

- 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731037001  
 Project Manager/Contact: Christina Rain 415-955-5247 crain@langan.com  
 Samplers: Liz Kimbrel & Zbair Trabzada  
 Recorder (Signature Required): Elyse K

Turnaround Time  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TRAH, g/mo	BTEX, 802-1	PNAs 8270C-500	VOCs 8260B	SVOCs 8270C	PEBS: Pesticides 800	CAM 17	PH 9045D									
B-26-12.5	5/11/15	0955		X									X	X	X	X	X	X	X	X	X	X	X	X				
B-26-17.5		1005		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-27-12.5		1030		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-27-17.5		1035		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-28-12.5		1115		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-28-17.5		1125		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-29-12.5		1310		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-29-17.5		1315		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-29-28		1437		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-30-2.5		1140		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		hold metals for further (MET) analyses
B-30-7.5		1500		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-30-12.5		1510		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-30-17.5		1515		X									X	X	X	X	X	X	X	X	X	X	X	X	X			
B-30-27		1530		X									X	X	X	X	X	X	X	X	X	X	X	X	X			

Relinquished by: (Signature) <u>Elyse K</u>	Date <u>5/11/2015</u>	Time <u>1700</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-12-15</u>	Time <u>1340</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-12-15</u>	Time <u>1450</u>	Received by: (Signature) <u>[Signature]</u>	Date	Time
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature) <u>[Signature]</u>	Date <u>5/12/15</u>	Time <u>1450</u>

Sent to Laboratory (Name): McCampbell  
 Laboratory Comments/Notes: ICE# 5.8  
 Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)

White Copy - Original

APPROPRIATE CONTAINERS SERVED IN LAB  
 Yellow Copy - Laboratory  
 PRESERVATION VOAS O&G METALS OTHER

Pink Copy - Field

COC Number:



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/12/2015 4:42:25 PM**  
 Project Name: **#731637001; 3093 Broadway** LogIn Reviewed by: **Maria Venegas**  
 WorkOrder No: **1505412** Matrix: Soil Carrier: Bernie Cummins (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   
 Sample/Temp Blank temperature Temp: 5.8°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505412 A

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/12/2015

Analytical Report reviewed & approved for release on 06/11/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505412

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 6/6/15

**WorkOrder:** 1505412  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

## STLC Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/08/2015 22:54

Analyst(s): DB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 6/6/15

**WorkOrder:** 1505412  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### STLC Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.13	0.050	1	06/09/2015 00:51
Lead	22	0.20	1	06/09/2015 00:51

Analyst(s): DB





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 6/9/15

**WorkOrder:** 1505412  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### TCLP Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-7.5	1505412-011A	Soil	05/11/2015 15:00	ICP-JY	106063

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Chromium	ND	0.050	1	06/11/2015 12:56

Analyst(s): DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/12/15 16:42  
**Date Prepared:** 6/9/15

**WorkOrder:** 1505412  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### TCLP Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-30-2.5	1505412-010A	Soil	05/11/2015 11:40	ICP-JY	106063

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/11/2015 13:44
Lead	<b>0.22</b>	0.20	1	06/11/2015 13:44

Analyst(s): DVH



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/6/15  
**Date Analyzed:** 6/8/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 105958  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-105958  
 1506155-001AMS/MSD

### QC Summary Report for Metals (STLC)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.908	0.050	1	-	91	75-125
Lead	ND	0.851	0.20	1	-	85	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.10	1.10	1	0.1510	95	95	70-130	0	30
Lead	1.47	1.46	1	0.51	95	95	70-130	0	30



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/9/15  
**Date Analyzed:** 6/11/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505412  
**BatchID:** 106063  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-106063  
 1505412-011AMS/MSD

### QC Summary Report for Metals (TCLP)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.948	0.050	1	-	95	75-125
Lead	ND	0.914	0.20	1	-	91	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	0.983	0.997	1	ND	98	100	70-130	1.42	30
Lead	0.957	0.914	1	ND	96	91	70-130	4.62	30



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505412 **A**

ClientCode: TWRK

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  Fax  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

**Date Received: 05/12/2015**

**Date Add-On: 06/04/2015**

**Date Printed: 06/04/2015**

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	
1505412-010	B-30-2.5	Soil	5/11/2015 11:40	<input type="checkbox"/>		A		A									
1505412-011	B-30-7.5	Soil	5/11/2015 15:00	<input type="checkbox"/>	A		A										

**Test Legend:**

1	STLC_METALS_S	2	STLC_PBCR_S	3	TCLP_METALS_S	4	TCLP_PBCR_S	5	
6		7		8		9		10	
11		12							

**Prepared by: Maria Venegas**

**Add-On Prepared By: Maria Venegas**

**Comments:**    STLC's & TCLP's added 6/4/15 STAT.

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:** STLC's & TCLP's added 6/4/15 STAT.

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** [crain@langan.com](mailto:crain@langan.com)

**Work Order:** 1505412  
**Date Received:** 5/12/2015  
**Date Add-On:** 6/4/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505412-010A	B-30-2.5	Soil	SW6010B (Chromium & Lead) (TCLP)	1	Stainless Steel tube 2"x6"	5/11/2015 11:40	5 days*		<input type="checkbox"/>	
			SW6010B (Chromium & Lead) (STLC)				5 days*			
1505412-011A	B-30-7.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Acetate Liner	5/11/2015 15:00	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

please email the work order summary to:

① Elizabeth Kimbrel: ekimbrel@langan.com

② Christina Rain: crain@langan.com thank you!

008370

1505412

# Treadwell&Rollo

Environmental and Geotechnical Consultant

## CHAIN OF CUSTODY RECORD

Page 1 of 1

- 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731037001  
 Project Manager/Contact: Christina Rain 415-955-5247 Crain@langan.com  
 Samplers: Liz Kimbrel; Ekair Trabzada  
 Recorder (Signature Required): Elyse Kim

**Turnaround Time**

5td

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Remarks					
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH/g mo	BTEX 8021	PNAs 8270C - 8021	VOCs 8260B	SIVCs 8270C	PEBS-c Pesticides 8021	CAM 17	PH 9045D	STLC Pb	STLC Cr		TCUP Pb	TCUP Cr	Silica gel clean-up	Hold	
B-26-12.5	5/11/15	0955		X																							
B-26-17.5		1005		X																							
B-27-12.5		1030		X																							
B-27-17.5		1035		X																							
B-28-12.5		1115		X																							
B-28-17.5		1125		X																							
B-29-12.5		1310		X																							
B-29-17.5		1315		X																							
B-29-28		1437		X																							
B-30-2.5		1140		X																							hold metals for further (NET) analyses
B-30-7.5		1500		X																							
B-30-12.5		1510		X																							
B-30-17.5		1515		X																							
B-30-27		1530		X																							

Relinquished by: (Signature) <u>Elyse Kim</u>	Date <u>5/11/2015</u>	Time <u>1700</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-12-15</u>	Time <u>1340</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-12-15</u>	Time <u>1450</u>	Received by: (Signature) <u>[Signature]</u>	Date	Time
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature) <u>Marcus [Signature]</u>	Date <u>5/12/15</u>	Time <u>1450</u>

Sent to Laboratory (Name): McCampbell Method of Shipment  Lab courier  Fed Ex  Airborne  UPS

Laboratory Comments/Notes: added 6/4/15 STAT  Hand Carried  Private Courier (Co. Name)

ICE # 5.8  
 GOOD CONDITION  
 HEAD SPACE ABSENT  
 DECHLORINATED  
 PRESERVATION VOAS O&G METALS OTHER  
 APPROPRIATE CONTAINERS SERVED IN LAB

White Copy - Original

Pink Copy - Field

COC Number:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505476

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/13/2015

Analytical Report reviewed & approved for release on 05/20/2015 by:

Angela Rydelius,  
Laboratory Manager

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







## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505476

### Glossary Abbreviation

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

### Analytical Qualifiers

a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
d2	heavier gasoline range compounds are significant (aged gasoline?)
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505476

### Quality Control Qualifiers

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



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC23	104777

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.010	10	05/15/2015 18:43
a-BHC	ND	0.010	10	05/15/2015 18:43
b-BHC	ND	0.010	10	05/15/2015 18:43
d-BHC	ND	0.010	10	05/15/2015 18:43
g-BHC	ND	0.010	10	05/15/2015 18:43
Chlordane (Technical)	ND	0.25	10	05/15/2015 18:43
a-Chlordane	ND	0.010	10	05/15/2015 18:43
g-Chlordane	ND	0.010	10	05/15/2015 18:43
p,p-DDD	ND	0.010	10	05/15/2015 18:43
p,p-DDE	ND	0.010	10	05/15/2015 18:43
p,p-DDT	ND	0.010	10	05/15/2015 18:43
Dieldrin	ND	0.010	10	05/15/2015 18:43
Endosulfan I	ND	0.010	10	05/15/2015 18:43
Endosulfan II	ND	0.010	10	05/15/2015 18:43
Endosulfan sulfate	ND	0.010	10	05/15/2015 18:43
Endrin	ND	0.010	10	05/15/2015 18:43
Endrin aldehyde	ND	0.010	10	05/15/2015 18:43
Endrin ketone	ND	0.010	10	05/15/2015 18:43
Heptachlor	ND	0.010	10	05/15/2015 18:43
Heptachlor epoxide	ND	0.010	10	05/15/2015 18:43
Hexachlorobenzene	ND	0.10	10	05/15/2015 18:43
Hexachlorocyclopentadiene	ND	0.20	10	05/15/2015 18:43
Methoxychlor	ND	0.010	10	05/15/2015 18:43
Toxaphene	ND	0.50	10	05/15/2015 18:43
Aroclor1016	ND	0.50	10	05/15/2015 18:43
Aroclor1221	ND	0.50	10	05/15/2015 18:43
Aroclor1232	ND	0.50	10	05/15/2015 18:43
Aroclor1242	ND	0.50	10	05/15/2015 18:43
Aroclor1248	ND	0.50	10	05/15/2015 18:43
Aroclor1254	ND	0.50	10	05/15/2015 18:43
Aroclor1260	ND	0.50	10	05/15/2015 18:43
PCBs, total	ND	0.50	10	05/15/2015 18:43

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	104	70-130	05/15/2015 18:43

**Analyst(s):** CK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011B	Soil	05/12/2015 15:00	GC10	104839

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/14/2015 23:11
tert-Amyl methyl ether (TAME)	ND	0.0088	1	05/14/2015 23:11
Benzene	ND	0.0088	1	05/14/2015 23:11
Bromobenzene	ND	0.0088	1	05/14/2015 23:11
Bromochloromethane	ND	0.0088	1	05/14/2015 23:11
Bromodichloromethane	ND	0.0088	1	05/14/2015 23:11
Bromoform	ND	0.0088	1	05/14/2015 23:11
Bromomethane	ND	0.0088	1	05/14/2015 23:11
2-Butanone (MEK)	ND	0.035	1	05/14/2015 23:11
t-Butyl alcohol (TBA)	ND	0.088	1	05/14/2015 23:11
n-Butyl benzene	ND	0.0088	1	05/14/2015 23:11
sec-Butyl benzene	ND	0.0088	1	05/14/2015 23:11
tert-Butyl benzene	ND	0.0088	1	05/14/2015 23:11
Carbon Disulfide	ND	0.0088	1	05/14/2015 23:11
Carbon Tetrachloride	ND	0.0088	1	05/14/2015 23:11
Chlorobenzene	ND	0.0088	1	05/14/2015 23:11
Chloroethane	ND	0.0088	1	05/14/2015 23:11
Chloroform	ND	0.0088	1	05/14/2015 23:11
Chloromethane	ND	0.0088	1	05/14/2015 23:11
2-Chlorotoluene	ND	0.0088	1	05/14/2015 23:11
4-Chlorotoluene	ND	0.0088	1	05/14/2015 23:11
Dibromochloromethane	ND	0.0088	1	05/14/2015 23:11
1,2-Dibromo-3-chloropropane	ND	0.0070	1	05/14/2015 23:11
1,2-Dibromoethane (EDB)	ND	0.0070	1	05/14/2015 23:11
Dibromomethane	ND	0.0088	1	05/14/2015 23:11
1,2-Dichlorobenzene	ND	0.0088	1	05/14/2015 23:11
1,3-Dichlorobenzene	ND	0.0088	1	05/14/2015 23:11
1,4-Dichlorobenzene	ND	0.0088	1	05/14/2015 23:11
Dichlorodifluoromethane	ND	0.0088	1	05/14/2015 23:11
1,1-Dichloroethane	ND	0.0088	1	05/14/2015 23:11
1,2-Dichloroethane (1,2-DCA)	ND	0.0088	1	05/14/2015 23:11
1,1-Dichloroethene	ND	0.0088	1	05/14/2015 23:11
cis-1,2-Dichloroethene	ND	0.0088	1	05/14/2015 23:11
trans-1,2-Dichloroethene	ND	0.0088	1	05/14/2015 23:11
1,2-Dichloropropane	ND	0.0088	1	05/14/2015 23:11
1,3-Dichloropropane	ND	0.0088	1	05/14/2015 23:11
2,2-Dichloropropane	ND	0.0088	1	05/14/2015 23:11
1,1-Dichloropropene	ND	0.0088	1	05/14/2015 23:11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011B	Soil	05/12/2015 15:00	GC10	104839

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0088	1	05/14/2015 23:11
trans-1,3-Dichloropropene	ND	0.0088	1	05/14/2015 23:11
Diisopropyl ether (DIPE)	ND	0.0088	1	05/14/2015 23:11
Ethylbenzene	ND	0.0088	1	05/14/2015 23:11
Ethyl tert-butyl ether (ETBE)	ND	0.0088	1	05/14/2015 23:11
Freon 113	ND	0.0088	1	05/14/2015 23:11
Hexachlorobutadiene	ND	0.0088	1	05/14/2015 23:11
Hexachloroethane	ND	0.0088	1	05/14/2015 23:11
2-Hexanone	ND	0.0088	1	05/14/2015 23:11
Isopropylbenzene	ND	0.0088	1	05/14/2015 23:11
4-Isopropyl toluene	ND	0.0088	1	05/14/2015 23:11
Methyl-t-butyl ether (MTBE)	ND	0.0088	1	05/14/2015 23:11
Methylene chloride	ND	0.0088	1	05/14/2015 23:11
4-Methyl-2-pentanone (MIBK)	ND	0.0088	1	05/14/2015 23:11
Naphthalene	ND	0.0088	1	05/14/2015 23:11
n-Propyl benzene	ND	0.0088	1	05/14/2015 23:11
Styrene	ND	0.0088	1	05/14/2015 23:11
1,1,1,2-Tetrachloroethane	ND	0.0088	1	05/14/2015 23:11
1,1,2,2-Tetrachloroethane	ND	0.0088	1	05/14/2015 23:11
Tetrachloroethene	ND	0.0088	1	05/14/2015 23:11
Toluene	ND	0.0088	1	05/14/2015 23:11
1,2,3-Trichlorobenzene	ND	0.0088	1	05/14/2015 23:11
1,2,4-Trichlorobenzene	ND	0.0088	1	05/14/2015 23:11
1,1,1-Trichloroethane	ND	0.0088	1	05/14/2015 23:11
1,1,2-Trichloroethane	ND	0.0088	1	05/14/2015 23:11
Trichloroethene	ND	0.0088	1	05/14/2015 23:11
Trichlorofluoromethane	ND	0.0088	1	05/14/2015 23:11
1,2,3-Trichloropropane	ND	0.0088	1	05/14/2015 23:11
1,2,4-Trimethylbenzene	ND	0.0088	1	05/14/2015 23:11
1,3,5-Trimethylbenzene	ND	0.0088	1	05/14/2015 23:11
Vinyl Chloride	ND	0.0088	1	05/14/2015 23:11
Xylenes, Total	ND	0.0088	1	05/14/2015 23:11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011B	Soil	05/12/2015 15:00	GC10	104839

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	80	70-130		05/14/2015 23:11
Toluene-d8	97	70-130		05/14/2015 23:11
4-BFB	95	70-130		05/14/2015 23:11
Benzene-d6	85	60-140		05/14/2015 23:11
Ethylbenzene-d10	95	60-140		05/14/2015 23:11
1,2-DCB-d4	90	60-140		05/14/2015 23:11

**Analyst(s):** KF

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-31-12.75	1505476-001A	Soil	05/12/2015 09:02	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 20:29
Acenaphthylene	ND	0.010	1	05/14/2015 20:29
Anthracene	ND	0.010	1	05/14/2015 20:29
Benzo (a) anthracene	ND	0.010	1	05/14/2015 20:29
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 20:29
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 20:29
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 20:29
Benzo (a) pyrene	ND	0.010	1	05/14/2015 20:29
Chrysene	ND	0.010	1	05/14/2015 20:29
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 20:29
Fluoranthene	ND	0.010	1	05/14/2015 20:29
Fluorene	ND	0.010	1	05/14/2015 20:29
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 20:29
1-Methylnaphthalene	ND	0.010	1	05/14/2015 20:29
2-Methylnaphthalene	ND	0.010	1	05/14/2015 20:29
Naphthalene	ND	0.010	1	05/14/2015 20:29
Phenanthrene	ND	0.010	1	05/14/2015 20:29
Pyrene	ND	0.010	1	05/14/2015 20:29
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	81	30-130		05/14/2015 20:29
2-Fluorobiphenyl	79	30-130		05/14/2015 20:29

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-31-17.75	1505476-002A	Soil	05/12/2015 09:11	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 20:58
Acenaphthylene	ND	0.010	1	05/14/2015 20:58
Anthracene	ND	0.010	1	05/14/2015 20:58
Benzo (a) anthracene	ND	0.010	1	05/14/2015 20:58
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 20:58
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 20:58
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 20:58
Benzo (a) pyrene	ND	0.010	1	05/14/2015 20:58
Chrysene	ND	0.010	1	05/14/2015 20:58
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 20:58
Fluoranthene	ND	0.010	1	05/14/2015 20:58
Fluorene	ND	0.010	1	05/14/2015 20:58
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 20:58
1-Methylnaphthalene	ND	0.010	1	05/14/2015 20:58
2-Methylnaphthalene	ND	0.010	1	05/14/2015 20:58
Naphthalene	ND	0.010	1	05/14/2015 20:58
Phenanthrene	ND	0.010	1	05/14/2015 20:58
Pyrene	ND	0.010	1	05/14/2015 20:58

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	82	30-130	05/14/2015 20:58
2-Fluorobiphenyl	80	30-130	05/14/2015 20:58

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-32-12.5	1505476-003A	Soil	05/12/2015 09:45	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 21:27
Acenaphthylene	ND	0.010	1	05/14/2015 21:27
Anthracene	ND	0.010	1	05/14/2015 21:27
Benzo (a) anthracene	ND	0.010	1	05/14/2015 21:27
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 21:27
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 21:27
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 21:27
Benzo (a) pyrene	ND	0.010	1	05/14/2015 21:27
Chrysene	ND	0.010	1	05/14/2015 21:27
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 21:27
Fluoranthene	ND	0.010	1	05/14/2015 21:27
Fluorene	ND	0.010	1	05/14/2015 21:27
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 21:27
1-Methylnaphthalene	ND	0.010	1	05/14/2015 21:27
2-Methylnaphthalene	ND	0.010	1	05/14/2015 21:27
Naphthalene	ND	0.010	1	05/14/2015 21:27
Phenanthrene	ND	0.010	1	05/14/2015 21:27
Pyrene	ND	0.010	1	05/14/2015 21:27
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	83	30-130		05/14/2015 21:27
2-Fluorobiphenyl	81	30-130		05/14/2015 21:27

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-32-17.75	1505476-004A	Soil	05/12/2015 09:50	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 21:57
Acenaphthylene	ND	0.010	1	05/14/2015 21:57
Anthracene	ND	0.010	1	05/14/2015 21:57
Benzo (a) anthracene	ND	0.010	1	05/14/2015 21:57
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 21:57
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 21:57
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 21:57
Benzo (a) pyrene	ND	0.010	1	05/14/2015 21:57
Chrysene	ND	0.010	1	05/14/2015 21:57
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 21:57
Fluoranthene	ND	0.010	1	05/14/2015 21:57
Fluorene	ND	0.010	1	05/14/2015 21:57
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 21:57
1-Methylnaphthalene	ND	0.010	1	05/14/2015 21:57
2-Methylnaphthalene	ND	0.010	1	05/14/2015 21:57
Naphthalene	ND	0.010	1	05/14/2015 21:57
Phenanthrene	ND	0.010	1	05/14/2015 21:57
Pyrene	ND	0.010	1	05/14/2015 21:57
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	87	30-130		05/14/2015 21:57
2-Fluorobiphenyl	84	30-130		05/14/2015 21:57

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-21-12.75	1505476-005A	Soil	05/12/2015 10:40	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 22:25
Acenaphthylene	ND	0.010	1	05/14/2015 22:25
Anthracene	ND	0.010	1	05/14/2015 22:25
Benzo (a) anthracene	ND	0.010	1	05/14/2015 22:25
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 22:25
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 22:25
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 22:25
Benzo (a) pyrene	ND	0.010	1	05/14/2015 22:25
Chrysene	ND	0.010	1	05/14/2015 22:25
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 22:25
Fluoranthene	ND	0.010	1	05/14/2015 22:25
Fluorene	ND	0.010	1	05/14/2015 22:25
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 22:25
1-Methylnaphthalene	ND	0.010	1	05/14/2015 22:25
2-Methylnaphthalene	ND	0.010	1	05/14/2015 22:25
Naphthalene	ND	0.010	1	05/14/2015 22:25
Phenanthrene	ND	0.010	1	05/14/2015 22:25
Pyrene	ND	0.010	1	05/14/2015 22:25

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	85	30-130	05/14/2015 22:25
2-Fluorobiphenyl	81	30-130	05/14/2015 22:25

**Analyst(s):** HK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-21-17.75	1505476-006A	Soil	05/12/2015 10:50	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 22:54
Acenaphthylene	ND	0.010	1	05/14/2015 22:54
Anthracene	ND	0.010	1	05/14/2015 22:54
Benzo (a) anthracene	ND	0.010	1	05/14/2015 22:54
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 22:54
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 22:54
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 22:54
Benzo (a) pyrene	ND	0.010	1	05/14/2015 22:54
Chrysene	ND	0.010	1	05/14/2015 22:54
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 22:54
Fluoranthene	ND	0.010	1	05/14/2015 22:54
Fluorene	ND	0.010	1	05/14/2015 22:54
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 22:54
1-Methylnaphthalene	ND	0.010	1	05/14/2015 22:54
2-Methylnaphthalene	ND	0.010	1	05/14/2015 22:54
Naphthalene	ND	0.010	1	05/14/2015 22:54
Phenanthrene	ND	0.010	1	05/14/2015 22:54
Pyrene	ND	0.010	1	05/14/2015 22:54
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	89	30-130		05/14/2015 22:54
2-Fluorobiphenyl	87	30-130		05/14/2015 22:54

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-25-12.5	1505476-007A	Soil	05/12/2015 12:05	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 23:22
Acenaphthylene	ND	0.010	1	05/14/2015 23:22
Anthracene	ND	0.010	1	05/14/2015 23:22
Benzo (a) anthracene	ND	0.010	1	05/14/2015 23:22
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 23:22
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 23:22
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 23:22
Benzo (a) pyrene	ND	0.010	1	05/14/2015 23:22
Chrysene	ND	0.010	1	05/14/2015 23:22
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 23:22
Fluoranthene	ND	0.010	1	05/14/2015 23:22
Fluorene	ND	0.010	1	05/14/2015 23:22
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 23:22
1-Methylnaphthalene	ND	0.010	1	05/14/2015 23:22
2-Methylnaphthalene	ND	0.010	1	05/14/2015 23:22
Naphthalene	ND	0.010	1	05/14/2015 23:22
Phenanthrene	ND	0.010	1	05/14/2015 23:22
Pyrene	ND	0.010	1	05/14/2015 23:22
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	82	30-130		05/14/2015 23:22
2-Fluorobiphenyl	81	30-130		05/14/2015 23:22

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-25-17.5	1505476-008A	Soil	05/12/2015 12:15	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 23:52
Acenaphthylene	ND	0.010	1	05/14/2015 23:52
Anthracene	ND	0.010	1	05/14/2015 23:52
Benzo (a) anthracene	ND	0.010	1	05/14/2015 23:52
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 23:52
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 23:52
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 23:52
Benzo (a) pyrene	ND	0.010	1	05/14/2015 23:52
Chrysene	ND	0.010	1	05/14/2015 23:52
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 23:52
Fluoranthene	ND	0.010	1	05/14/2015 23:52
Fluorene	ND	0.010	1	05/14/2015 23:52
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 23:52
1-Methylnaphthalene	ND	0.010	1	05/14/2015 23:52
2-Methylnaphthalene	ND	0.010	1	05/14/2015 23:52
Naphthalene	ND	0.010	1	05/14/2015 23:52
Phenanthrene	ND	0.010	1	05/14/2015 23:52
Pyrene	ND	0.010	1	05/14/2015 23:52
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	87	30-130		05/14/2015 23:52
2-Fluorobiphenyl	84	30-130		05/14/2015 23:52

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-17-12.5	1505476-009A	Soil	05/12/2015 14:00	GC35	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/16/2015 01:16
Acenaphthylene	ND	0.010	1	05/16/2015 01:16
Anthracene	ND	0.010	1	05/16/2015 01:16
Benzo (a) anthracene	ND	0.010	1	05/16/2015 01:16
Benzo (b) fluoranthene	ND	0.010	1	05/16/2015 01:16
Benzo (k) fluoranthene	ND	0.010	1	05/16/2015 01:16
Benzo (g,h,i) perylene	ND	0.010	1	05/16/2015 01:16
Benzo (a) pyrene	ND	0.010	1	05/16/2015 01:16
Chrysene	ND	0.010	1	05/16/2015 01:16
Dibenzo (a,h) anthracene	ND	0.010	1	05/16/2015 01:16
Fluoranthene	ND	0.010	1	05/16/2015 01:16
Fluorene	ND	0.010	1	05/16/2015 01:16
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/16/2015 01:16
1-Methylnaphthalene	ND	0.010	1	05/16/2015 01:16
2-Methylnaphthalene	ND	0.010	1	05/16/2015 01:16
Naphthalene	ND	0.010	1	05/16/2015 01:16
Phenanthrene	ND	0.010	1	05/16/2015 01:16
Pyrene	ND	0.010	1	05/16/2015 01:16

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	87	30-130	05/16/2015 01:16
2-Fluorobiphenyl	80	30-130	05/16/2015 01:16

**Analyst(s):** HK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-17-18	1505476-010A	Soil	05/12/2015 14:30	GC35	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/16/2015 01:41
Acenaphthylene	ND	0.010	1	05/16/2015 01:41
Anthracene	ND	0.010	1	05/16/2015 01:41
Benzo (a) anthracene	ND	0.010	1	05/16/2015 01:41
Benzo (b) fluoranthene	ND	0.010	1	05/16/2015 01:41
Benzo (k) fluoranthene	ND	0.010	1	05/16/2015 01:41
Benzo (g,h,i) perylene	ND	0.010	1	05/16/2015 01:41
Benzo (a) pyrene	ND	0.010	1	05/16/2015 01:41
Chrysene	ND	0.010	1	05/16/2015 01:41
Dibenzo (a,h) anthracene	ND	0.010	1	05/16/2015 01:41
Fluoranthene	ND	0.010	1	05/16/2015 01:41
Fluorene	ND	0.010	1	05/16/2015 01:41
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/16/2015 01:41
1-Methylnaphthalene	ND	0.010	1	05/16/2015 01:41
2-Methylnaphthalene	ND	0.010	1	05/16/2015 01:41
Naphthalene	ND	0.010	1	05/16/2015 01:41
Phenanthrene	ND	0.010	1	05/16/2015 01:41
Pyrene	ND	0.010	1	05/16/2015 01:41
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	89	30-130		05/16/2015 01:41
2-Fluorobiphenyl	81	30-130		05/16/2015 01:41

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC35	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.050	5	05/16/2015 02:06
Acenaphthylene	ND	0.050	5	05/16/2015 02:06
Anthracene	ND	0.050	5	05/16/2015 02:06
Benzo (a) anthracene	<b>0.18</b>	0.050	5	05/16/2015 02:06
Benzo (b) fluoranthene	<b>0.34</b>	0.050	5	05/16/2015 02:06
Benzo (k) fluoranthene	<b>0.17</b>	0.050	5	05/16/2015 02:06
Benzo (g,h,i) perylene	<b>0.28</b>	0.050	5	05/16/2015 02:06
Benzo (a) pyrene	<b>0.33</b>	0.050	5	05/16/2015 02:06
Chrysene	<b>0.16</b>	0.050	5	05/16/2015 02:06
Dibenzo (a,h) anthracene	ND	0.050	5	05/16/2015 02:06
Fluoranthene	<b>0.29</b>	0.050	5	05/16/2015 02:06
Fluorene	ND	0.050	5	05/16/2015 02:06
Indeno (1,2,3-cd) pyrene	<b>0.21</b>	0.050	5	05/16/2015 02:06
1-Methylnaphthalene	ND	0.050	5	05/16/2015 02:06
2-Methylnaphthalene	ND	0.050	5	05/16/2015 02:06
Naphthalene	ND	0.050	5	05/16/2015 02:06
Phenanthrene	<b>0.22</b>	0.050	5	05/16/2015 02:06
Pyrene	<b>0.27</b>	0.050	5	05/16/2015 02:06

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	94	30-130	05/16/2015 02:06
2-Fluorobiphenyl	95	30-130	05/16/2015 02:06

**Analyst(s):** HK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-13-17.5	1505476-012A	Soil	05/12/2015 15:03	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/15/2015 14:44
Acenaphthylene	ND	0.010	1	05/15/2015 14:44
Anthracene	ND	0.010	1	05/15/2015 14:44
Benzo (a) anthracene	ND	0.010	1	05/15/2015 14:44
Benzo (b) fluoranthene	ND	0.010	1	05/15/2015 14:44
Benzo (k) fluoranthene	ND	0.010	1	05/15/2015 14:44
Benzo (g,h,i) perylene	ND	0.010	1	05/15/2015 14:44
Benzo (a) pyrene	ND	0.010	1	05/15/2015 14:44
Chrysene	ND	0.010	1	05/15/2015 14:44
Dibenzo (a,h) anthracene	ND	0.010	1	05/15/2015 14:44
Fluoranthene	ND	0.010	1	05/15/2015 14:44
Fluorene	ND	0.010	1	05/15/2015 14:44
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/15/2015 14:44
1-Methylnaphthalene	ND	0.010	1	05/15/2015 14:44
2-Methylnaphthalene	ND	0.010	1	05/15/2015 14:44
Naphthalene	ND	0.010	1	05/15/2015 14:44
Phenanthrene	ND	0.010	1	05/15/2015 14:44
Pyrene	ND	0.010	1	05/15/2015 14:44
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	82	30-130		05/15/2015 14:44
2-Fluorobiphenyl	84	30-130		05/15/2015 14:44

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-13-12.5	1505476-013A	Soil	05/12/2015 14:50	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/15/2015 13:45
Acenaphthylene	ND	0.010	1	05/15/2015 13:45
Anthracene	ND	0.010	1	05/15/2015 13:45
Benzo (a) anthracene	ND	0.010	1	05/15/2015 13:45
Benzo (b) fluoranthene	ND	0.010	1	05/15/2015 13:45
Benzo (k) fluoranthene	ND	0.010	1	05/15/2015 13:45
Benzo (g,h,i) perylene	ND	0.010	1	05/15/2015 13:45
Benzo (a) pyrene	ND	0.010	1	05/15/2015 13:45
Chrysene	ND	0.010	1	05/15/2015 13:45
Dibenzo (a,h) anthracene	ND	0.010	1	05/15/2015 13:45
Fluoranthene	ND	0.010	1	05/15/2015 13:45
Fluorene	ND	0.010	1	05/15/2015 13:45
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/15/2015 13:45
1-Methylnaphthalene	ND	0.010	1	05/15/2015 13:45
2-Methylnaphthalene	ND	0.010	1	05/15/2015 13:45
Naphthalene	ND	0.010	1	05/15/2015 13:45
Phenanthrene	ND	0.010	1	05/15/2015 13:45
Pyrene	ND	0.010	1	05/15/2015 13:45

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	82	30-130	05/15/2015 13:45
2-Fluorobiphenyl	85	30-130	05/15/2015 13:45

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-9-12.5	1505476-014A	Soil	05/12/2015 15:27	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/15/2015 14:15
Acenaphthylene	ND	0.010	1	05/15/2015 14:15
Anthracene	ND	0.010	1	05/15/2015 14:15
Benzo (a) anthracene	ND	0.010	1	05/15/2015 14:15
Benzo (b) fluoranthene	ND	0.010	1	05/15/2015 14:15
Benzo (k) fluoranthene	ND	0.010	1	05/15/2015 14:15
Benzo (g,h,i) perylene	ND	0.010	1	05/15/2015 14:15
Benzo (a) pyrene	ND	0.010	1	05/15/2015 14:15
Chrysene	ND	0.010	1	05/15/2015 14:15
Dibenzo (a,h) anthracene	ND	0.010	1	05/15/2015 14:15
Fluoranthene	ND	0.010	1	05/15/2015 14:15
Fluorene	ND	0.010	1	05/15/2015 14:15
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/15/2015 14:15
1-Methylnaphthalene	ND	0.010	1	05/15/2015 14:15
2-Methylnaphthalene	ND	0.010	1	05/15/2015 14:15
Naphthalene	ND	0.010	1	05/15/2015 14:15
Phenanthrene	ND	0.010	1	05/15/2015 14:15
Pyrene	ND	0.010	1	05/15/2015 14:15
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	81	30-130		05/15/2015 14:15
2-Fluorobiphenyl	84	30-130		05/15/2015 14:15

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-9-17.5	1505476-015A	Soil	05/12/2015 15:40	GC17	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/14/2015 19:02
Acenaphthylene	ND	0.010	1	05/14/2015 19:02
Anthracene	ND	0.010	1	05/14/2015 19:02
Benzo (a) anthracene	ND	0.010	1	05/14/2015 19:02
Benzo (b) fluoranthene	ND	0.010	1	05/14/2015 19:02
Benzo (k) fluoranthene	ND	0.010	1	05/14/2015 19:02
Benzo (g,h,i) perylene	ND	0.010	1	05/14/2015 19:02
Benzo (a) pyrene	ND	0.010	1	05/14/2015 19:02
Chrysene	ND	0.010	1	05/14/2015 19:02
Dibenzo (a,h) anthracene	ND	0.010	1	05/14/2015 19:02
Fluoranthene	ND	0.010	1	05/14/2015 19:02
Fluorene	ND	0.010	1	05/14/2015 19:02
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/14/2015 19:02
1-Methylnaphthalene	ND	0.010	1	05/14/2015 19:02
2-Methylnaphthalene	ND	0.010	1	05/14/2015 19:02
Naphthalene	ND	0.010	1	05/14/2015 19:02
Phenanthrene	ND	0.010	1	05/14/2015 19:02
Pyrene	ND	0.010	1	05/14/2015 19:02

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	76	30-130	05/14/2015 19:02
2-Fluorobiphenyl	75	30-130	05/14/2015 19:02

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC21	104865
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	2.0	1	05/15/2015 18:06	
Acenaphthylene	ND	2.0	1	05/15/2015 18:06	
Acetochlor	ND	2.0	1	05/15/2015 18:06	
Anthracene	ND	2.0	1	05/15/2015 18:06	
Benzidine	ND	10	1	05/15/2015 18:06	
Benzo (a) anthracene	ND	2.0	1	05/15/2015 18:06	
Benzo (b) fluoranthene	ND	2.0	1	05/15/2015 18:06	
Benzo (k) fluoranthene	ND	2.0	1	05/15/2015 18:06	
Benzo (g,h,i) perylene	ND	2.0	1	05/15/2015 18:06	
Benzo (a) pyrene	ND	2.0	1	05/15/2015 18:06	
Benzyl Alcohol	ND	10	1	05/15/2015 18:06	
1,1-Biphenyl	ND	2.0	1	05/15/2015 18:06	
Bis (2-chloroethoxy) Methane	ND	2.0	1	05/15/2015 18:06	
Bis (2-chloroethyl) Ether	ND	2.0	1	05/15/2015 18:06	
Bis (2-chloroisopropyl) Ether	ND	2.0	1	05/15/2015 18:06	
Bis (2-ethylhexyl) Adipate	ND	2.0	1	05/15/2015 18:06	
Bis (2-ethylhexyl) Phthalate	ND	2.0	1	05/15/2015 18:06	
4-Bromophenyl Phenyl Ether	ND	2.0	1	05/15/2015 18:06	
Butylbenzyl Phthalate	ND	2.0	1	05/15/2015 18:06	
4-Chloroaniline	ND	4.0	1	05/15/2015 18:06	
4-Chloro-3-methylphenol	ND	2.0	1	05/15/2015 18:06	
2-Chloronaphthalene	ND	2.0	1	05/15/2015 18:06	
2-Chlorophenol	ND	2.0	1	05/15/2015 18:06	
4-Chlorophenyl Phenyl Ether	ND	2.0	1	05/15/2015 18:06	
Chrysene	ND	2.0	1	05/15/2015 18:06	
Dibenzo (a,h) anthracene	ND	2.0	1	05/15/2015 18:06	
Dibenzofuran	ND	2.0	1	05/15/2015 18:06	
Di-n-butyl Phthalate	ND	2.0	1	05/15/2015 18:06	
1,2-Dichlorobenzene	ND	2.0	1	05/15/2015 18:06	
1,3-Dichlorobenzene	ND	2.0	1	05/15/2015 18:06	
1,4-Dichlorobenzene	ND	2.0	1	05/15/2015 18:06	
3,3-Dichlorobenzidine	ND	4.0	1	05/15/2015 18:06	
2,4-Dichlorophenol	ND	2.0	1	05/15/2015 18:06	
Diethyl Phthalate	ND	2.0	1	05/15/2015 18:06	
2,4-Dimethylphenol	ND	2.0	1	05/15/2015 18:06	
Dimethyl Phthalate	ND	2.0	1	05/15/2015 18:06	
4,6-Dinitro-2-methylphenol	ND	10	1	05/15/2015 18:06	
2,4-Dinitrophenol	ND	50	1	05/15/2015 18:06	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	2.0	1	05/15/2015 18:06
2,6-Dinitrotoluene	ND	2.0	1	05/15/2015 18:06
Di-n-octyl Phthalate	ND	4.0	1	05/15/2015 18:06
1,2-Diphenylhydrazine	ND	2.0	1	05/15/2015 18:06
Fluoranthene	ND	2.0	1	05/15/2015 18:06
Fluorene	ND	2.0	1	05/15/2015 18:06
Hexachlorobenzene	ND	2.0	1	05/15/2015 18:06
Hexachlorobutadiene	ND	2.0	1	05/15/2015 18:06
Hexachlorocyclopentadiene	ND	10	1	05/15/2015 18:06
Hexachloroethane	ND	2.0	1	05/15/2015 18:06
Indeno (1,2,3-cd) pyrene	ND	2.0	1	05/15/2015 18:06
Isophorone	ND	2.0	1	05/15/2015 18:06
2-Methylnaphthalene	ND	2.0	1	05/15/2015 18:06
2-Methylphenol (o-Cresol)	ND	2.0	1	05/15/2015 18:06
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	05/15/2015 18:06
Naphthalene	ND	2.0	1	05/15/2015 18:06
2-Nitroaniline	ND	10	1	05/15/2015 18:06
3-Nitroaniline	ND	10	1	05/15/2015 18:06
4-Nitroaniline	ND	10	1	05/15/2015 18:06
Nitrobenzene	ND	2.0	1	05/15/2015 18:06
2-Nitrophenol	ND	10	1	05/15/2015 18:06
4-Nitrophenol	ND	10	1	05/15/2015 18:06
N-Nitrosodiphenylamine	ND	2.0	1	05/15/2015 18:06
N-Nitrosodi-n-propylamine	ND	2.0	1	05/15/2015 18:06
Pentachlorophenol	ND	10	1	05/15/2015 18:06
Phenanthrene	ND	2.0	1	05/15/2015 18:06
Phenol	ND	2.0	1	05/15/2015 18:06
Pyrene	ND	2.0	1	05/15/2015 18:06
1,2,4-Trichlorobenzene	ND	2.0	1	05/15/2015 18:06
2,4,5-Trichlorophenol	ND	2.0	1	05/15/2015 18:06
2,4,6-Trichlorophenol	ND	2.0	1	05/15/2015 18:06

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	128	30-130		05/15/2015 18:06
Phenol-d5	117	30-130		05/15/2015 18:06
Nitrobenzene-d5	99	30-130		05/15/2015 18:06
2-Fluorobiphenyl	94	30-130		05/15/2015 18:06
2,4,6-Tribromophenol	82	16-130		05/15/2015 18:06
4-Terphenyl-d14	100	30-130		05/15/2015 18:06

**Analyst(s):** HK

**Analytical Comments:** a4





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	ICP-MS1	104816

Analytes	Result	RL	DF	Date Analyzed
Antimony	1.5	0.50	1	05/15/2015 19:52
Arsenic	5.0	0.50	1	05/15/2015 19:52
Barium	240	5.0	1	05/15/2015 19:52
Beryllium	ND	0.50	1	05/15/2015 19:52
Cadmium	1.4	0.25	1	05/15/2015 19:52
Chromium	52	0.50	1	05/15/2015 19:52
Cobalt	7.5	0.50	1	05/15/2015 19:52
Copper	37	0.50	1	05/15/2015 19:52
Lead	170	0.50	1	05/15/2015 19:52
Mercury	0.22	0.050	1	05/15/2015 19:52
Molybdenum	0.84	0.50	1	05/15/2015 19:52
Nickel	34	0.50	1	05/15/2015 19:52
Selenium	ND	0.50	1	05/15/2015 19:52
Silver	ND	0.50	1	05/15/2015 19:52
Thallium	ND	0.50	1	05/15/2015 19:52
Vanadium	41	0.50	1	05/15/2015 19:52
Zinc	1500	5.0	1	05/15/2015 19:52
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	100	70-130		05/15/2015 19:52

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-31-12.75	1505476-001A	Soil	05/12/2015 09:02	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 19:03
MTBE	---	0.050	1	05/14/2015 19:03
Benzene	ND	0.0050	1	05/14/2015 19:03
Toluene	ND	0.0050	1	05/14/2015 19:03
Ethylbenzene	ND	0.0050	1	05/14/2015 19:03
Xylenes	ND	0.0050	1	05/14/2015 19:03

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	92	70-130	05/14/2015 19:03

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-31-17.75	1505476-002A	Soil	05/12/2015 09:11	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 19:33
MTBE	---	0.050	1	05/14/2015 19:33
Benzene	ND	0.0050	1	05/14/2015 19:33
Toluene	ND	0.0050	1	05/14/2015 19:33
Ethylbenzene	ND	0.0050	1	05/14/2015 19:33
Xylenes	ND	0.0050	1	05/14/2015 19:33

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	70-130	05/14/2015 19:33

Analyst(s): DP

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-32-12.5	1505476-003A	Soil	05/12/2015 09:45	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 20:03
MTBE	---	0.050	1	05/14/2015 20:03
Benzene	ND	0.0050	1	05/14/2015 20:03
Toluene	ND	0.0050	1	05/14/2015 20:03
Ethylbenzene	ND	0.0050	1	05/14/2015 20:03
Xylenes	ND	0.0050	1	05/14/2015 20:03

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	70-130	05/14/2015 20:03

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-32-17.75	1505476-004A	Soil	05/12/2015 09:50	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 20:33
MTBE	---	0.050	1	05/14/2015 20:33
Benzene	ND	0.0050	1	05/14/2015 20:33
Toluene	ND	0.0050	1	05/14/2015 20:33
Ethylbenzene	ND	0.0050	1	05/14/2015 20:33
Xylenes	ND	0.0050	1	05/14/2015 20:33

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	85	70-130	05/14/2015 20:33

Analyst(s): DP

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-21-12.75	1505476-005A	Soil	05/12/2015 10:40	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 21:03
MTBE	---	0.050	1	05/14/2015 21:03
Benzene	ND	0.0050	1	05/14/2015 21:03
Toluene	ND	0.0050	1	05/14/2015 21:03
Ethylbenzene	ND	0.0050	1	05/14/2015 21:03
Xylenes	ND	0.0050	1	05/14/2015 21:03

Surrogates	REC (%)	Limits
2-Fluorotoluene	89	70-130

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-21-17.75	1505476-006A	Soil	05/12/2015 10:50	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 21:34
MTBE	---	0.050	1	05/14/2015 21:34
Benzene	ND	0.0050	1	05/14/2015 21:34
Toluene	ND	0.0050	1	05/14/2015 21:34
Ethylbenzene	ND	0.0050	1	05/14/2015 21:34
Xylenes	ND	0.0050	1	05/14/2015 21:34

Surrogates	REC (%)	Limits
2-Fluorotoluene	85	70-130

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-25-12.5	1505476-007A	Soil	05/12/2015 12:05	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 22:04
MTBE	---	0.050	1	05/14/2015 22:04
Benzene	ND	0.0050	1	05/14/2015 22:04
Toluene	ND	0.0050	1	05/14/2015 22:04
Ethylbenzene	ND	0.0050	1	05/14/2015 22:04
Xylenes	ND	0.0050	1	05/14/2015 22:04

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-25-17.5	1505476-008A	Soil	05/12/2015 12:15	GC19	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/15/2015 12:57
MTBE	---	0.050	1	05/15/2015 12:57
Benzene	ND	0.0050	1	05/15/2015 12:57
Toluene	ND	0.0050	1	05/15/2015 12:57
Ethylbenzene	ND	0.0050	1	05/15/2015 12:57
Xylenes	ND	0.0050	1	05/15/2015 12:57

Surrogates	REC (%)	Limits
2-Fluorotoluene	106	70-130

Analyst(s): HD



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-17-12.5	1505476-009A	Soil	05/12/2015 14:00	GC3	104820

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 22:34
MTBE	---	0.050	1	05/14/2015 22:34
Benzene	ND	0.0050	1	05/14/2015 22:34
Toluene	ND	0.0050	1	05/14/2015 22:34
Ethylbenzene	ND	0.0050	1	05/14/2015 22:34
Xylenes	ND	0.0050	1	05/14/2015 22:34

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-17-18	1505476-010A	Soil	05/12/2015 14:30	GC3	104840

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 14:03
MTBE	---	0.050	1	05/14/2015 14:03
Benzene	ND	0.0050	1	05/14/2015 14:03
Toluene	ND	0.0050	1	05/14/2015 14:03
Ethylbenzene	ND	0.0050	1	05/14/2015 14:03
Xylenes	ND	0.0050	1	05/14/2015 14:03

Surrogates	REC (%)	Limits
2-Fluorotoluene	94	70-130

Analyst(s): DP

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC19	104840

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	1.5	1.0	1	05/15/2015 13:59
MTBE	---	0.050	1	05/15/2015 13:59
Benzene	---	0.0050	1	05/15/2015 13:59
Toluene	---	0.0050	1	05/15/2015 13:59
Ethylbenzene	---	0.0050	1	05/15/2015 13:59
Xylenes	---	0.0050	1	05/15/2015 13:59

Surrogates	REC (%)	Limits
2-Fluorotoluene	99	70-130

Analyst(s): HD

Analytical Comments: d2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-13-17.5	1505476-012A	Soil	05/12/2015 15:03	GC3	104840

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 23:04
MTBE	---	0.050	1	05/14/2015 23:04
Benzene	ND	0.0050	1	05/14/2015 23:04
Toluene	ND	0.0050	1	05/14/2015 23:04
Ethylbenzene	ND	0.0050	1	05/14/2015 23:04
Xylenes	ND	0.0050	1	05/14/2015 23:04

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-13-12.5	1505476-013A	Soil	05/12/2015 14:50	GC3	104840

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/14/2015 23:33
MTBE	---	0.050	1	05/14/2015 23:33
Benzene	ND	0.0050	1	05/14/2015 23:33
Toluene	ND	0.0050	1	05/14/2015 23:33
Ethylbenzene	ND	0.0050	1	05/14/2015 23:33
Xylenes	ND	0.0050	1	05/14/2015 23:33

Surrogates	REC (%)	Limits
2-Fluorotoluene	91	70-130

Analyst(s): DP

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-9-12.5	1505476-014A	Soil	05/12/2015 15:27	GC3	104840

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/15/2015 00:03
MTBE	---	0.050	1	05/15/2015 00:03
Benzene	ND	0.0050	1	05/15/2015 00:03
Toluene	ND	0.0050	1	05/15/2015 00:03
Ethylbenzene	ND	0.0050	1	05/15/2015 00:03
Xylenes	ND	0.0050	1	05/15/2015 00:03

Surrogates	REC (%)	Limits
2-Fluorotoluene	94	70-130

Analyst(s): DP

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-9-17.5	1505476-015A	Soil	05/12/2015 15:40	GC3	104840

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/15/2015 00:33
MTBE	---	0.050	1	05/15/2015 00:33
Benzene	ND	0.0050	1	05/15/2015 00:33
Toluene	ND	0.0050	1	05/15/2015 00:33
Ethylbenzene	ND	0.0050	1	05/15/2015 00:33
Xylenes	ND	0.0050	1	05/15/2015 00:33

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	97	70-130	05/15/2015 00:33

Analyst(s): DP



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505476  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	WetChem	104909

<u>Analytes</u>	<u>Result</u>	<u>Accuracy</u>	<u>DF</u>	<u>Date Analyzed</u>
pH	7.55	0.1	1	05/14/2015 21:18

Analyst(s): RB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-31-12.75	1505476-001A	Soil	05/12/2015 09:02	GC6A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 04:15
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 04:15

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 04:15

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-31-17.75	1505476-002A	Soil	05/12/2015 09:11	GC6A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 03:04
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 03:04

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 03:04

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-32-12.5	1505476-003A	Soil	05/12/2015 09:45	GC6A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 10:12
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 10:12

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 10:12

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-32-17.75	1505476-004A	Soil	05/12/2015 09:50	GC6A	104821

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 09:01
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 09:01

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	106	70-130	05/19/2015 09:01

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-21-12.75	1505476-005A	Soil	05/12/2015 10:40	GC6B	104821

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 01:59
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 01:59

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	113	70-130	05/20/2015 01:59

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-21-17.75	1505476-006A	Soil	05/12/2015 10:50	GC2A	104821

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 04:59
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 04:59

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	113	70-130	05/20/2015 04:59

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-25-12.5	1505476-007A	Soil	05/12/2015 12:05	GC6A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 07:49
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 07:49

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 07:49

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-25-17.5	1505476-008A	Soil	05/12/2015 12:15	GC6A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 06:38
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 06:38

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 06:38

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-17-12.5	1505476-009A	Soil	05/12/2015 14:00	GC6A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 05:27
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 05:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 05:27

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-17-18	1505476-010A	Soil	05/12/2015 14:30	GC2A	104821

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 06:14
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 06:14

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	114	70-130	05/20/2015 06:14

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	GC9a	104821

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	12	2.0	2	05/20/2015 06:59
TPH-Motor Oil (C18-C36)	76	10	2	05/20/2015 06:59

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	107	70-130	05/20/2015 06:59

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-13-17.5	1505476-012A	Soil	05/12/2015 15:03	GC6B	104821

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/19/2015 18:50
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/19/2015 18:50

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	115	70-130	05/19/2015 18:50

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 5/13/15

**WorkOrder:** 1505476  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-13-12.5	1505476-013A	Soil	05/12/2015 14:50	GC2A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 07:30
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 07:30

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/20/2015 07:30

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-9-12.5	1505476-014A	Soil	05/12/2015 15:27	GC2A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 03:44
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 03:44

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/20/2015 03:44

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-9-17.5	1505476-015A	Soil	05/12/2015 15:40	GC2A	104821

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 02:29
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 02:29

Surrogates	REC (%)	Limits	Date Analyzed
C9	114	70-130	05/20/2015 02:29

Analyst(s): HD



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104777  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104777  
 1505377-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0505	0.0010	0.050	-	101	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0495	0.0010	0.050	-	99	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0405	0.0010	0.050	-	81	70-130
Dieldrin	ND	0.0510	0.0010	0.050	-	102	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0474	0.0010	0.050	-	95	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0503	0.0010	0.050	-	101	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-

**Surrogate Recovery**

Decachlorobiphenyl	0.0479	0.0484		0.050	96	97	70-130
--------------------	--------	--------	--	-------	----	----	--------

(Cont.)





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/12/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104777  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104777  
 1505377-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0481	0.0495	0.050	ND	96	99	70-130	2.90	30
g-BHC	0.0487	0.0500	0.050	ND	97	100	70-130	2.48	30
p,p-DDT	0.0399	0.0377	0.050	ND	80	75	70-130	5.66	30
Dieldrin	0.0499	0.0500	0.050	ND	100	100	70-130	0	30
Endrin	0.0469	0.0472	0.050	ND	94	94	70-130	0	30
Heptachlor	0.0480	0.0496	0.050	ND	96	99	70-130	3.39	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0478	0.0480	0.050		96	96	70-130	0	30



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104816  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104816  
 1505484-008AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	49.0	0.50	50	-	98	75-125
Arsenic	ND	51.7	0.50	50	-	103	75-125
Barium	ND	471	5.0	500	-	94	75-125
Beryllium	ND	48.3	0.50	50	-	97	75-125
Cadmium	ND	49.4	0.25	50	-	99	75-125
Chromium	ND	50.2	0.50	50	-	100	75-125
Cobalt	ND	47.6	0.50	50	-	95	75-125
Copper	ND	51.5	0.50	50	-	103	75-125
Lead	ND	49.8	0.50	50	-	100	75-125
Mercury	ND	1.12	0.050	1.25	-	88	75-125
Molybdenum	ND	47.6	0.50	50	-	95	75-125
Nickel	ND	51.5	0.50	50	-	103	75-125
Selenium	ND	53.0	0.50	50	-	106	75-125
Silver	ND	51.6	0.50	50	-	103	75-125
Thallium	ND	48.5	0.50	50	-	97	75-125
Vanadium	ND	50.5	0.50	50	-	101	75-125
Zinc	ND	525	5.0	500	-	105	75-125
<b>Surrogate Recovery</b>							
Terbium	554	508		500	111	102	70-130



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104816  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104816  
 1505484-008AMS/MSD

### QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	50.2	53.9	50	0.86	99	106	75-125	7.01	20
Arsenic	65.6	63.0	50	13.37	104	99	75-125	3.90	20
Barium	750	814	500	200	109	122	75-125	8.17	20
Beryllium	44.1	46.0	50	0.55	87	91	75-125	4.33	20
Cadmium	50.4	53.0	50	ND	101	106	75-125	4.95	20
Chromium	NR	NR	50	57	NR	NR	75-125	NR	20
Cobalt	58.7	62.7	50	15	87	95	75-125	6.51	20
Copper	NR	NR	50	110	NR	NR	75-125	NR	20
Lead	85.9	92.4	50	32.70	106	119	75-125	7.27	20
Mercury	1.20	1.20	1.25	0.063	91	91	75-125	0	20
Molybdenum	49.5	53.8	50	0.86	97	106	75-125	8.38	20
Nickel	NR	NR	50	65	NR	NR	75-125	NR	20
Selenium	52.9	50.1	50	ND	105	99	75-125	5.44	20
Silver	51.3	53.9	50	ND	102	108	75-125	5.00	20
Thallium	49.8	52.2	50	ND	99	104	75-125	4.74	20
Vanadium	NR	NR	50	70	NR	NR	75-125	NR	20
Zinc	593	599	500	88	101	102	75-125	0.923	20
<b>Surrogate Recovery</b>									
Terbium	533	561	500		107	112	70-130	5.14	20



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC3  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104820  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104820  
 1505481-008AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.732	0.40	0.60	-	122	70-130
MTBE	ND	0.0947	0.050	0.10	-	95	70-130
Benzene	ND	0.106	0.0050	0.10	-	107	70-130
Toluene	ND	0.107	0.0050	0.10	-	107	70-130
Ethylbenzene	ND	0.108	0.0050	0.10	-	108	70-130
Xylenes	ND	0.328	0.0050	0.30	-	109	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.103	0.0976		0.10	103	98	70-130
-----------------	-------	--------	--	------	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.656	0.671	0.60	ND	109	112	70-130	2.26	20
MTBE	0.0881	0.0881	0.10	ND	88	88	70-130	0	20
Benzene	0.106	0.102	0.10	ND	106	101	70-130	4.10	20
Toluene	0.108	0.104	0.10	ND	108	104	70-130	3.79	20
Ethylbenzene	0.106	0.104	0.10	ND	106	104	70-130	1.72	20
Xylenes	0.318	0.316	0.30	ND	106	105	70-130	0.771	20

**Surrogate Recovery**

2-Fluorotoluene	0.0990	0.0947	0.10		99	95	70-130	4.45	20
-----------------	--------	--------	------	--	----	----	--------	------	----

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC3  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104840  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104840  
 1505476-010AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.683	0.40	0.60	-	114	70-130
MTBE	ND	0.0888	0.050	0.10	-	89	70-130
Benzene	ND	0.104	0.0050	0.10	-	104	70-130
Toluene	ND	0.107	0.0050	0.10	-	107	70-130
Ethylbenzene	ND	0.106	0.0050	0.10	-	106	70-130
Xylenes	ND	0.319	0.0050	0.30	-	106	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.108	0.0965		0.10	108	97	70-130
-----------------	-------	--------	--	------	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.654	0.585	0.60	ND	109	97	70-130	11.2	20
MTBE	0.0852	0.0834	0.10	ND	85	83	70-130	2.09	20
Benzene	0.0967	0.101	0.10	ND	97	101	70-130	4.46	20
Toluene	0.0984	0.102	0.10	ND	98	102	70-130	3.86	20
Ethylbenzene	0.0990	0.103	0.10	ND	99	103	70-130	4.07	20
Xylenes	0.298	0.306	0.30	ND	99	102	70-130	2.66	20

**Surrogate Recovery**

2-Fluorotoluene	0.0884	0.0934	0.10		88	93	70-130	5.59	20
-----------------	--------	--------	------	--	----	----	--------	------	----

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104865  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104865  
 1505481-007AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.34	0.25	5	-	87	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	5.36	0.25	5	-	107	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.18	0.25	5	-	104	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.24	0.25	5	-	85	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	5.14	0.25	5	-	103	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104865  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104865  
 1505481-007AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.92	1.3	5	-	78	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.77	0.25	5	-	95	30-130
Pentachlorophenol	ND	2.89	1.3	5	-	58	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	5.01	0.25	5	-	100	30-130
Pyrene	ND	4.91	0.25	5	-	98	30-130
1,2,4-Trichlorobenzene	ND	4.34	0.25	5	-	87	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

#### Surrogate Recovery

2-Fluorophenol	4.56	5.17		5	91	103	30-130
Phenol-d5	4.51	5.24		5	90	105	30-130
Nitrobenzene-d5	3.37	4.23		5	67	85	30-130
2-Fluorobiphenyl	3.28	4.01		5	66	80	30-130
2,4,6-Tribromophenol	1.59	3.21		5	32	64	16-130
4-Terphenyl-d14	4.08	4.76		5	82	95	30-130

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104865  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104865  
 1505481-007AMS/MSD

## QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	4.77	4.69	5	ND	95	94	30-130	1.73	30
4-Chloro-3-methylphenol	7.29	6.39	5	ND	146,F1	128	30-130	13.1	30
2-Chlorophenol	6.55	6.01	5	ND	131,F1	120	30-130	8.57	30
1,4-Dichlorobenzene	4.43	4.41	5	ND	89	88	30-130	0.443	30
2,4-Dinitrotoluene	6.09	5.65	5	ND	122	113	30-130	7.42	30
4-Nitrophenol	5.04	4.24	5	ND	101	85	30-130	17.4	30
N-Nitrosodi-n-propylamine	6.11	5.99	5	ND	122	120	30-130	1.93	30
Pentachlorophenol	4.16	3.95	5	ND	83	79	30-130	5.11	30
Phenol	6.68	6.11	5	ND	134,F1	122	30-130	8.88	30
Pyrene	5.70	5.75	5	ND	114	115	30-130	0.950	30
1,2,4-Trichlorobenzene	4.58	4.40	5	ND	92	88	30-130	4.01	30

### Surrogate Recovery

2-Fluorophenol	6.75	6.27	5		135	125	30-130	7.24	30
Phenol-d5	6.78	6.39	5		136	128	30-130	5.91	30
Nitrobenzene-d5	4.72	4.39	5		94	88	30-130	7.14	30
2-Fluorobiphenyl	4.33	4.36	5		87	87	30-130	0	30
2,4,6-Tribromophenol	3.54	3.16	5		71	63	16-130	11.4	30
4-Terphenyl-d14	5.65	5.93	5		113	119	30-130	4.84	30





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104839  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104839

### QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0742	0.010	0.10	-	74	70-130
Benzene	ND	0.0846	0.010	0.10	-	85	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.292	0.10	0.40	-	73	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0913	0.010	0.10	-	91	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0800	0.0080	0.10	-	80	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0810	0.010	0.10	-	81	70-130
1,1-Dichloroethene	ND	0.0799	0.010	0.10	-	80	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104839  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104839

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0819	0.010	0.10	-	82	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0788	0.010	0.10	-	79	70-130
Freon 113	ND	-	0.010	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0740	0.010	0.10	-	74	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.0965	0.010	0.10	-	97	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0881	0.010	0.10	-	88	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.206	0.209		0.25	82	84	70-130
Toluene-d8	0.257	0.236		0.25	103	94	70-130
4-BFB	0.0209	0.0236		0.025	83	94	70-130
Benzene-d6	0.188	0.175		0.20	94	87	60-140
Ethylbenzene-d10	0.227	0.204		0.20	113	102	60-140
1,2-DCB-d4	0.206	0.156		0.20	103	78	60-140



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104872  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104872  
 1505476-015AMSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.192	0.010	0.20	-	96	30-130
Chrysene	ND	0.169	0.010	0.20	-	85	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.177	0.010	0.20	-	88	30-130
2-Methylnaphthalene	ND	0.172	0.010	0.20	-	86	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.172	0.010	0.20	-	86	30-130
Pyrene	ND	0.152	0.010	0.20	-	76	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.346	0.366		0.50	69	73	30-130
2-Fluorobiphenyl	0.328	0.357		0.50	66	71	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	N/A	N/A		N/A	N/A	N/A	-	N/A	30
Chrysene	N/A	N/A		N/A	N/A	N/A	-	N/A	30
1-Methylnaphthalene	N/A	N/A		N/A	N/A	N/A	-	N/A	30
2-Methylnaphthalene	N/A	N/A		N/A	N/A	N/A	-	N/A	30
Phenanthrene	N/A	N/A		N/A	N/A	N/A	-	N/A	30
Pyrene	N/A	N/A		N/A	N/A	N/A	-	N/A	30

### Surrogate Recovery

1-Fluoronaphthalene	N/A	N/A			N/A	N/A	-	N/A	30
2-Fluorobiphenyl	N/A	N/A			N/A	N/A	-	N/A	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** WetChem  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104909  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

## QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505569-005A	6.36	1	6.34	1	0.02	0.1



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC11B, GC2B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 104821  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104821  
 1505490-001AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	42.8	1.0	40	-	107	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	26.8	28.1		25	107	112	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	47.3	47.1	40	1.852	114	113	70-130	0.544	30

**Surrogate Recovery**

C9	29.0	29.0	25		116	116	70-130	0	30
----	------	------	----	--	-----	-----	--------	---	----

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505476

ClientCode: TWRK

WaterTrax    WriteOn    EDF    Excel    EQUIS    Email    HardCopy    ThirdParty    J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500   FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

**Date Received: 05/13/2015**

**Date Printed: 05/14/2015**

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
1505476-001	B-31-12.75	Soil	5/12/2015 9:02	<input type="checkbox"/>			A			A		A				
1505476-002	B-31-17.75	Soil	5/12/2015 9:11	<input type="checkbox"/>			A			A		A				
1505476-003	B-32-12.5	Soil	5/12/2015 9:45	<input type="checkbox"/>			A			A		A				
1505476-004	B-32-17.75	Soil	5/12/2015 9:50	<input type="checkbox"/>			A			A		A				
1505476-005	B-21-12.75	Soil	5/12/2015 10:40	<input type="checkbox"/>			A			A		A				
1505476-006	B-21-17.75	Soil	5/12/2015 10:50	<input type="checkbox"/>			A			A		A				
1505476-007	B-25-12.5	Soil	5/12/2015 12:05	<input type="checkbox"/>			A			A		A				
1505476-008	B-25-17.5	Soil	5/12/2015 12:15	<input type="checkbox"/>			A			A		A				
1505476-009	B-17-12.5	Soil	5/12/2015 14:00	<input type="checkbox"/>			A			A		A				
1505476-010	B-17-18	Soil	5/12/2015 14:30	<input type="checkbox"/>			A			A		A				
1505476-011	B-1-2.5	Soil	5/12/2015 15:00	<input type="checkbox"/>	A	B	A	A	A	A	A	A				
1505476-012	B-13-17.5	Soil	5/12/2015 15:03	<input type="checkbox"/>			A			A		A				
1505476-013	B-13-12.5	Soil	5/12/2015 14:50	<input type="checkbox"/>			A			A		A				
1505476-014	B-9-12.5	Soil	5/12/2015 15:27	<input type="checkbox"/>			A			A		A				
1505476-015	B-9-17.5	Soil	5/12/2015 15:40	<input type="checkbox"/>			A			A		A				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

Prepared by: Jena Alfaro

**Comments:**

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505476  
**Date Received:** 5/13/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505476-001A	B-31-12.75	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 9:02	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-002A	B-31-17.75	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 9:11	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-003A	B-32-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 9:45	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-004A	B-32-17.75	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 9:50	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-005A	B-21-12.75	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 10:40	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-006A	B-21-17.75	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 10:50	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** [crain@langan.com](mailto:crain@langan.com)

**Work Order:** 1505476  
**Date Received:** 5/13/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505476-006A	B-21-17.75	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 10:50	5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
						<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-007A	B-25-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 12:05	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-008A	B-25-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 12:15	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-009A	B-17-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 14:00	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-010A	B-17-18	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 14:30	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505476-011A	B-1-2.5	Soil	SW8015B (Diesel & Motor Oil)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/12/2015 15:00	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505476  
**Date Received:** 5/13/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1505476-011A	B-1-2.5	Soil	SW8021B/8015Bm (G/MBTEX)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/12/2015 15:00	5 days		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505476-011B	B-1-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/12/2015 15:00	5 days		<input type="checkbox"/>			
1505476-012A	B-13-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 15:03	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505476-013A	B-13-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 14:50	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505476-014A	B-9-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 15:27	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505476-015A	B-9-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 15:40	5 days		<input type="checkbox"/>			

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505476  
**Date Received:** 5/13/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505476-015A	B-9-17.5	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	5/12/2015 15:40	5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Please send work order summaries to:

- 1) Liz Kimbrel: ekimbrel@langan.com
- 2) Christina Rain: crain@langan.com

009083

## CHAIN OF CUSTODY RECORD

1505476  
**Treadwell & Rollo**  
 Environmental and Geotechnical Consultant

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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413  
 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Christina Rain 415-955-5247, crain@langan.com  
 Samplers: Liz Kimbrel & Evmar Tranzada  
 Recorder (Signature Required): [Signature]

<b>Turnaround Time</b> <u>Std</u>
--------------------------------------

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested												Silica gel clean-up	Hold	Remarks		
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, g/mo	BTEX by 0021	PVAs by 0270C	VOCS by 0260B	SVOCs by 0270	PCBs: Pest 0081A	CAM17	PH by 9M5D									
B-31-12.5	5/12/15	0902		X																						Hold for further metals analyses		
B-31-17.5		0911		X																								
B-32-12.5		0945		X																								
B-32-17.5		0950		X																								
B-21-12.5		1040		X																								
B-21-17.5		1050		X																								
B-25-12.5		1205		X																								
B-25-17.5		1215		X																								
B-17-12.5		1400		X																								
B-17-18		1430		X																								
B-1-2.5		1500		X																								
B-13-17.5		1503		X																								
B-13-12.5		1450		X																								
B-9-12.5		1527		X																								

Relinquished by: (Signature) [Signature]	Date 5/12/15	Time 1050	Received by: (Signature) [Signature]	Date 5/13/15	Time 1050
Relinquished by: (Signature) [Signature]	Date 5/13/15	Time 1505	Received by: (Signature) [Signature]	Date 5/13/15	Time 1505
Relinquished by: (Signature) [Signature]	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampell Analytical Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Laboratory Comments/Notes: ICE# 2.1 APPROPRIATE CONTAINERS  Hand Carried  Private Courier (Co. Name)

please send work order summary to:

- 1) Liz Kimbrel → ekimbrel@langan.com 009084
- 2) Christina Rain → crain@langan.com



# 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: ~~73107~~ 731037001  
 Project Manager/Contact: Christina Rain 415-955-5247  
 Samplers: Liz Kimbrel & Zubair Trabzada  
 Recorder (Signature Required): [Signature]

Turnaround Time	
Std	

### Analysis Requested

TPH, dl, me  
 BTEX by 8221  
 PNAs by 8270C  
 VOCs by 8220B  
 SVOCs by 8270C  
 PCBs & Pst 8081A  
 CAM 17  
 pH by 9045D

### No. Containers & Preservative

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested							Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, dl, me	BTEX by 8221	PNAs by 8270C	VOCs by 8220B	SVOCs by 8270C	PCBs & Pst 8081A	CAM 17				pH by 9045D		
B-9-17-5	5/12/15	1540		X																		X	hold samples for further metals analysis	

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/13/15</u>	Time <u>1050</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/13/15</u>	Time <u>1050</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/13/15</u>	Time <u>1505</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/13/15</u>	Time <u>1505</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical  
 Laboratory Comments/Notes: \_\_\_\_\_  
 Method of Shipment  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name) \_\_\_\_\_



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/13/2015 4:45:01 PM**  
 Project Name: **#731637001; 3093 Broadway** LogIn Reviewed by: **Jena Alfaro**  
 WorkOrder No: **1505476** Matrix: Soil Carrier: Daniel (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   
 Sample/Temp Blank temperature Temp: 2.1°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505476 A

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/13/2015

Analytical Report reviewed & approved for release on 06/10/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505476

### Glossary Abbreviation

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

### Analytical Qualifiers

a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
d2	heavier gasoline range compounds are significant (aged gasoline?)
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



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

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505476

### **Quality Control Qualifiers**

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





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 6/6/15

**WorkOrder:** 1505476  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### STLC Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.16	0.050	1	06/08/2015 23:31
Lead	4.0	0.20	1	06/08/2015 23:31

Analyst(s): DB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/13/15 16:45  
**Date Prepared:** 6/8/15

**WorkOrder:** 1505476  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### TCLP Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-2.5	1505476-011A	Soil	05/12/2015 15:00	ICP-JY	106020

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Chromium	ND	0.050	1	06/09/2015 19:23
Lead	ND	0.20	1	06/09/2015 19:23

Analyst(s): DB



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/6/15  
**Date Analyzed:** 6/8/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 105958  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-105958  
 1506155-001AMS/MSD

### QC Summary Report for Metals (STLC)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.908	0.050	1	-	91	75-125
Lead	ND	0.851	0.20	1	-	85	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.10	1.10	1	0.1510	95	95	70-130	0	30
Lead	1.47	1.46	1	0.51	95	95	70-130	0	30



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/8/15  
**Date Analyzed:** 6/9/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505476  
**BatchID:** 106020  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-106020

### QC Summary Report for Metals (TCLP)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	1.00	0.050	1	-	100	75-125
Lead	ND	0.954	0.20	1	-	95	75-125



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505476 **A**

ClientCode: TWRK

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  Fax  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

*Date Received:* **05/13/2015**

*Date Add-On:* **06/04/2015**

*Date Printed:* **06/04/2015**

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	
1505476-011	B-1-2.5	Soil	5/12/2015 15:00	<input type="checkbox"/>	A	A											

**Test Legend:**

1	STLC_PBCR_S	2	TCLP_PBCR_S	3		4		5	
6		7		8		9		10	
11		12							

**Prepared by: Jena Alfaro**

**Add-On Prepared By: Maria Venegas**

**Comments:**    STLC's & TCLP's added 6/4/15 STAT.

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:** STLC's & TCLP's added 6/4/15 STAT.

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** [crain@langan.com](mailto:crain@langan.com)

**Work Order:** 1505476  
**Date Received:** 5/13/2015  
**Date Add-On:** 6/4/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505476-011A	B-1-2.5	Soil	SW6010B (Chromium & Lead) (TCLP)	1	Stainless Steel tube 2"x6"	5/12/2015 15:00	5 days*		<input type="checkbox"/>	
			SW6010B (Chromium & Lead) (STLC)				5 days*		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Please send work order summaries to:

1) Liz Kimbrel: ekimbrel@langan.com

2) Christina Rain: crain@langan.com

009083



# 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway

Job Number: 731637001

Project Manager/Contact: Christina Rain 415-955-5247, langan.com

Samplers: Liz Kimbrel & Evlair Trabzada

Recorder (Signature Required): [Signature]

No. Containers & Preservative

### Analysis Requested

Turnaround Time  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested											Remarks					
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH d, g, mo	BTEX by BZL	PNA's by BZL	VOCS by BZL	SVOCs by BZL	PCBs: Pest 8081A	CAM 17	PH by 9145D	STL Pb, Cr	TCLP Pb, Cr	Silica gel clean-up		Hold				
B-31-12.5 <sup>12:75</sup>	5/12/15	0902		X								X	X	X													hold for further metals analyses	
B-31-17.5 <sup>12:75</sup>		0911		X								X	X	X														
B-32-12.5		0945		X								X	X	X														
B-32-17.5 <sup>12:75</sup>		0950		X								X	X	X														
B-21-12.5 <sup>12:75</sup>		1040		X								X	X	X														
B-21-17.5 <sup>12:75</sup>		1050		X								X	X	X														
B-25-12.5		1205		X								X	X	X														
B-25-17.5		1215		X								X	X	X														
B-17-12.5		1400		X								X	X	X														
B-17-18		1430		X								X	X	X														
B-1-2.5		1500		X								X	X	X	X	X	X	XX				X						
B-13-17.5		1503		X								X	X	X														
B-13-12.5		1450		X								X	X	X														
B-9-12.5	↓	1527		X								X	X	X														

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/12/15</u>	Time <u>1050</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/12/15</u>	Time <u>1050</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/13/15</u>	Time <u>1505</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/13/15</u>	Time <u>1505</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical Method of Shipment  Lab courier  Fed Ex  Airborne  UPS

Laboratory Comments/Notes: added 6/4/15 STAFF  Hand Carried  Private Courier (Co. Name)

ICE/P# 2.1 APPROPRIATE CONTAINERS PRESERVED IN LAB  
 GOOD CONDITION HEAD SPACE ABSENT DECHLORINATED IN LAB PRESERVATION VOAS O&G METALS OTHER  
 White Copy - Original Yellow Copy - Laboratory Pink Copy - Field COC Number:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505579

**Report Created for:** Treadwell & Rollo

555 Montgomery St., Suite 1300  
San Francisco, CA 94111

**Project Contact:** Zubair Trabzada

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/14/2015

Analytical Report reviewed & approved for release on 05/21/2015 by:

Angela Rydelius,  
Laboratory Manager

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







## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505579

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
e2	diesel range compounds are significant; no recognizable pattern

### Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.
----	--



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC23	104855

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/15/2015 16:14
a-BHC	ND	0.0010	1	05/15/2015 16:14
b-BHC	ND	0.0010	1	05/15/2015 16:14
d-BHC	ND	0.0010	1	05/15/2015 16:14
g-BHC	ND	0.0010	1	05/15/2015 16:14
Chlordane (Technical)	ND	0.025	1	05/15/2015 16:14
a-Chlordane	ND	0.0010	1	05/15/2015 16:14
g-Chlordane	ND	0.0010	1	05/15/2015 16:14
p,p-DDD	ND	0.0010	1	05/15/2015 16:14
p,p-DDE	ND	0.0010	1	05/15/2015 16:14
p,p-DDT	ND	0.0010	1	05/15/2015 16:14
Dieldrin	ND	0.0010	1	05/15/2015 16:14
Endosulfan I	ND	0.0010	1	05/15/2015 16:14
Endosulfan II	ND	0.0010	1	05/15/2015 16:14
Endosulfan sulfate	ND	0.0010	1	05/15/2015 16:14
Endrin	ND	0.0010	1	05/15/2015 16:14
Endrin aldehyde	ND	0.0010	1	05/15/2015 16:14
Endrin ketone	ND	0.0010	1	05/15/2015 16:14
Heptachlor	ND	0.0010	1	05/15/2015 16:14
Heptachlor epoxide	ND	0.0010	1	05/15/2015 16:14
Hexachlorobenzene	ND	0.010	1	05/15/2015 16:14
Hexachlorocyclopentadiene	ND	0.020	1	05/15/2015 16:14
Methoxychlor	ND	0.0010	1	05/15/2015 16:14
Toxaphene	ND	0.050	1	05/15/2015 16:14
Aroclor1016	ND	0.050	1	05/15/2015 16:14
Aroclor1221	ND	0.050	1	05/15/2015 16:14
Aroclor1232	ND	0.050	1	05/15/2015 16:14
Aroclor1242	ND	0.050	1	05/15/2015 16:14
Aroclor1248	ND	0.050	1	05/15/2015 16:14
Aroclor1254	ND	0.050	1	05/15/2015 16:14
Aroclor1260	ND	0.050	1	05/15/2015 16:14
PCBs, total	ND	0.050	1	05/15/2015 16:14

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	95	70-130	05/15/2015 16:14

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC23	104855

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/16/2015 00:20
a-BHC	ND	0.0010	1	05/16/2015 00:20
b-BHC	ND	0.0010	1	05/16/2015 00:20
d-BHC	ND	0.0010	1	05/16/2015 00:20
g-BHC	ND	0.0010	1	05/16/2015 00:20
Chlordane (Technical)	ND	0.025	1	05/16/2015 00:20
a-Chlordane	ND	0.0010	1	05/16/2015 00:20
g-Chlordane	ND	0.0010	1	05/16/2015 00:20
p,p-DDD	ND	0.0010	1	05/16/2015 00:20
p,p-DDE	ND	0.0010	1	05/16/2015 00:20
p,p-DDT	ND	0.0010	1	05/16/2015 00:20
Dieldrin	ND	0.0010	1	05/16/2015 00:20
Endosulfan I	ND	0.0010	1	05/16/2015 00:20
Endosulfan II	ND	0.0010	1	05/16/2015 00:20
Endosulfan sulfate	ND	0.0010	1	05/16/2015 00:20
Endrin	ND	0.0010	1	05/16/2015 00:20
Endrin aldehyde	ND	0.0010	1	05/16/2015 00:20
Endrin ketone	ND	0.0010	1	05/16/2015 00:20
Heptachlor	ND	0.0010	1	05/16/2015 00:20
Heptachlor epoxide	ND	0.0010	1	05/16/2015 00:20
Hexachlorobenzene	ND	0.010	1	05/16/2015 00:20
Hexachlorocyclopentadiene	ND	0.020	1	05/16/2015 00:20
Methoxychlor	ND	0.0010	1	05/16/2015 00:20
Toxaphene	ND	0.050	1	05/16/2015 00:20
Aroclor1016	ND	0.050	1	05/16/2015 00:20
Aroclor1221	ND	0.050	1	05/16/2015 00:20
Aroclor1232	ND	0.050	1	05/16/2015 00:20
Aroclor1242	ND	0.050	1	05/16/2015 00:20
Aroclor1248	ND	0.050	1	05/16/2015 00:20
Aroclor1254	ND	0.050	1	05/16/2015 00:20
Aroclor1260	ND	0.050	1	05/16/2015 00:20
PCBs, total	ND	0.050	1	05/16/2015 00:20

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	94	70-130	05/16/2015 00:20

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC23	104855

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/15/2015 18:06
a-BHC	ND	0.0010	1	05/15/2015 18:06
b-BHC	ND	0.0010	1	05/15/2015 18:06
d-BHC	ND	0.0010	1	05/15/2015 18:06
g-BHC	ND	0.0010	1	05/15/2015 18:06
Chlordane (Technical)	ND	0.025	1	05/15/2015 18:06
a-Chlordane	ND	0.0010	1	05/15/2015 18:06
g-Chlordane	ND	0.0010	1	05/15/2015 18:06
p,p-DDD	ND	0.0010	1	05/15/2015 18:06
p,p-DDE	ND	0.0010	1	05/15/2015 18:06
p,p-DDT	ND	0.0010	1	05/15/2015 18:06
Dieldrin	ND	0.0010	1	05/15/2015 18:06
Endosulfan I	ND	0.0010	1	05/15/2015 18:06
Endosulfan II	ND	0.0010	1	05/15/2015 18:06
Endosulfan sulfate	ND	0.0010	1	05/15/2015 18:06
Endrin	ND	0.0010	1	05/15/2015 18:06
Endrin aldehyde	ND	0.0010	1	05/15/2015 18:06
Endrin ketone	ND	0.0010	1	05/15/2015 18:06
Heptachlor	ND	0.0010	1	05/15/2015 18:06
Heptachlor epoxide	ND	0.0010	1	05/15/2015 18:06
Hexachlorobenzene	ND	0.010	1	05/15/2015 18:06
Hexachlorocyclopentadiene	ND	0.020	1	05/15/2015 18:06
Methoxychlor	ND	0.0010	1	05/15/2015 18:06
Toxaphene	ND	0.050	1	05/15/2015 18:06
Aroclor1016	ND	0.050	1	05/15/2015 18:06
Aroclor1221	ND	0.050	1	05/15/2015 18:06
Aroclor1232	ND	0.050	1	05/15/2015 18:06
Aroclor1242	ND	0.050	1	05/15/2015 18:06
Aroclor1248	ND	0.050	1	05/15/2015 18:06
Aroclor1254	ND	0.050	1	05/15/2015 18:06
Aroclor1260	ND	0.050	1	05/15/2015 18:06
PCBs, total	ND	0.050	1	05/15/2015 18:06

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	91	70-130	05/15/2015 18:06

**Analyst(s):** CK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001A	Soil	05/13/2015 14:45	GC10	104839

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.19	1	05/15/2015 14:04
tert-Amyl methyl ether (TAME)	ND	0.0095	1	05/15/2015 14:04
Benzene	ND	0.0095	1	05/15/2015 14:04
Bromobenzene	ND	0.0095	1	05/15/2015 14:04
Bromochloromethane	ND	0.0095	1	05/15/2015 14:04
Bromodichloromethane	ND	0.0095	1	05/15/2015 14:04
Bromoform	ND	0.0095	1	05/15/2015 14:04
Bromomethane	ND	0.0095	1	05/15/2015 14:04
2-Butanone (MEK)	ND	0.038	1	05/15/2015 14:04
t-Butyl alcohol (TBA)	ND	0.095	1	05/15/2015 14:04
n-Butyl benzene	ND	0.0095	1	05/15/2015 14:04
sec-Butyl benzene	ND	0.0095	1	05/15/2015 14:04
tert-Butyl benzene	ND	0.0095	1	05/15/2015 14:04
Carbon Disulfide	ND	0.0095	1	05/15/2015 14:04
Carbon Tetrachloride	ND	0.0095	1	05/15/2015 14:04
Chlorobenzene	ND	0.0095	1	05/15/2015 14:04
Chloroethane	ND	0.0095	1	05/15/2015 14:04
Chloroform	ND	0.0095	1	05/15/2015 14:04
Chloromethane	ND	0.0095	1	05/15/2015 14:04
2-Chlorotoluene	ND	0.0095	1	05/15/2015 14:04
4-Chlorotoluene	ND	0.0095	1	05/15/2015 14:04
Dibromochloromethane	ND	0.0095	1	05/15/2015 14:04
1,2-Dibromo-3-chloropropane	ND	0.0076	1	05/15/2015 14:04
1,2-Dibromoethane (EDB)	ND	0.0076	1	05/15/2015 14:04
Dibromomethane	ND	0.0095	1	05/15/2015 14:04
1,2-Dichlorobenzene	ND	0.0095	1	05/15/2015 14:04
1,3-Dichlorobenzene	ND	0.0095	1	05/15/2015 14:04
1,4-Dichlorobenzene	ND	0.0095	1	05/15/2015 14:04
Dichlorodifluoromethane	ND	0.0095	1	05/15/2015 14:04
1,1-Dichloroethane	ND	0.0095	1	05/15/2015 14:04
1,2-Dichloroethane (1,2-DCA)	ND	0.0095	1	05/15/2015 14:04
1,1-Dichloroethene	ND	0.0095	1	05/15/2015 14:04
cis-1,2-Dichloroethene	ND	0.0095	1	05/15/2015 14:04
trans-1,2-Dichloroethene	ND	0.0095	1	05/15/2015 14:04
1,2-Dichloropropane	ND	0.0095	1	05/15/2015 14:04
1,3-Dichloropropane	ND	0.0095	1	05/15/2015 14:04
2,2-Dichloropropane	ND	0.0095	1	05/15/2015 14:04
1,1-Dichloropropene	ND	0.0095	1	05/15/2015 14:04

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001A	Soil	05/13/2015 14:45	GC10	104839

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0095	1	05/15/2015 14:04
trans-1,3-Dichloropropene	ND	0.0095	1	05/15/2015 14:04
Diisopropyl ether (DIPE)	ND	0.0095	1	05/15/2015 14:04
Ethylbenzene	ND	0.0095	1	05/15/2015 14:04
Ethyl tert-butyl ether (ETBE)	ND	0.0095	1	05/15/2015 14:04
Freon 113	ND	0.0095	1	05/15/2015 14:04
Hexachlorobutadiene	ND	0.0095	1	05/15/2015 14:04
Hexachloroethane	ND	0.0095	1	05/15/2015 14:04
2-Hexanone	ND	0.0095	1	05/15/2015 14:04
Isopropylbenzene	ND	0.0095	1	05/15/2015 14:04
4-Isopropyl toluene	ND	0.0095	1	05/15/2015 14:04
Methyl-t-butyl ether (MTBE)	ND	0.0095	1	05/15/2015 14:04
Methylene chloride	ND	0.0095	1	05/15/2015 14:04
4-Methyl-2-pentanone (MIBK)	ND	0.0095	1	05/15/2015 14:04
Naphthalene	ND	0.0095	1	05/15/2015 14:04
n-Propyl benzene	ND	0.0095	1	05/15/2015 14:04
Styrene	ND	0.0095	1	05/15/2015 14:04
1,1,1,2-Tetrachloroethane	ND	0.0095	1	05/15/2015 14:04
1,1,2,2-Tetrachloroethane	ND	0.0095	1	05/15/2015 14:04
Tetrachloroethene	ND	0.0095	1	05/15/2015 14:04
Toluene	ND	0.0095	1	05/15/2015 14:04
1,2,3-Trichlorobenzene	ND	0.0095	1	05/15/2015 14:04
1,2,4-Trichlorobenzene	ND	0.0095	1	05/15/2015 14:04
1,1,1-Trichloroethane	ND	0.0095	1	05/15/2015 14:04
1,1,2-Trichloroethane	ND	0.0095	1	05/15/2015 14:04
Trichloroethene	ND	0.0095	1	05/15/2015 14:04
Trichlorofluoromethane	ND	0.0095	1	05/15/2015 14:04
1,2,3-Trichloropropane	ND	0.0095	1	05/15/2015 14:04
1,2,4-Trimethylbenzene	ND	0.0095	1	05/15/2015 14:04
1,3,5-Trimethylbenzene	ND	0.0095	1	05/15/2015 14:04
Vinyl Chloride	ND	0.0095	1	05/15/2015 14:04
Xylenes, Total	ND	0.0095	1	05/15/2015 14:04

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001A	Soil	05/13/2015 14:45	GC10	104839

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	83	70-130		05/15/2015 14:04
Toluene-d8	94	70-130		05/15/2015 14:04
4-BFB	88	70-130		05/15/2015 14:04
Benzene-d6	84	60-140		05/15/2015 14:04
Ethylbenzene-d10	98	60-140		05/15/2015 14:04
1,2-DCB-d4	83	60-140		05/15/2015 14:04

Analyst(s): KF

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002A	Soil	05/13/2015 14:55	GC16	104839

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.19	1	05/16/2015 16:02
tert-Amyl methyl ether (TAME)	ND	0.0093	1	05/16/2015 16:02
Benzene	ND	0.0093	1	05/16/2015 16:02
Bromobenzene	ND	0.0093	1	05/16/2015 16:02
Bromochloromethane	ND	0.0093	1	05/16/2015 16:02
Bromodichloromethane	ND	0.0093	1	05/16/2015 16:02
Bromoform	ND	0.0093	1	05/16/2015 16:02
Bromomethane	ND	0.0093	1	05/16/2015 16:02
2-Butanone (MEK)	ND	0.037	1	05/16/2015 16:02
t-Butyl alcohol (TBA)	ND	0.093	1	05/16/2015 16:02
n-Butyl benzene	ND	0.0093	1	05/16/2015 16:02
sec-Butyl benzene	ND	0.0093	1	05/16/2015 16:02
tert-Butyl benzene	ND	0.0093	1	05/16/2015 16:02
Carbon Disulfide	ND	0.0093	1	05/16/2015 16:02
Carbon Tetrachloride	ND	0.0093	1	05/16/2015 16:02
Chlorobenzene	ND	0.0093	1	05/16/2015 16:02
Chloroethane	ND	0.0093	1	05/16/2015 16:02
Chloroform	ND	0.0093	1	05/16/2015 16:02
Chloromethane	ND	0.0093	1	05/16/2015 16:02
2-Chlorotoluene	ND	0.0093	1	05/16/2015 16:02
4-Chlorotoluene	ND	0.0093	1	05/16/2015 16:02
Dibromochloromethane	ND	0.0093	1	05/16/2015 16:02
1,2-Dibromo-3-chloropropane	ND	0.0074	1	05/16/2015 16:02
1,2-Dibromoethane (EDB)	ND	0.0074	1	05/16/2015 16:02
Dibromomethane	ND	0.0093	1	05/16/2015 16:02
1,2-Dichlorobenzene	ND	0.0093	1	05/16/2015 16:02
1,3-Dichlorobenzene	ND	0.0093	1	05/16/2015 16:02
1,4-Dichlorobenzene	ND	0.0093	1	05/16/2015 16:02
Dichlorodifluoromethane	ND	0.0093	1	05/16/2015 16:02
1,1-Dichloroethane	ND	0.0093	1	05/16/2015 16:02
1,2-Dichloroethane (1,2-DCA)	ND	0.0093	1	05/16/2015 16:02
1,1-Dichloroethene	ND	0.0093	1	05/16/2015 16:02
cis-1,2-Dichloroethene	ND	0.0093	1	05/16/2015 16:02
trans-1,2-Dichloroethene	ND	0.0093	1	05/16/2015 16:02
1,2-Dichloropropane	ND	0.0093	1	05/16/2015 16:02
1,3-Dichloropropane	ND	0.0093	1	05/16/2015 16:02
2,2-Dichloropropane	ND	0.0093	1	05/16/2015 16:02
1,1-Dichloropropene	ND	0.0093	1	05/16/2015 16:02

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002A	Soil	05/13/2015 14:55	GC16	104839

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0093	1	05/16/2015 16:02
trans-1,3-Dichloropropene	ND	0.0093	1	05/16/2015 16:02
Diisopropyl ether (DIPE)	ND	0.0093	1	05/16/2015 16:02
Ethylbenzene	ND	0.0093	1	05/16/2015 16:02
Ethyl tert-butyl ether (ETBE)	ND	0.0093	1	05/16/2015 16:02
Freon 113	ND	0.0093	1	05/16/2015 16:02
Hexachlorobutadiene	ND	0.0093	1	05/16/2015 16:02
Hexachloroethane	ND	0.0093	1	05/16/2015 16:02
2-Hexanone	ND	0.0093	1	05/16/2015 16:02
Isopropylbenzene	ND	0.0093	1	05/16/2015 16:02
4-Isopropyl toluene	ND	0.0093	1	05/16/2015 16:02
Methyl-t-butyl ether (MTBE)	ND	0.0093	1	05/16/2015 16:02
Methylene chloride	ND	0.0093	1	05/16/2015 16:02
4-Methyl-2-pentanone (MIBK)	ND	0.0093	1	05/16/2015 16:02
Naphthalene	ND	0.0093	1	05/16/2015 16:02
n-Propyl benzene	ND	0.0093	1	05/16/2015 16:02
Styrene	ND	0.0093	1	05/16/2015 16:02
1,1,1,2-Tetrachloroethane	ND	0.0093	1	05/16/2015 16:02
1,1,2,2-Tetrachloroethane	ND	0.0093	1	05/16/2015 16:02
Tetrachloroethene	ND	0.0093	1	05/16/2015 16:02
Toluene	ND	0.0093	1	05/16/2015 16:02
1,2,3-Trichlorobenzene	ND	0.0093	1	05/16/2015 16:02
1,2,4-Trichlorobenzene	ND	0.0093	1	05/16/2015 16:02
1,1,1-Trichloroethane	ND	0.0093	1	05/16/2015 16:02
1,1,2-Trichloroethane	ND	0.0093	1	05/16/2015 16:02
Trichloroethene	ND	0.0093	1	05/16/2015 16:02
Trichlorofluoromethane	ND	0.0093	1	05/16/2015 16:02
1,2,3-Trichloropropane	ND	0.0093	1	05/16/2015 16:02
1,2,4-Trimethylbenzene	ND	0.0093	1	05/16/2015 16:02
1,3,5-Trimethylbenzene	ND	0.0093	1	05/16/2015 16:02
Vinyl Chloride	ND	0.0093	1	05/16/2015 16:02
Xylenes, Total	ND	0.0093	1	05/16/2015 16:02

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002A	Soil	05/13/2015 14:55	GC16	104839

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/16/2015 16:02
Toluene-d8	94	70-130		05/16/2015 16:02
4-BFB	93	70-130		05/16/2015 16:02
Benzene-d6	84	60-140		05/16/2015 16:02
Ethylbenzene-d10	94	60-140		05/16/2015 16:02
1,2-DCB-d4	73	60-140		05/16/2015 16:02

Analyst(s): KF

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003A	Soil	05/13/2015 15:02	GC16	104839

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.20	1	05/16/2015 16:44
tert-Amyl methyl ether (TAME)	ND	0.0098	1	05/16/2015 16:44
Benzene	ND	0.0098	1	05/16/2015 16:44
Bromobenzene	ND	0.0098	1	05/16/2015 16:44
Bromochloromethane	ND	0.0098	1	05/16/2015 16:44
Bromodichloromethane	ND	0.0098	1	05/16/2015 16:44
Bromoform	ND	0.0098	1	05/16/2015 16:44
Bromomethane	ND	0.0098	1	05/16/2015 16:44
2-Butanone (MEK)	ND	0.039	1	05/16/2015 16:44
t-Butyl alcohol (TBA)	ND	0.098	1	05/16/2015 16:44
n-Butyl benzene	ND	0.0098	1	05/16/2015 16:44
sec-Butyl benzene	ND	0.0098	1	05/16/2015 16:44
tert-Butyl benzene	ND	0.0098	1	05/16/2015 16:44
Carbon Disulfide	ND	0.0098	1	05/16/2015 16:44
Carbon Tetrachloride	ND	0.0098	1	05/16/2015 16:44
Chlorobenzene	ND	0.0098	1	05/16/2015 16:44
Chloroethane	ND	0.0098	1	05/16/2015 16:44
Chloroform	ND	0.0098	1	05/16/2015 16:44
Chloromethane	ND	0.0098	1	05/16/2015 16:44
2-Chlorotoluene	ND	0.0098	1	05/16/2015 16:44
4-Chlorotoluene	ND	0.0098	1	05/16/2015 16:44
Dibromochloromethane	ND	0.0098	1	05/16/2015 16:44
1,2-Dibromo-3-chloropropane	ND	0.0079	1	05/16/2015 16:44
1,2-Dibromoethane (EDB)	ND	0.0079	1	05/16/2015 16:44
Dibromomethane	ND	0.0098	1	05/16/2015 16:44
1,2-Dichlorobenzene	ND	0.0098	1	05/16/2015 16:44
1,3-Dichlorobenzene	ND	0.0098	1	05/16/2015 16:44
1,4-Dichlorobenzene	ND	0.0098	1	05/16/2015 16:44
Dichlorodifluoromethane	ND	0.0098	1	05/16/2015 16:44
1,1-Dichloroethane	ND	0.0098	1	05/16/2015 16:44
1,2-Dichloroethane (1,2-DCA)	ND	0.0098	1	05/16/2015 16:44
1,1-Dichloroethene	ND	0.0098	1	05/16/2015 16:44
cis-1,2-Dichloroethene	ND	0.0098	1	05/16/2015 16:44
trans-1,2-Dichloroethene	ND	0.0098	1	05/16/2015 16:44
1,2-Dichloropropane	ND	0.0098	1	05/16/2015 16:44
1,3-Dichloropropane	ND	0.0098	1	05/16/2015 16:44
2,2-Dichloropropane	ND	0.0098	1	05/16/2015 16:44
1,1-Dichloropropene	ND	0.0098	1	05/16/2015 16:44

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003A	Soil	05/13/2015 15:02	GC16	104839

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0098	1	05/16/2015 16:44
trans-1,3-Dichloropropene	ND	0.0098	1	05/16/2015 16:44
Diisopropyl ether (DIPE)	ND	0.0098	1	05/16/2015 16:44
Ethylbenzene	ND	0.0098	1	05/16/2015 16:44
Ethyl tert-butyl ether (ETBE)	ND	0.0098	1	05/16/2015 16:44
Freon 113	ND	0.0098	1	05/16/2015 16:44
Hexachlorobutadiene	ND	0.0098	1	05/16/2015 16:44
Hexachloroethane	ND	0.0098	1	05/16/2015 16:44
2-Hexanone	ND	0.0098	1	05/16/2015 16:44
Isopropylbenzene	ND	0.0098	1	05/16/2015 16:44
4-Isopropyl toluene	ND	0.0098	1	05/16/2015 16:44
Methyl-t-butyl ether (MTBE)	ND	0.0098	1	05/16/2015 16:44
Methylene chloride	ND	0.0098	1	05/16/2015 16:44
4-Methyl-2-pentanone (MIBK)	ND	0.0098	1	05/16/2015 16:44
Naphthalene	ND	0.0098	1	05/16/2015 16:44
n-Propyl benzene	ND	0.0098	1	05/16/2015 16:44
Styrene	ND	0.0098	1	05/16/2015 16:44
1,1,1,2-Tetrachloroethane	ND	0.0098	1	05/16/2015 16:44
1,1,2,2-Tetrachloroethane	ND	0.0098	1	05/16/2015 16:44
Tetrachloroethene	ND	0.0098	1	05/16/2015 16:44
Toluene	ND	0.0098	1	05/16/2015 16:44
1,2,3-Trichlorobenzene	ND	0.0098	1	05/16/2015 16:44
1,2,4-Trichlorobenzene	ND	0.0098	1	05/16/2015 16:44
1,1,1-Trichloroethane	ND	0.0098	1	05/16/2015 16:44
1,1,2-Trichloroethane	ND	0.0098	1	05/16/2015 16:44
Trichloroethene	ND	0.0098	1	05/16/2015 16:44
Trichlorofluoromethane	ND	0.0098	1	05/16/2015 16:44
1,2,3-Trichloropropane	ND	0.0098	1	05/16/2015 16:44
1,2,4-Trimethylbenzene	ND	0.0098	1	05/16/2015 16:44
1,3,5-Trimethylbenzene	ND	0.0098	1	05/16/2015 16:44
Vinyl Chloride	ND	0.0098	1	05/16/2015 16:44
Xylenes, Total	ND	0.0098	1	05/16/2015 16:44

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003A	Soil	05/13/2015 15:02	GC16	104839

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/16/2015 16:44
Toluene-d8	92	70-130		05/16/2015 16:44
4-BFB	90	70-130		05/16/2015 16:44
Benzene-d6	80	60-140		05/16/2015 16:44
Ethylbenzene-d10	90	60-140		05/16/2015 16:44
1,2-DCB-d4	69	60-140		05/16/2015 16:44

Analyst(s): KF

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC35	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/16/2015 00:01
Acenaphthylene	ND	0.010	1	05/16/2015 00:01
Anthracene	ND	0.010	1	05/16/2015 00:01
Benzo (a) anthracene	ND	0.010	1	05/16/2015 00:01
Benzo (b) fluoranthene	ND	0.010	1	05/16/2015 00:01
Benzo (k) fluoranthene	ND	0.010	1	05/16/2015 00:01
Benzo (g,h,i) perylene	ND	0.010	1	05/16/2015 00:01
Benzo (a) pyrene	ND	0.010	1	05/16/2015 00:01
Chrysene	ND	0.010	1	05/16/2015 00:01
Dibenzo (a,h) anthracene	ND	0.010	1	05/16/2015 00:01
Fluoranthene	ND	0.010	1	05/16/2015 00:01
Fluorene	ND	0.010	1	05/16/2015 00:01
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/16/2015 00:01
1-Methylnaphthalene	ND	0.010	1	05/16/2015 00:01
2-Methylnaphthalene	ND	0.010	1	05/16/2015 00:01
Naphthalene	ND	0.010	1	05/16/2015 00:01
Phenanthrene	ND	0.010	1	05/16/2015 00:01
Pyrene	ND	0.010	1	05/16/2015 00:01

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	88	30-130	05/16/2015 00:01
2-Fluorobiphenyl	81	30-130	05/16/2015 00:01

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC35	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/15/2015 23:36
Acenaphthylene	ND	0.010	1	05/15/2015 23:36
Anthracene	ND	0.010	1	05/15/2015 23:36
Benzo (a) anthracene	ND	0.010	1	05/15/2015 23:36
Benzo (b) fluoranthene	ND	0.010	1	05/15/2015 23:36
Benzo (k) fluoranthene	ND	0.010	1	05/15/2015 23:36
Benzo (g,h,i) perylene	ND	0.010	1	05/15/2015 23:36
Benzo (a) pyrene	ND	0.010	1	05/15/2015 23:36
Chrysene	ND	0.010	1	05/15/2015 23:36
Dibenzo (a,h) anthracene	ND	0.010	1	05/15/2015 23:36
Fluoranthene	ND	0.010	1	05/15/2015 23:36
Fluorene	ND	0.010	1	05/15/2015 23:36
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/15/2015 23:36
1-Methylnaphthalene	ND	0.010	1	05/15/2015 23:36
2-Methylnaphthalene	ND	0.010	1	05/15/2015 23:36
Naphthalene	ND	0.010	1	05/15/2015 23:36
Phenanthrene	ND	0.010	1	05/15/2015 23:36
Pyrene	ND	0.010	1	05/15/2015 23:36
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	81	30-130		05/15/2015 23:36
2-Fluorobiphenyl	74	30-130		05/15/2015 23:36

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC35	104872

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/15/2015 23:11
Acenaphthylene	ND	0.010	1	05/15/2015 23:11
Anthracene	ND	0.010	1	05/15/2015 23:11
Benzo (a) anthracene	ND	0.010	1	05/15/2015 23:11
Benzo (b) fluoranthene	ND	0.010	1	05/15/2015 23:11
Benzo (k) fluoranthene	ND	0.010	1	05/15/2015 23:11
Benzo (g,h,i) perylene	ND	0.010	1	05/15/2015 23:11
Benzo (a) pyrene	ND	0.010	1	05/15/2015 23:11
Chrysene	ND	0.010	1	05/15/2015 23:11
Dibenzo (a,h) anthracene	ND	0.010	1	05/15/2015 23:11
Fluoranthene	ND	0.010	1	05/15/2015 23:11
Fluorene	ND	0.010	1	05/15/2015 23:11
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/15/2015 23:11
1-Methylnaphthalene	ND	0.010	1	05/15/2015 23:11
2-Methylnaphthalene	ND	0.010	1	05/15/2015 23:11
Naphthalene	ND	0.010	1	05/15/2015 23:11
Phenanthrene	ND	0.010	1	05/15/2015 23:11
Pyrene	ND	0.010	1	05/15/2015 23:11

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	88	30-130	05/15/2015 23:11
2-Fluorobiphenyl	80	30-130	05/15/2015 23:11

**Analyst(s):** HK





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/15/2015 19:30
Acenaphthylene	ND	0.25	1	05/15/2015 19:30
Acetochlor	ND	0.25	1	05/15/2015 19:30
Anthracene	ND	0.25	1	05/15/2015 19:30
Benzidine	ND	1.3	1	05/15/2015 19:30
Benzo (a) anthracene	ND	0.25	1	05/15/2015 19:30
Benzo (b) fluoranthene	ND	0.25	1	05/15/2015 19:30
Benzo (k) fluoranthene	ND	0.25	1	05/15/2015 19:30
Benzo (g,h,i) perylene	ND	0.25	1	05/15/2015 19:30
Benzo (a) pyrene	ND	0.25	1	05/15/2015 19:30
Benzyl Alcohol	ND	1.3	1	05/15/2015 19:30
1,1-Biphenyl	ND	0.25	1	05/15/2015 19:30
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/15/2015 19:30
Bis (2-chloroethyl) Ether	ND	0.25	1	05/15/2015 19:30
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/15/2015 19:30
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/15/2015 19:30
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/15/2015 19:30
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/15/2015 19:30
Butylbenzyl Phthalate	ND	0.25	1	05/15/2015 19:30
4-Chloroaniline	ND	0.50	1	05/15/2015 19:30
4-Chloro-3-methylphenol	ND	0.25	1	05/15/2015 19:30
2-Chloronaphthalene	ND	0.25	1	05/15/2015 19:30
2-Chlorophenol	ND	0.25	1	05/15/2015 19:30
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/15/2015 19:30
Chrysene	ND	0.25	1	05/15/2015 19:30
Dibenzo (a,h) anthracene	ND	0.25	1	05/15/2015 19:30
Dibenzofuran	ND	0.25	1	05/15/2015 19:30
Di-n-butyl Phthalate	ND	0.25	1	05/15/2015 19:30
1,2-Dichlorobenzene	ND	0.25	1	05/15/2015 19:30
1,3-Dichlorobenzene	ND	0.25	1	05/15/2015 19:30
1,4-Dichlorobenzene	ND	0.25	1	05/15/2015 19:30
3,3-Dichlorobenzidine	ND	0.50	1	05/15/2015 19:30
2,4-Dichlorophenol	ND	0.25	1	05/15/2015 19:30
Diethyl Phthalate	ND	0.25	1	05/15/2015 19:30
2,4-Dimethylphenol	ND	0.25	1	05/15/2015 19:30
Dimethyl Phthalate	ND	0.25	1	05/15/2015 19:30
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/15/2015 19:30
2,4-Dinitrophenol	ND	6.3	1	05/15/2015 19:30

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC21	104865
<b>Analytes</b>	<b>Result</b>	<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>	
2,4-Dinitrotoluene	ND	0.25	1	05/15/2015 19:30	
2,6-Dinitrotoluene	ND	0.25	1	05/15/2015 19:30	
Di-n-octyl Phthalate	ND	0.50	1	05/15/2015 19:30	
1,2-Diphenylhydrazine	ND	0.25	1	05/15/2015 19:30	
Fluoranthene	ND	0.25	1	05/15/2015 19:30	
Fluorene	ND	0.25	1	05/15/2015 19:30	
Hexachlorobenzene	ND	0.25	1	05/15/2015 19:30	
Hexachlorobutadiene	ND	0.25	1	05/15/2015 19:30	
Hexachlorocyclopentadiene	ND	1.3	1	05/15/2015 19:30	
Hexachloroethane	ND	0.25	1	05/15/2015 19:30	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/15/2015 19:30	
Isophorone	ND	0.25	1	05/15/2015 19:30	
2-Methylnaphthalene	ND	0.25	1	05/15/2015 19:30	
2-Methylphenol (o-Cresol)	ND	0.25	1	05/15/2015 19:30	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/15/2015 19:30	
Naphthalene	ND	0.25	1	05/15/2015 19:30	
2-Nitroaniline	ND	1.3	1	05/15/2015 19:30	
3-Nitroaniline	ND	1.3	1	05/15/2015 19:30	
4-Nitroaniline	ND	1.3	1	05/15/2015 19:30	
Nitrobenzene	ND	0.25	1	05/15/2015 19:30	
2-Nitrophenol	ND	1.3	1	05/15/2015 19:30	
4-Nitrophenol	ND	1.3	1	05/15/2015 19:30	
N-Nitrosodiphenylamine	ND	0.25	1	05/15/2015 19:30	
N-Nitrosodi-n-propylamine	ND	0.25	1	05/15/2015 19:30	
Pentachlorophenol	ND	1.3	1	05/15/2015 19:30	
Phenanthrene	ND	0.25	1	05/15/2015 19:30	
Phenol	ND	0.25	1	05/15/2015 19:30	
Pyrene	ND	0.25	1	05/15/2015 19:30	
1,2,4-Trichlorobenzene	ND	0.25	1	05/15/2015 19:30	
2,4,5-Trichlorophenol	ND	0.25	1	05/15/2015 19:30	
2,4,6-Trichlorophenol	ND	0.25	1	05/15/2015 19:30	

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	120		30-130	05/15/2015 19:30
Phenol-d5	111		30-130	05/15/2015 19:30
Nitrobenzene-d5	95		30-130	05/15/2015 19:30
2-Fluorobiphenyl	94		30-130	05/15/2015 19:30
2,4,6-Tribromophenol	70		16-130	05/15/2015 19:30
4-Terphenyl-d14	102		30-130	05/15/2015 19:30

Analyst(s): HK



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/15/2015 19:02
Acenaphthylene	ND	0.25	1	05/15/2015 19:02
Acetochlor	ND	0.25	1	05/15/2015 19:02
Anthracene	ND	0.25	1	05/15/2015 19:02
Benzidine	ND	1.3	1	05/15/2015 19:02
Benzo (a) anthracene	ND	0.25	1	05/15/2015 19:02
Benzo (b) fluoranthene	ND	0.25	1	05/15/2015 19:02
Benzo (k) fluoranthene	ND	0.25	1	05/15/2015 19:02
Benzo (g,h,i) perylene	ND	0.25	1	05/15/2015 19:02
Benzo (a) pyrene	ND	0.25	1	05/15/2015 19:02
Benzyl Alcohol	ND	1.3	1	05/15/2015 19:02
1,1-Biphenyl	ND	0.25	1	05/15/2015 19:02
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/15/2015 19:02
Bis (2-chloroethyl) Ether	ND	0.25	1	05/15/2015 19:02
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/15/2015 19:02
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/15/2015 19:02
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/15/2015 19:02
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/15/2015 19:02
Butylbenzyl Phthalate	ND	0.25	1	05/15/2015 19:02
4-Chloroaniline	ND	0.50	1	05/15/2015 19:02
4-Chloro-3-methylphenol	ND	0.25	1	05/15/2015 19:02
2-Chloronaphthalene	ND	0.25	1	05/15/2015 19:02
2-Chlorophenol	ND	0.25	1	05/15/2015 19:02
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/15/2015 19:02
Chrysene	ND	0.25	1	05/15/2015 19:02
Dibenzo (a,h) anthracene	ND	0.25	1	05/15/2015 19:02
Dibenzofuran	ND	0.25	1	05/15/2015 19:02
Di-n-butyl Phthalate	ND	0.25	1	05/15/2015 19:02
1,2-Dichlorobenzene	ND	0.25	1	05/15/2015 19:02
1,3-Dichlorobenzene	ND	0.25	1	05/15/2015 19:02
1,4-Dichlorobenzene	ND	0.25	1	05/15/2015 19:02
3,3-Dichlorobenzidine	ND	0.50	1	05/15/2015 19:02
2,4-Dichlorophenol	ND	0.25	1	05/15/2015 19:02
Diethyl Phthalate	ND	0.25	1	05/15/2015 19:02
2,4-Dimethylphenol	ND	0.25	1	05/15/2015 19:02
Dimethyl Phthalate	ND	0.25	1	05/15/2015 19:02
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/15/2015 19:02
2,4-Dinitrophenol	ND	6.3	1	05/15/2015 19:02

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC21	104865
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
2,4-Dinitrotoluene	ND		0.25	1	05/15/2015 19:02
2,6-Dinitrotoluene	ND		0.25	1	05/15/2015 19:02
Di-n-octyl Phthalate	ND		0.50	1	05/15/2015 19:02
1,2-Diphenylhydrazine	ND		0.25	1	05/15/2015 19:02
Fluoranthene	ND		0.25	1	05/15/2015 19:02
Fluorene	ND		0.25	1	05/15/2015 19:02
Hexachlorobenzene	ND		0.25	1	05/15/2015 19:02
Hexachlorobutadiene	ND		0.25	1	05/15/2015 19:02
Hexachlorocyclopentadiene	ND		1.3	1	05/15/2015 19:02
Hexachloroethane	ND		0.25	1	05/15/2015 19:02
Indeno (1,2,3-cd) pyrene	ND		0.25	1	05/15/2015 19:02
Isophorone	ND		0.25	1	05/15/2015 19:02
2-Methylnaphthalene	ND		0.25	1	05/15/2015 19:02
2-Methylphenol (o-Cresol)	ND		0.25	1	05/15/2015 19:02
3 & 4-Methylphenol (m,p-Cresol)	ND		0.25	1	05/15/2015 19:02
Naphthalene	ND		0.25	1	05/15/2015 19:02
2-Nitroaniline	ND		1.3	1	05/15/2015 19:02
3-Nitroaniline	ND		1.3	1	05/15/2015 19:02
4-Nitroaniline	ND		1.3	1	05/15/2015 19:02
Nitrobenzene	ND		0.25	1	05/15/2015 19:02
2-Nitrophenol	ND		1.3	1	05/15/2015 19:02
4-Nitrophenol	ND		1.3	1	05/15/2015 19:02
N-Nitrosodiphenylamine	ND		0.25	1	05/15/2015 19:02
N-Nitrosodi-n-propylamine	ND		0.25	1	05/15/2015 19:02
Pentachlorophenol	ND		1.3	1	05/15/2015 19:02
Phenanthrene	ND		0.25	1	05/15/2015 19:02
Phenol	ND		0.25	1	05/15/2015 19:02
Pyrene	ND		0.25	1	05/15/2015 19:02
1,2,4-Trichlorobenzene	ND		0.25	1	05/15/2015 19:02
2,4,5-Trichlorophenol	ND		0.25	1	05/15/2015 19:02
2,4,6-Trichlorophenol	ND		0.25	1	05/15/2015 19:02

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	126		30-130	05/15/2015 19:02
Phenol-d5	118		30-130	05/15/2015 19:02
Nitrobenzene-d5	95		30-130	05/15/2015 19:02
2-Fluorobiphenyl	93		30-130	05/15/2015 19:02
2,4,6-Tribromophenol	76		16-130	05/15/2015 19:02
4-Terphenyl-d14	106		30-130	05/15/2015 19:02

Analyst(s): HK



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/15/2015 18:34
Acenaphthylene	ND	0.25	1	05/15/2015 18:34
Acetochlor	ND	0.25	1	05/15/2015 18:34
Anthracene	ND	0.25	1	05/15/2015 18:34
Benzidine	ND	1.3	1	05/15/2015 18:34
Benzo (a) anthracene	ND	0.25	1	05/15/2015 18:34
Benzo (b) fluoranthene	ND	0.25	1	05/15/2015 18:34
Benzo (k) fluoranthene	ND	0.25	1	05/15/2015 18:34
Benzo (g,h,i) perylene	ND	0.25	1	05/15/2015 18:34
Benzo (a) pyrene	ND	0.25	1	05/15/2015 18:34
Benzyl Alcohol	ND	1.3	1	05/15/2015 18:34
1,1-Biphenyl	ND	0.25	1	05/15/2015 18:34
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/15/2015 18:34
Bis (2-chloroethyl) Ether	ND	0.25	1	05/15/2015 18:34
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/15/2015 18:34
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/15/2015 18:34
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/15/2015 18:34
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/15/2015 18:34
Butylbenzyl Phthalate	ND	0.25	1	05/15/2015 18:34
4-Chloroaniline	ND	0.50	1	05/15/2015 18:34
4-Chloro-3-methylphenol	ND	0.25	1	05/15/2015 18:34
2-Chloronaphthalene	ND	0.25	1	05/15/2015 18:34
2-Chlorophenol	ND	0.25	1	05/15/2015 18:34
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/15/2015 18:34
Chrysene	ND	0.25	1	05/15/2015 18:34
Dibenzo (a,h) anthracene	ND	0.25	1	05/15/2015 18:34
Dibenzofuran	ND	0.25	1	05/15/2015 18:34
Di-n-butyl Phthalate	ND	0.25	1	05/15/2015 18:34
1,2-Dichlorobenzene	ND	0.25	1	05/15/2015 18:34
1,3-Dichlorobenzene	ND	0.25	1	05/15/2015 18:34
1,4-Dichlorobenzene	ND	0.25	1	05/15/2015 18:34
3,3-Dichlorobenzidine	ND	0.50	1	05/15/2015 18:34
2,4-Dichlorophenol	ND	0.25	1	05/15/2015 18:34
Diethyl Phthalate	ND	0.25	1	05/15/2015 18:34
2,4-Dimethylphenol	ND	0.25	1	05/15/2015 18:34
Dimethyl Phthalate	ND	0.25	1	05/15/2015 18:34
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/15/2015 18:34
2,4-Dinitrophenol	ND	6.3	1	05/15/2015 18:34

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC21	104865

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/15/2015 18:34
2,6-Dinitrotoluene	ND	0.25	1	05/15/2015 18:34
Di-n-octyl Phthalate	ND	0.50	1	05/15/2015 18:34
1,2-Diphenylhydrazine	ND	0.25	1	05/15/2015 18:34
Fluoranthene	ND	0.25	1	05/15/2015 18:34
Fluorene	ND	0.25	1	05/15/2015 18:34
Hexachlorobenzene	ND	0.25	1	05/15/2015 18:34
Hexachlorobutadiene	ND	0.25	1	05/15/2015 18:34
Hexachlorocyclopentadiene	ND	1.3	1	05/15/2015 18:34
Hexachloroethane	ND	0.25	1	05/15/2015 18:34
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/15/2015 18:34
Isophorone	ND	0.25	1	05/15/2015 18:34
2-Methylnaphthalene	ND	0.25	1	05/15/2015 18:34
2-Methylphenol (o-Cresol)	ND	0.25	1	05/15/2015 18:34
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/15/2015 18:34
Naphthalene	ND	0.25	1	05/15/2015 18:34
2-Nitroaniline	ND	1.3	1	05/15/2015 18:34
3-Nitroaniline	ND	1.3	1	05/15/2015 18:34
4-Nitroaniline	ND	1.3	1	05/15/2015 18:34
Nitrobenzene	ND	0.25	1	05/15/2015 18:34
2-Nitrophenol	ND	1.3	1	05/15/2015 18:34
4-Nitrophenol	ND	1.3	1	05/15/2015 18:34
N-Nitrosodiphenylamine	ND	0.25	1	05/15/2015 18:34
N-Nitrosodi-n-propylamine	ND	0.25	1	05/15/2015 18:34
Pentachlorophenol	ND	1.3	1	05/15/2015 18:34
Phenanthrene	ND	0.25	1	05/15/2015 18:34
Phenol	ND	0.25	1	05/15/2015 18:34
Pyrene	ND	0.25	1	05/15/2015 18:34
1,2,4-Trichlorobenzene	ND	0.25	1	05/15/2015 18:34
2,4,5-Trichlorophenol	ND	0.25	1	05/15/2015 18:34
2,4,6-Trichlorophenol	ND	0.25	1	05/15/2015 18:34

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/15/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC21	104865

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
2-Fluorophenol	134	S	30-130		05/15/2015 18:34
Phenol-d5	127		30-130		05/15/2015 18:34
Nitrobenzene-d5	101		30-130		05/15/2015 18:34
2-Fluorobiphenyl	103		30-130		05/15/2015 18:34
2,4,6-Tribromophenol	84		16-130		05/15/2015 18:34
4-Terphenyl-d14	116		30-130		05/15/2015 18:34

**Analyst(s):** HK

**Analytical Comments:** c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	ICP-MS1	104890

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/15/2015 19:02
Arsenic	<b>3.3</b>	0.50	1	05/15/2015 19:02
Barium	<b>100</b>	5.0	1	05/15/2015 19:02
Beryllium	<b>0.54</b>	0.50	1	05/15/2015 19:02
Cadmium	ND	0.25	1	05/15/2015 19:02
Chromium	<b>35</b>	0.50	1	05/15/2015 19:02
Cobalt	<b>9.6</b>	0.50	1	05/15/2015 19:02
Copper	<b>9.7</b>	0.50	1	05/15/2015 19:02
Lead	<b>4.4</b>	0.50	1	05/15/2015 19:02
Mercury	ND	0.050	1	05/15/2015 19:02
Molybdenum	ND	0.50	1	05/15/2015 19:02
Nickel	<b>81</b>	0.50	1	05/15/2015 19:02
Selenium	ND	0.50	1	05/15/2015 19:02
Silver	ND	0.50	1	05/15/2015 19:02
Thallium	ND	0.50	1	05/15/2015 19:02
Vanadium	<b>31</b>	0.50	1	05/15/2015 19:02
Zinc	<b>22</b>	5.0	1	05/15/2015 19:02
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	104	70-130		05/15/2015 19:02

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	ICP-MS1	104890

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/15/2015 19:08
Arsenic	<b>4.9</b>	0.50	1	05/15/2015 19:08
Barium	<b>130</b>	5.0	1	05/15/2015 19:08
Beryllium	ND	0.50	1	05/15/2015 19:08
Cadmium	ND	0.25	1	05/15/2015 19:08
Chromium	<b>48</b>	0.50	1	05/15/2015 19:08
Cobalt	<b>9.0</b>	0.50	1	05/15/2015 19:08
Copper	<b>17</b>	0.50	1	05/15/2015 19:08
Lead	<b>7.0</b>	0.50	1	05/15/2015 19:08
Mercury	<b>0.051</b>	0.050	1	05/15/2015 19:08
Molybdenum	<b>1.1</b>	0.50	1	05/15/2015 19:08
Nickel	<b>55</b>	0.50	1	05/15/2015 19:08
Selenium	ND	0.50	1	05/15/2015 19:08
Silver	ND	0.50	1	05/15/2015 19:08
Thallium	ND	0.50	1	05/15/2015 19:08
Vanadium	<b>41</b>	0.50	1	05/15/2015 19:08
Zinc	<b>26</b>	5.0	1	05/15/2015 19:08
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	106	70-130		05/15/2015 19:08

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	ICP-MS1	104890

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/15/2015 19:14
Arsenic	<b>4.8</b>	0.50	1	05/15/2015 19:14
Barium	<b>160</b>	5.0	1	05/15/2015 19:14
Beryllium	ND	0.50	1	05/15/2015 19:14
Cadmium	ND	0.25	1	05/15/2015 19:14
Chromium	<b>36</b>	0.50	1	05/15/2015 19:14
Cobalt	<b>5.7</b>	0.50	1	05/15/2015 19:14
Copper	<b>16</b>	0.50	1	05/15/2015 19:14
Lead	<b>6.0</b>	0.50	1	05/15/2015 19:14
Mercury	<b>0.11</b>	0.050	1	05/15/2015 19:14
Molybdenum	ND	0.50	1	05/15/2015 19:14
Nickel	<b>57</b>	0.50	1	05/15/2015 19:14
Selenium	ND	0.50	1	05/15/2015 19:14
Silver	ND	0.50	1	05/15/2015 19:14
Thallium	ND	0.50	1	05/15/2015 19:14
Vanadium	<b>39</b>	0.50	1	05/15/2015 19:14
Zinc	<b>40</b>	5.0	1	05/15/2015 19:14
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	109	70-130		05/15/2015 19:14

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC7	104879

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/15/2015 20:16
MTBE	---	0.050	1	05/15/2015 20:16
Benzene	---	0.0050	1	05/15/2015 20:16
Toluene	---	0.0050	1	05/15/2015 20:16
Ethylbenzene	---	0.0050	1	05/15/2015 20:16
Xylenes	---	0.0050	1	05/15/2015 20:16

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	92	70-130	05/15/2015 20:16

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC7	104879

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/15/2015 20:46
MTBE	---	0.050	1	05/15/2015 20:46
Benzene	---	0.0050	1	05/15/2015 20:46
Toluene	---	0.0050	1	05/15/2015 20:46
Ethylbenzene	---	0.0050	1	05/15/2015 20:46
Xylenes	---	0.0050	1	05/15/2015 20:46

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	70-130	05/15/2015 20:46

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC7	104879

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/15/2015 21:16
MTBE	---	0.050	1	05/15/2015 21:16
Benzene	---	0.0050	1	05/15/2015 21:16
Toluene	---	0.0050	1	05/15/2015 21:16
Ethylbenzene	---	0.0050	1	05/15/2015 21:16
Xylenes	---	0.0050	1	05/15/2015 21:16

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	79	70-130	05/15/2015 21:16

**Analyst(s):** SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15

**WorkOrder:** 1505579  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	WetChem	104909

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.37	0.1	1	05/14/2015 21:21

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	WetChem	104909

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.40	0.1	1	05/14/2015 21:24

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	WetChem	104909

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.07	0.1	1	05/14/2015 21:35

Analyst(s): RB



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/14/15 19:11  
**Date Prepared:** 5/14/15-5/19/15

**WorkOrder:** 1505579  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-2.5	1505579-001B	Soil	05/13/2015 14:45	GC6A	104990

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 15:17
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/20/2015 15:17

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	05/20/2015 15:17

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-7.5	1505579-002B	Soil	05/13/2015 14:55	GC6A	104886

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.4	1.0	1	05/21/2015 05:35
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 05:35

Surrogates	REC (%)	Limits	Date Analyzed
C9	106	70-130	05/21/2015 05:35

Analyst(s): HD

Analytical Comments: e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-40-12.5	1505579-003B	Soil	05/13/2015 15:02	GC11B	104886

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/15/2015 08:09
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/15/2015 08:09

Surrogates	REC (%)	Limits	Date Analyzed
C9	107	70-130	05/15/2015 08:09

Analyst(s): HD





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/15/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104855  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104855  
 1505579-001BMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0560	0.0010	0.050	-	112	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0548	0.0010	0.050	-	110	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0421	0.0010	0.050	-	84	70-130
Dieldrin	ND	0.0592	0.0010	0.050	-	118	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0594	0.0010	0.050	-	119	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0537	0.0010	0.050	-	107	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-
<b>Surrogate Recovery</b>							
Decachlorobiphenyl	0.0482	0.0492		0.050	96	98	70-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/15/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104855  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104855  
 1505579-001BMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0556	0.0560	0.050	ND	111	112	70-130	0.804	30
g-BHC	0.0538	0.0545	0.050	ND	108	109	70-130	1.33	30
p,p-DDT	0.0415	0.0425	0.050	ND	83	85	70-130	2.42	30
Dieldrin	0.0655	0.0665	0.050	ND	129	131,F1	70-130	1.49	30
Endrin	0.0615	0.0628	0.050	ND	123	126	70-130	2.05	30
Heptachlor	0.0533	0.0537	0.050	ND	107	107	70-130	0	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0471	0.0477	0.050		94	95	70-130	1.37	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104839  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104839

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0742	0.010	0.10	-	74	70-130
Benzene	ND	0.0846	0.010	0.10	-	85	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.292	0.10	0.40	-	73	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0913	0.010	0.10	-	91	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0800	0.0080	0.10	-	80	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0810	0.010	0.10	-	81	70-130
1,1-Dichloroethene	ND	0.0799	0.010	0.10	-	80	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/13/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104839  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104839

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0819	0.010	0.10	-	82	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0788	0.010	0.10	-	79	70-130
Freon 113	ND	-	0.010	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0740	0.010	0.10	-	74	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.0965	0.010	0.10	-	97	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0881	0.010	0.10	-	88	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.206	0.209		0.25	82	84	70-130
Toluene-d8	0.257	0.236		0.25	103	94	70-130
4-BFB	0.0209	0.0236		0.025	83	94	70-130
Benzene-d6	0.188	0.175		0.20	94	87	60-140
Ethylbenzene-d10	0.227	0.204		0.20	113	102	60-140
1,2-DCB-d4	0.206	0.156		0.20	103	78	60-140



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104872  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104872  
 1505476-015AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.192	0.010	0.20	-	96	30-130
Chrysene	ND	0.169	0.010	0.20	-	85	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.177	0.010	0.20	-	88	30-130
2-Methylnaphthalene	ND	0.172	0.010	0.20	-	86	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.172	0.010	0.20	-	86	30-130
Pyrene	ND	0.152	0.010	0.20	-	76	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.346	0.366		0.50	69	73	30-130
2-Fluorobiphenyl	0.328	0.357		0.50	66	71	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	0.235	0.223	0.20	ND	118	112	30-130	5.11	30
Chrysene	0.207	0.201	0.20	ND	102	99	30-130	2.83	30
1-Methylnaphthalene	0.209	0.202	0.20	ND	105	101	30-130	3.58	30
2-Methylnaphthalene	0.204	0.197	0.20	ND	102	98	30-130	3.75	30
Phenanthrene	0.210	0.201	0.20	ND	105	100	30-130	4.40	30
Pyrene	0.190	0.185	0.20	ND	95	92	30-130	2.76	30

### Surrogate Recovery

1-Fluoronaphthalene	0.432	0.421	0.50		86	84	30-130	2.56	30
2-Fluorobiphenyl	0.430	0.418	0.50		86	84	30-130	2.71	30



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104865  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104865  
 1505481-007AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.34	0.25	5	-	87	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	5.36	0.25	5	-	107	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.18	0.25	5	-	104	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.24	0.25	5	-	85	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	5.14	0.25	5	-	103	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104865  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104865  
 1505481-007AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.92	1.3	5	-	78	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.77	0.25	5	-	95	30-130
Pentachlorophenol	ND	2.89	1.3	5	-	58	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	5.01	0.25	5	-	100	30-130
Pyrene	ND	4.91	0.25	5	-	98	30-130
1,2,4-Trichlorobenzene	ND	4.34	0.25	5	-	87	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

#### Surrogate Recovery

2-Fluorophenol	4.56	5.17		5	91	103	30-130
Phenol-d5	4.51	5.24		5	90	105	30-130
Nitrobenzene-d5	3.37	4.23		5	67	85	30-130
2-Fluorobiphenyl	3.28	4.01		5	66	80	30-130
2,4,6-Tribromophenol	1.59	3.21		5	32	64	16-130
4-Terphenyl-d14	4.08	4.76		5	82	95	30-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/14/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104865  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104865  
 1505481-007AMS/MSD

### QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	4.77	4.69	5	ND	95	94	30-130	1.73	30
4-Chloro-3-methylphenol	7.29	6.39	5	ND	146,F1	128	30-130	13.1	30
2-Chlorophenol	6.55	6.01	5	ND	131,F1	120	30-130	8.57	30
1,4-Dichlorobenzene	4.43	4.41	5	ND	89	88	30-130	0.443	30
2,4-Dinitrotoluene	6.09	5.65	5	ND	122	113	30-130	7.42	30
4-Nitrophenol	5.04	4.24	5	ND	101	85	30-130	17.4	30
N-Nitrosodi-n-propylamine	6.11	5.99	5	ND	122	120	30-130	1.93	30
Pentachlorophenol	4.16	3.95	5	ND	83	79	30-130	5.11	30
Phenol	6.68	6.11	5	ND	134,F1	122	30-130	8.88	30
Pyrene	5.70	5.75	5	ND	114	115	30-130	0.950	30
1,2,4-Trichlorobenzene	4.58	4.40	5	ND	92	88	30-130	4.01	30

#### Surrogate Recovery

2-Fluorophenol	6.75	6.27	5		135	125	30-130	7.24	30
Phenol-d5	6.78	6.39	5		136	128	30-130	5.91	30
Nitrobenzene-d5	4.72	4.39	5		94	88	30-130	7.14	30
2-Fluorobiphenyl	4.33	4.36	5		87	87	30-130	0	30
2,4,6-Tribromophenol	3.54	3.16	5		71	63	16-130	11.4	30
4-Terphenyl-d14	5.65	5.93	5		113	119	30-130	4.84	30





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/15/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104890  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104890

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	49.0	0.50	50	-	98	75-125
Arsenic	ND	48.8	0.50	50	-	98	75-125
Barium	ND	469	5.0	500	-	94	75-125
Beryllium	ND	47.7	0.50	50	-	95	75-125
Cadmium	ND	48.3	0.25	50	-	97	75-125
Chromium	ND	49.3	0.50	50	-	99	75-125
Cobalt	ND	47.6	0.50	50	-	95	75-125
Copper	ND	51.4	0.50	50	-	102	75-125
Lead	ND	49.5	0.50	50	-	99	75-125
Mercury	ND	1.13	0.050	1.25	-	91	75-125
Molybdenum	ND	48.1	0.50	50	-	96	75-125
Nickel	ND	50.6	0.50	50	-	101	75-125
Selenium	ND	50.7	0.50	50	-	101	75-125
Silver	ND	50.8	0.50	50	-	102	75-125
Thallium	ND	45.5	0.50	50	-	91	75-125
Vanadium	ND	49.6	0.50	50	-	99	75-125
Zinc	ND	516	5.0	500	-	103	75-125
<b>Surrogate Recovery</b>							
Terbium	535	503		500	107	101	70-130



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/15/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104879  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104879  
 1505564-015AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.615	0.40	0.60	-	103	70-130
MTBE	ND	0.0819	0.050	0.10	-	82	70-130
Benzene	ND	0.0902	0.0050	0.10	-	90	70-130
Toluene	ND	0.0885	0.0050	0.10	-	88	70-130
Ethylbenzene	ND	0.0967	0.0050	0.10	-	97	70-130
Xylenes	ND	0.308	0.0050	0.30	-	103	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.107	0.0933		0.10	107	93	70-130
-----------------	-------	--------	--	------	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.566	0.566	0.60	ND	94	94	70-130	0	20
MTBE	0.0995	0.103	0.10	ND	99	103	70-130	3.46	20
Benzene	0.101	0.106	0.10	ND	101	106	70-130	5.49	20
Toluene	0.0986	0.104	0.10	ND	99	104	70-130	5.73	20
Ethylbenzene	0.106	0.113	0.10	ND	106	113	70-130	6.89	20
Xylenes	0.331	0.352	0.30	ND	110	117	70-130	6.15	20

**Surrogate Recovery**

2-Fluorotoluene	0.101	0.108	0.10		101	108	70-130	6.99	20
-----------------	-------	-------	------	--	-----	-----	--------	------	----



# Quality Control Report

**Client:** Treadwell & Rollo

**Date Prepared:** 5/14/15

**Date Analyzed:** 5/14/15

**Instrument:** WetChem

**Matrix:** Soil

**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579

**BatchID:** 104909

**Extraction Method:** SW9045D

**Analytical Method:** SW9045D

**Unit:** ±, pH units @ 25°C

## QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505569-005A	6.36	1	6.34	1	0.02	0.1



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/15/15  
**Instrument:** GC11B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104886  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104886  
 1505569-020AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	38.1	1.0	40	-	95	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	27.4	27.3		25	110	109	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		23	NR	NR	-	NR	

**Surrogate Recovery**

C9	NR	NR			NR	NR	-	NR	
----	----	----	--	--	----	----	---	----	--



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15 - 5/19/15  
**Instrument:** GC11B, GC2B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505579  
**BatchID:** 104990  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104990  
 1505715-003AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	41.2	1.0	40	-	103	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	27.9	28.3		25	111	113	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	45.1	43.4	40	7.471	94	90	70-130	3.81	30

**Surrogate Recovery**

C9	28.1	27.8	25		113	111	70-130	1.06	30
----	------	------	----	--	-----	-----	--------	------	----



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505579

ClientCode: TWRF

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**

Zubair Trabzada  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
(415) 955-5200    FAX: (415) 955-9041

Email: ztrabzada@Langan.com  
cc/3rd Party:  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

*Date Received:* 05/14/2015

*Date Printed:* 05/15/2015

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	
1505579-001	B-40-2.5	Soil	5/13/2015 14:45	<input type="checkbox"/>	B	A	B	B	B	B	B	B	B				
1505579-002	B-40-7.5	Soil	5/13/2015 14:55	<input type="checkbox"/>	B	A	B	B	B	B	B	B	B				
1505579-003	B-40-12.5	Soil	5/13/2015 15:02	<input type="checkbox"/>	B	A	B	B	B	B	B	B	B				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)WSG_S	9		10	
11		12							

The following SampleIDs: 001B, 002B, 003B contain testgroup.

**Prepared by: Maria Venegas**

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505579

**Project:** #731637001; 3093 Broadway

**Client Contact:** Zubair Trabzada

**Date Received:** 5/14/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** ztrabzada@Langan.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505579-001A	B-40-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/13/2015 14:45	5 days		<input type="checkbox"/>	
1505579-001B	B-40-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/13/2015 14:45	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505579-002A	B-40-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/13/2015 14:55	5 days		<input type="checkbox"/>	
1505579-002B	B-40-7.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 14:55	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505579-003A	B-40-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/13/2015 15:02	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505579

**Project:** #731637001; 3093 Broadway

**Client Contact:** Zubair Trabzada

**Date Received:** 5/14/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** ztrabzada@Langan.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505579-003B	B-40-12.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 15:02	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

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

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



1505579

009086



# 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Zubair Trabzada  
 Samplers: ZT  
 Recorder (Signature Required): Dub T. L.

<b>Turnaround Time</b>
<u>standard</u>

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, TPH <sub>20</sub>	PAHs	VOCs	SVOCs	PCBs & Pesticides	CAM-17	PH	Other									
B-40-2.5	05/13/15	1445		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	*Analyze VOCs using En-Core containers*
B-40-7.5	05/13/15	1455		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
B-40-12.5	05/13/15	1502		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
				ICE/1° <u>5.0</u>				APPROPRIATE CONTAINERS																				
				GOOD CONDITION				PRESERVED IN LAB																				
				HEAD SPACE ABSENT																								
				DECHLORINATED IN LAB																								
				PRESERVATION																								

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/14/15</u>	Time <u>0140</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-14-15</u>	Time <u>1340</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-14-15</u>	Time <u>1615</u>	Received by: (Signature) _____	Date _____	Time _____
Relinquished by: (Signature) _____	Date _____	Time _____	Received by Lab: (Signature) <u>[Signature]</u>	Date <u>5/14/15</u>	Time <u>1615</u>

Sent to Laboratory (Name): McCampbell  
 Laboratory Comments/Notes: \_\_\_\_\_  
 Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name) \_\_\_\_\_



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/14/2015 7:11:33 PM**  
 Project Name: **#731637001; 3093 Broadway** LogIn Reviewed by: **Maria Venegas**  
 WorkOrder No: **1505579** Matrix: Soil Carrier: Bernie Cummins (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   
 Sample/Temp Blank temperature Temp: 5.6°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505580

**Report Created for:** Treadwell & Rollo

555 Montgomery St., Suite 1300  
San Francisco, CA 94111

**Project Contact:** Adrian Angel

**Project P.O.:**

**Project Name:** #731637001; 3090 Broadway

**Project Received:** 05/14/2015

Analytical Report reviewed & approved for release on 05/21/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**WorkOrder:** 1505580

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
c2	surrogate recovery outside of the control limits due to matrix interference.
c7	Surrogate value diluted out of range
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
d2	heavier gasoline range compounds are significant (aged gasoline?)
d9	no recognizable pattern
e4	gasoline range compounds are significant.



## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**WorkOrder:** 1505580

### Quality Control Qualifiers

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



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

### Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-7.5'	1505580-002A	Soil	05/13/2015 13:05	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 03:03
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/21/2015 03:03
Ethylbenzene	ND	0.0050	1	05/21/2015 03:03
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 03:03
Naphthalene	ND	0.0050	1	05/21/2015 03:03
Toluene	ND	0.0050	1	05/21/2015 03:03
Xylenes, Total	ND	0.0050	1	05/21/2015 03:03

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	99		70-130	05/21/2015 03:03
Toluene-d8	97		70-130	05/21/2015 03:03
4-BFB	147	S	70-130	05/21/2015 03:03
Benzene-d6	79		60-140	05/21/2015 03:03
Ethylbenzene-d10	94		60-140	05/21/2015 03:03
1,2-DCB-d4	83		60-140	05/21/2015 03:03

Analyst(s): KBO

Analytical Comments: c11

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-12.5'	1505580-003A	Soil	05/13/2015 13:13	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 03:43
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/21/2015 03:43
Ethylbenzene	ND	0.0050	1	05/21/2015 03:43
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 03:43
Naphthalene	ND	0.0050	1	05/21/2015 03:43
Toluene	ND	0.0050	1	05/21/2015 03:43
Xylenes, Total	ND	0.0050	1	05/21/2015 03:43

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	101		70-130	05/21/2015 03:43
Toluene-d8	96		70-130	05/21/2015 03:43
4-BFB	137	S	70-130	05/21/2015 03:43
Benzene-d6	77		60-140	05/21/2015 03:43
Ethylbenzene-d10	91		60-140	05/21/2015 03:43
1,2-DCB-d4	79		60-140	05/21/2015 03:43

Analyst(s): KBO

Analytical Comments: c11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

### Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-21.5'	1505580-005A	Soil	05/13/2015 13:30	GC28	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	100	05/20/2015 15:48
1,2-Dichloroethane (1,2-DCA)	ND	0.40	100	05/20/2015 15:48
Ethylbenzene	<b>2.0</b>	0.50	100	05/20/2015 15:48
Methyl-t-butyl ether (MTBE)	ND	0.50	100	05/20/2015 15:48
Naphthalene	<b>1.9</b>	0.50	100	05/20/2015 15:48
Toluene	ND	0.50	100	05/20/2015 15:48
Xylenes, Total	<b>1.9</b>	0.50	100	05/20/2015 15:48

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	113		70-130	05/20/2015 15:48
Toluene-d8	107		70-130	05/20/2015 15:48
4-BFB	92		70-130	05/20/2015 15:48
Benzene-d6	82		60-140	05/20/2015 15:48
Ethylbenzene-d10	97		60-140	05/20/2015 15:48
1,2-DCB-d4	292	S	60-140	05/20/2015 15:48

Analyst(s): KBO

Analytical Comments: c7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-26.5'	1505580-006A	Soil	05/13/2015 14:01	GC16	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/20/2015 11:34
1,2-Dichloroethane (1,2-DCA)	<b>0.011</b>	0.0040	1	05/20/2015 11:34
Ethylbenzene	ND	0.0050	1	05/20/2015 11:34
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/20/2015 11:34
Naphthalene	ND	0.0050	1	05/20/2015 11:34
Toluene	ND	0.0050	1	05/20/2015 11:34
Xylenes, Total	ND	0.0050	1	05/20/2015 11:34

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	82	70-130	05/20/2015 11:34
Toluene-d8	89	70-130	05/20/2015 11:34
4-BFB	88	70-130	05/20/2015 11:34
Benzene-d6	76	60-140	05/20/2015 11:34
Ethylbenzene-d10	86	60-140	05/20/2015 11:34
1,2-DCB-d4	69	60-140	05/20/2015 11:34

Analyst(s): KBO

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

## Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-31.5'	1505580-007A	Soil	05/13/2015 14:10	GC16	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/20/2015 12:16
1,2-Dichloroethane (1,2-DCA)	<b>0.028</b>	0.0040	1	05/20/2015 12:16
Ethylbenzene	ND	0.0050	1	05/20/2015 12:16
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/20/2015 12:16
Naphthalene	ND	0.0050	1	05/20/2015 12:16
Toluene	ND	0.0050	1	05/20/2015 12:16
Xylenes, Total	ND	0.0050	1	05/20/2015 12:16

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	82	70-130	05/20/2015 12:16
Toluene-d8	90	70-130	05/20/2015 12:16
4-BFB	89	70-130	05/20/2015 12:16
Benzene-d6	83	60-140	05/20/2015 12:16
Ethylbenzene-d10	95	60-140	05/20/2015 12:16
1,2-DCB-d4	74	60-140	05/20/2015 12:16

Analyst(s): KBO

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-7.5'	1505580-009A	Soil	05/13/2015 09:10	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 04:24
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/21/2015 04:24
Ethylbenzene	ND	0.0050	1	05/21/2015 04:24
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 04:24
Naphthalene	ND	0.0050	1	05/21/2015 04:24
Toluene	ND	0.0050	1	05/21/2015 04:24
Xylenes, Total	ND	0.0050	1	05/21/2015 04:24

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	100		70-130	05/21/2015 04:24
Toluene-d8	96		70-130	05/21/2015 04:24
4-BFB	155	S	70-130	05/21/2015 04:24
Benzene-d6	79		60-140	05/21/2015 04:24
Ethylbenzene-d10	93		60-140	05/21/2015 04:24
1,2-DCB-d4	81		60-140	05/21/2015 04:24

Analyst(s): KBO

Analytical Comments: c11

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

### Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-12.5'	1505580-010A	Soil	05/13/2015 09:20	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 05:06
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/21/2015 05:06
Ethylbenzene	ND	0.0050	1	05/21/2015 05:06
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 05:06
Naphthalene	ND	0.0050	1	05/21/2015 05:06
Toluene	ND	0.0050	1	05/21/2015 05:06
Xylenes, Total	ND	0.0050	1	05/21/2015 05:06

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	100	70-130	05/21/2015 05:06
Toluene-d8	97	70-130	05/21/2015 05:06
4-BFB	129	70-130	05/21/2015 05:06
Benzene-d6	80	60-140	05/21/2015 05:06
Ethylbenzene-d10	95	60-140	05/21/2015 05:06
1,2-DCB-d4	85	60-140	05/21/2015 05:06

Analyst(s): KBO

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-22'	1505580-012A	Soil	05/13/2015 09:45	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 05:47
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/21/2015 05:47
Ethylbenzene	ND	0.0050	1	05/21/2015 05:47
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 05:47
Naphthalene	ND	0.0050	1	05/21/2015 05:47
Toluene	ND	0.0050	1	05/21/2015 05:47
Xylenes, Total	ND	0.0050	1	05/21/2015 05:47

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	101	70-130	05/21/2015 05:47
Toluene-d8	97	70-130	05/21/2015 05:47
4-BFB	127	70-130	05/21/2015 05:47
Benzene-d6	77	60-140	05/21/2015 05:47
Ethylbenzene-d10	92	60-140	05/21/2015 05:47
1,2-DCB-d4	82	60-140	05/21/2015 05:47

Analyst(s): KBO

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

## Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-27.5'	1505580-013A	Soil	05/13/2015 09:52	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 06:28
1,2-Dichloroethane (1,2-DCA)	<b>0.0057</b>	0.0040	1	05/21/2015 06:28
Ethylbenzene	ND	0.0050	1	05/21/2015 06:28
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 06:28
Naphthalene	ND	0.0050	1	05/21/2015 06:28
Toluene	ND	0.0050	1	05/21/2015 06:28
Xylenes, Total	ND	0.0050	1	05/21/2015 06:28

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Dibromofluoromethane	101		70-130	05/21/2015 06:28
Toluene-d8	98		70-130	05/21/2015 06:28
4-BFB	170	S	70-130	05/21/2015 06:28
Benzene-d6	79		60-140	05/21/2015 06:28
Ethylbenzene-d10	94		60-140	05/21/2015 06:28
1,2-DCB-d4	88		60-140	05/21/2015 06:28

Analyst(s): KBO

Analytical Comments: c11

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-17.5'	1505580-015A	Soil	05/13/2015 09:35	GC10	104901

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/21/2015 07:09
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/21/2015 07:09
Ethylbenzene	ND	0.0050	1	05/21/2015 07:09
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/21/2015 07:09
Naphthalene	ND	0.0050	1	05/21/2015 07:09
Toluene	ND	0.0050	1	05/21/2015 07:09
Xylenes, Total	ND	0.0050	1	05/21/2015 07:09

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	100	70-130	05/21/2015 07:09
Toluene-d8	97	70-130	05/21/2015 07:09
4-BFB	116	70-130	05/21/2015 07:09
Benzene-d6	78	60-140	05/21/2015 07:09
Ethylbenzene-d10	95	60-140	05/21/2015 07:09
1,2-DCB-d4	82	60-140	05/21/2015 07:09

Analyst(s): KBO



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-7.5'	1505580-002A	Soil	05/13/2015 13:05	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 06:18
MTBE	---	0.050	1	05/16/2015 06:18
Benzene	---	0.0050	1	05/16/2015 06:18
Toluene	---	0.0050	1	05/16/2015 06:18
Ethylbenzene	---	0.0050	1	05/16/2015 06:18
Xylenes	---	0.0050	1	05/16/2015 06:18

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-12.5'	1505580-003A	Soil	05/13/2015 13:13	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 05:48
MTBE	---	0.050	1	05/16/2015 05:48
Benzene	---	0.0050	1	05/16/2015 05:48
Toluene	---	0.0050	1	05/16/2015 05:48
Ethylbenzene	---	0.0050	1	05/16/2015 05:48
Xylenes	---	0.0050	1	05/16/2015 05:48

Surrogates	REC (%)	Limits
2-Fluorotoluene	89	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-21.5'	1505580-005A	Soil	05/13/2015 13:30	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	620	100	100	05/18/2015 23:01
MTBE	---	5.0	100	05/18/2015 23:01
Benzene	---	0.50	100	05/18/2015 23:01
Toluene	---	0.50	100	05/18/2015 23:01
Ethylbenzene	---	0.50	100	05/18/2015 23:01
Xylenes	---	0.50	100	05/18/2015 23:01

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	469	S	70-130	05/18/2015 23:01

**Analyst(s):** SS **Analytical Comments:** d2,d9,c2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-26.5'	1505580-006A	Soil	05/13/2015 14:01	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 06:48
MTBE	---	0.050	1	05/16/2015 06:48
Benzene	---	0.0050	1	05/16/2015 06:48
Toluene	---	0.0050	1	05/16/2015 06:48
Ethylbenzene	---	0.0050	1	05/16/2015 06:48
Xylenes	---	0.0050	1	05/16/2015 06:48

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	90	70-130	05/16/2015 06:48

**Analyst(s):** SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-31.5'	1505580-007A	Soil	05/13/2015 14:10	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 07:19
MTBE	---	0.050	1	05/16/2015 07:19
Benzene	---	0.0050	1	05/16/2015 07:19
Toluene	---	0.0050	1	05/16/2015 07:19
Ethylbenzene	---	0.0050	1	05/16/2015 07:19
Xylenes	---	0.0050	1	05/16/2015 07:19

Surrogates	REC (%)	Limits
2-Fluorotoluene	93	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-7.5'	1505580-009A	Soil	05/13/2015 09:10	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 03:18
MTBE	---	0.050	1	05/16/2015 03:18
Benzene	---	0.0050	1	05/16/2015 03:18
Toluene	---	0.0050	1	05/16/2015 03:18
Ethylbenzene	---	0.0050	1	05/16/2015 03:18
Xylenes	---	0.0050	1	05/16/2015 03:18

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-12.5'	1505580-010A	Soil	05/13/2015 09:20	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 03:48
MTBE	---	0.050	1	05/16/2015 03:48
Benzene	---	0.0050	1	05/16/2015 03:48
Toluene	---	0.0050	1	05/16/2015 03:48
Ethylbenzene	---	0.0050	1	05/16/2015 03:48
Xylenes	---	0.0050	1	05/16/2015 03:48

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	100	70-130	05/16/2015 03:48

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-22'	1505580-012A	Soil	05/13/2015 09:45	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 04:18
MTBE	---	0.050	1	05/16/2015 04:18
Benzene	---	0.0050	1	05/16/2015 04:18
Toluene	---	0.0050	1	05/16/2015 04:18
Ethylbenzene	---	0.0050	1	05/16/2015 04:18
Xylenes	---	0.0050	1	05/16/2015 04:18

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	93	70-130	05/16/2015 04:18

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-27.5'	1505580-013A	Soil	05/13/2015 09:52	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 04:48
MTBE	---	0.050	1	05/16/2015 04:48
Benzene	---	0.0050	1	05/16/2015 04:48
Toluene	---	0.0050	1	05/16/2015 04:48
Ethylbenzene	---	0.0050	1	05/16/2015 04:48
Xylenes	---	0.0050	1	05/16/2015 04:48

Surrogates	REC (%)	Limits
2-Fluorotoluene	91	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-17.5'	1505580-015A	Soil	05/13/2015 09:35	GC7	104898

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/16/2015 05:18
MTBE	---	0.050	1	05/16/2015 05:18
Benzene	---	0.0050	1	05/16/2015 05:18
Toluene	---	0.0050	1	05/16/2015 05:18
Ethylbenzene	---	0.0050	1	05/16/2015 05:18
Xylenes	---	0.0050	1	05/16/2015 05:18

Surrogates	REC (%)	Limits
2-Fluorotoluene	77	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-7.5'	1505580-002A	Soil	05/13/2015 13:05	GC2A	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 08:25

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	115	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-12.5'	1505580-003A	Soil	05/13/2015 13:13	GC2A	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 04:40

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	115	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-21.5'	1505580-005A	Soil	05/13/2015 13:30	GC9a	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	37	1.0	1	05/21/2015 12:12

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): HD

Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-26.5'	1505580-006A	Soil	05/13/2015 14:01	GC2A	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 05:55

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	115	70-130

Analyst(s): HD

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-31.5'	1505580-007A	Soil	05/13/2015 14:10	GC2A	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 07:10

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	115	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-7.5'	1505580-009A	Soil	05/13/2015 09:10	GC11B	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 07:16

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	111	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-12.5'	1505580-010A	Soil	05/13/2015 09:20	GC11B	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 08:24

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	111	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-22'	1505580-012A	Soil	05/13/2015 09:45	GC11B	104897

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 14:11

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	114	70-130

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/14/15-5/15/15

**WorkOrder:** 1505580  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-27.5'	1505580-013A	Soil	05/13/2015 09:52	GC11B	104897

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 11:50

Surrogates	REC (%)	Limits	Date Analyzed
C9	109	70-130	05/20/2015 11:50

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-19-17.5'	1505580-015A	Soil	05/13/2015 09:35	GC2A	104897

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/20/2015 10:01

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/20/2015 10:01

Analyst(s): HD



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/16/15 - 5/18/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 104901  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104901  
 1505582-005AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0362	0.0050	0.050	-	72	53-116
Benzene	ND	0.0408	0.0050	0.050	-	82	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.140	0.050	0.20	-	70	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0410	0.0050	0.050	-	82	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0377	0.0040	0.050	-	75	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0377	0.0040	0.050	-	75	58-135
1,1-Dichloroethene	ND	0.0382	0.0050	0.050	-	76	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/16/15 - 5/18/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 104901  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104901  
 1505582-005AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0406	0.0050	0.050	-	81	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0389	0.0050	0.050	-	78	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0363	0.0050	0.050	-	73	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0442	0.0050	0.050	-	88	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0401	0.0050	0.050	-	80	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

#### Surrogate Recovery

Dibromofluoromethane	0.103	0.106		0.12	83	85	70-130
Toluene-d8	0.122	0.113		0.12	97	90	70-130
4-BFB	0.0113	0.0121		0.012	90	96	70-130
Benzene-d6	0.0974	0.0821		0.10	97	82	60-140
Ethylbenzene-d10	0.110	0.0941		0.10	110	94	60-140
1,2-DCB-d4	0.106	0.0747		0.10	105	75	60-140

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/16/15 - 5/18/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 104901  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104901  
 1505582-005AMS/MSD

### QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0314	0.0320	0.050	ND	63,F1	64,F1	70-130	2.00	20
Benzene	0.0427	0.0425	0.050	ND	85	85	70-130	0	20
t-Butyl alcohol (TBA)	0.144	0.148	0.20	ND	72	74	70-130	3.19	20
Chlorobenzene	0.0397	0.0389	0.050	ND	79	78	70-130	1.91	20
1,2-Dibromoethane (EDB)	0.0329	0.0336	0.050	ND	66,F1	67,F1	70-130	2.24	20
1,2-Dichloroethane (1,2-DCA)	0.0378	0.0377	0.050	ND	76	75	70-130	0.254	20
1,1-Dichloroethene	0.0400	0.0400	0.050	ND	80	80	70-130	0	20
Diisopropyl ether (DIPE)	0.0388	0.0392	0.050	ND	78	78	70-130	0	20
Ethyl tert-butyl ether (ETBE)	0.0374	0.0383	0.050	ND	75	77	70-130	2.18	20
Methyl-t-butyl ether (MTBE)	0.0362	0.0372	0.050	ND	72	74	70-130	2.85	20
Toluene	0.0426	0.0425	0.050	ND	85	85	70-130	0	20
Trichloroethene	0.0429	0.0422	0.050	ND	86	85	70-130	1.59	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.111	0.111	0.12		89	89	70-130	0	20
Toluene-d8	0.120	0.120	0.12		96	96	70-130	0	20
4-BFB	0.00937	0.00913	0.012		75	73	70-130	2.56	20
Benzene-d6	0.0958	0.0954	0.10		96	95	60-140	0.418	20
Ethylbenzene-d10	0.114	0.111	0.10		114	111	60-140	1.94	20
1,2-DCB-d4	0.0936	0.0920	0.10		94	92	60-140	1.72	20



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/17/15  
**Instrument:** GC3  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 104898  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104898  
 1505582-006AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.686	0.40	0.60	-	114	70-130
MTBE	ND	0.0901	0.050	0.10	-	90	70-130
Benzene	ND	0.106	0.0050	0.10	-	106	70-130
Toluene	ND	0.108	0.0050	0.10	-	108	70-130
Ethylbenzene	ND	0.107	0.0050	0.10	-	107	70-130
Xylenes	ND	0.324	0.0050	0.30	-	108	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.0973	0.0988		0.10	97	99	70-130
-----------------	--------	--------	--	------	----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.632	0.653	0.60	ND	105	109	70-130	3.27	20
MTBE	0.0818	0.0797	0.10	ND	82	80	70-130	2.57	20
Benzene	0.0933	0.0896	0.10	ND	93	90	70-130	4.09	20
Toluene	0.0952	0.0924	0.10	ND	95	92	70-130	2.95	20
Ethylbenzene	0.0954	0.0936	0.10	ND	95	94	70-130	1.92	20
Xylenes	0.289	0.286	0.30	ND	96	95	70-130	1.13	20

**Surrogate Recovery**

2-Fluorotoluene	0.0857	0.0832	0.10		86	83	70-130	2.93	20
-----------------	--------	--------	------	--	----	----	--------	------	----



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/14/15  
**Date Analyzed:** 5/15/15  
**Instrument:** GC9b  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 104897  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104897  
 1505579-001BMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	46.8	1.0	40	-	117	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	29.3	29.9		25	117	119	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	43.2	41.2	40	ND	108	103	70-130	4.55	30

**Surrogate Recovery**

C9	29.4	28.8	25		118	115	70-130	2.16	30
----	------	------	----	--	-----	-----	--------	------	----

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505580

ClientCode: TWRF

WaterTrax     WriteOn     EDF     Excel     EQUIS     Email     HardCopy     ThirdParty     J-flag

**Report to:**  
Adrian Angel  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
(415) 955-5200    FAX: (415) 955-9041

Email: aangel@langan.com  
cc/3rd Party:  
PO:  
ProjectNo: #731637001; 3090 Broadway

**Bill to:**  
Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT: 5 days**  
  
**Date Received: 05/14/2015**  
**Date Printed: 05/15/2015**

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	
1505580-002	MW-18-7.5'	Soil	5/13/2015 13:05	<input type="checkbox"/>	A	A	A										
1505580-003	MW-18-12.5'	Soil	5/13/2015 13:13	<input type="checkbox"/>	A	A	A										
1505580-005	MW-18-21.5'	Soil	5/13/2015 13:30	<input type="checkbox"/>	A	A	A										
1505580-006	MW-18-26.5'	Soil	5/13/2015 14:01	<input type="checkbox"/>	A	A	A										
1505580-007	MW-18-31.5'	Soil	5/13/2015 14:10	<input type="checkbox"/>	A	A	A										
1505580-009	MW-19-7.5'	Soil	5/13/2015 9:10	<input type="checkbox"/>	A	A	A										
1505580-010	MW-19-12.5'	Soil	5/13/2015 9:20	<input type="checkbox"/>	A	A	A										
1505580-012	MW-19-22'	Soil	5/13/2015 9:45	<input type="checkbox"/>	A	A	A										
1505580-013	MW-19-27.5'	Soil	5/13/2015 9:52	<input type="checkbox"/>	A	A	A										
1505580-015	MW-19-17.5'	Soil	5/13/2015 9:35	<input type="checkbox"/>	A	A	A										

**Test Legend:**

1	8260VOC_S	2	G-MBTX_S	3	TPH(D)WSG_S	4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 002A, 003A, 005A, 006A, 007A, 009A, 010A, 012A, 013A, 015A contain testgroup.

**Prepared by: Maria Venegas**

**Comments:**    SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

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





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505580

**Project:** #731637001; 3090 Broadway

**Client Contact:** Adrian Angel

**Date Received:** 5/14/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** aangel@langan.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505580-001A	MW-18-2.5'	Soil		1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/13/2015 8:20			<input checked="" type="checkbox"/>	
1505580-002A	MW-18-7.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 13:05	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505580-003A	MW-18-12.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 13:13	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505580-004A	MW-18-17.5'	Soil		1	Acetate Liner	<input type="checkbox"/>	5/13/2015 13:20			<input checked="" type="checkbox"/>	
1505580-005A	MW-18-21.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/13/2015 13:30	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505580-006A	MW-18-26.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 14:01	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505580

**Project:** #731637001; 3090 Broadway

**Client Contact:** Adrian Angel

**Date Received:** 5/14/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** aangel@langan.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505580-006A	MW-18-26.5'	Soil	SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 14:01	5 days		<input type="checkbox"/>	
1505580-007A	MW-18-31.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 14:10	5 days		<input type="checkbox"/>	
1505580-008A	MW-19-2.5'	Soil		1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/13/2015 8:50			<input checked="" type="checkbox"/>	
1505580-009A	MW-19-7.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 9:10	5 days		<input type="checkbox"/>	
1505580-010A	MW-19-12.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 9:20	5 days		<input type="checkbox"/>	
1505580-011A	MW-19-14.0'	Soil		1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/13/2015 13:16			<input checked="" type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505580

**Project:** #731637001; 3090 Broadway

**Client Contact:** Adrian Angel

**Date Received:** 5/14/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** aangel@langan.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505580-012A	MW-19-22'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/13/2015 9:45	5 days		<input type="checkbox"/>	
1505580-013A	MW-19-27.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 9:52	5 days		<input type="checkbox"/>	
1505580-014A	MW-19-32.5'	Soil		1	Acetate Liner	<input type="checkbox"/>	5/13/2015 10:00			<input checked="" type="checkbox"/>	
1505580-015A	MW-19-17.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Acetate Liner	<input type="checkbox"/>	5/13/2015 9:35	5 days		<input type="checkbox"/>	

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

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

*1505580*

## 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413  
 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Adrian Angel  
 Samplers: AA + ZT  
 Recorder (Signature Required): [Signature]

**Turnaround  
Time**

\_\_\_\_\_

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks	
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH - gas (2015)	TPH - diesel (2015)	MGTX (2260)	Naphthalene	1,2-DCA									
MW-18-2.5'	5/13/15	0820		X																			X	Silica gel cleanup on all diesel	
MW-18-7.5'		1305										X	X	X	X	X									X
MW-18-12.5'		1313										X	X	X	X	X									X
MW-18-17.5'		1320										X	X	X	X	X									X
MW-18-21.5'		1330										X	X	X	X	X									X
MW-18-26.5'		1401										X	X	X	X	X									X
MW-18-31.5'		1410										X	X	X	X	X									X
MW-19-2.5'		<i>MV 0820 08500</i>																							X
MW-19-7.5'		<i>MV 1305 0910</i>										X	X	X	X	X									X
MW-19-12.5'		<i>MV 1313 0920</i>										X	X	X	X	X									X
MW-19-14.0'		1316										X	X	X	X	X								X	
MW-19-21.5' 221		<i>MV 1330 09450</i>										X	X	X	X	X								X	
MW-19-26.5' 27.5'		<i>MV 1401 0952</i>										X	X	X	X	X								X	
MW-19-31.5' 32.5'		<i>MV 1410 1000</i>										X	X	X	X	X								X	
Relinquished by: (Signature) <u>[Signature]</u>				Date	<u>5/14/15</u>	Time	<u>0140</u>	Received by: (Signature) <u>[Signature]</u>				Date	<u>5-14-15</u>	Time	<u>1340</u>										
Relinquished by: (Signature) <u>[Signature]</u>				Date	<u>5-14-15</u>	Time	<u>1615</u>	Received by: (Signature) _____				Date	_____	Time	_____										
Relinquished by: (Signature) _____				Date	_____	Time	_____	Received by Lab: (Signature) <u>[Signature]</u>				Date	<u>5/14/15</u>	Time	<u>1615</u>										

Sent to Laboratory (Name): \_\_\_\_\_  
 Laboratory Comments/Notes: \_\_\_\_\_

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name) \_\_\_\_\_

White Copy - Original MW-19-17.5 5/13/15 0935 - Analyze for same as above.

GOOD CONDITION  APPROPRIATE CONTAINERS   
 HEAD SPACE ABSENT  PRESERVED IN LAB  VOC Number: \_\_\_\_\_  
 DECHLORINATED IN LAB   
 PRESERVATION VOAS  O&G  METALS  OTHER



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/14/2015 7:38:14 PM**  
 Project Name: **#731637001; 3090 Broadway** LogIn Reviewed by: **Maria Venegas**  
 WorkOrder No: **1505580** Matrix: Soil Carrier: Bernie Cummins (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   
 Sample/Temp Blank temperature Temp: 5.6°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505580 A

**Report Created for:** Treadwell & Rollo

555 Montgomery St., Suite 1300  
San Francisco, CA 94111

**Project Contact:** Adrian Angel

**Project P.O.:**

**Project Name:** #731637001; 3090 Broadway

**Project Received:** 05/14/2015

Analytical Report reviewed & approved for release on 06/02/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**WorkOrder:** 1505580

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
c2	surrogate recovery outside of the control limits due to matrix interference.
c7	Surrogate value diluted out of range
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
d1	weakly modified or unmodified gasoline is significant
d2	heavier gasoline range compounds are significant (aged gasoline?)
d9	no recognizable pattern
e4	gasoline range compounds are significant.



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

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**WorkOrder:** 1505580

### **Quality Control Qualifiers**

F1 MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.  
F3 the surrogate standard recovery is outside of acceptance limits.





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/27/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

### Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-17.5'	1505580-004A	Soil	05/13/2015 13:20	GC10	105422

Analytes	Result	RL	DF	Date Analyzed
Benzene	0.16	0.010	2	05/27/2015 19:53
1,2-Dichloroethane (1,2-DCA)	0.015	0.0080	2	05/27/2015 19:53
Ethylbenzene	0.11	0.010	2	05/27/2015 19:53
Methyl-t-butyl ether (MTBE)	ND	0.010	2	05/27/2015 19:53
Naphthalene	0.16	0.010	2	05/27/2015 19:53
Toluene	ND	0.010	2	05/27/2015 19:53
Xylenes, Total	0.17	0.010	2	05/27/2015 19:53

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	92	70-130	05/27/2015 19:53
Toluene-d8	92	70-130	05/27/2015 19:53
4-BFB	92	70-130	05/27/2015 19:53
Benzene-d6	65	60-140	05/27/2015 19:53
Ethylbenzene-d10	84	60-140	05/27/2015 19:53
1,2-DCB-d4	87	60-140	05/27/2015 19:53

Analyst(s): AK



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/27/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

## Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-17.5'	1505580-004A	Soil	05/13/2015 13:20	GC10	105422

Analytes	Result	RL	DF	Date Analyzed
Benzene	0.16	0.010	2	05/27/2015 19:53
1,2-Dichloroethane (1,2-DCA)	0.015	0.0080	2	05/27/2015 19:53
Ethylbenzene	0.11	0.010	2	05/27/2015 19:53
Methyl-t-butyl ether (MTBE)	ND	0.010	2	05/27/2015 19:53
Naphthalene	0.16	0.010	2	05/27/2015 19:53
Toluene	ND	0.010	2	05/27/2015 19:53
Xylenes, Total	0.17	0.010	2	05/27/2015 19:53

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	92	70-130	05/27/2015 19:53
Toluene-d8	92	70-130	05/27/2015 19:53
4-BFB	92	70-130	05/27/2015 19:53
Benzene-d6	65	60-140	05/27/2015 19:53
Ethylbenzene-d10	84	60-140	05/27/2015 19:53
1,2-DCB-d4	87	60-140	05/27/2015 19:53

Analyst(s): AK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/27/15

**WorkOrder:** 1505580  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-17.5'	1505580-004A	Soil	05/13/2015 13:20	GC7	105448

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	13	1.0	1	05/27/2015 18:50
MTBE	---	0.050	1	05/27/2015 18:50
Benzene	---	0.0050	1	05/27/2015 18:50
Toluene	---	0.0050	1	05/27/2015 18:50
Ethylbenzene	---	0.0050	1	05/27/2015 18:50
Xylenes	---	0.0050	1	05/27/2015 18:50

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	96	70-130	05/27/2015 18:50

**Analyst(s):** SS

**Analytical Comments:** d1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3090 Broadway  
**Date Received:** 5/14/15 19:38  
**Date Prepared:** 5/27/15

**WorkOrder:** 1505580  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

## Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-18-17.5'	1505580-004A	Soil	05/13/2015 13:20	GC11A	105464

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2.0	1.0	1	05/28/2015 21:34

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	70-130	05/28/2015 21:34

**Analyst(s):** HD      **Analytical Comments:** e4



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/26/15  
**Date Analyzed:** 5/27/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 105422  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105422  
 1505989-001AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0348	0.0050	0.050	-	70	53-116
Benzene	ND	0.0397	0.0050	0.050	-	79	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.137	0.050	0.20	-	68	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0430	0.0050	0.050	-	86	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0379	0.0040	0.050	-	76	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0373	0.0040	0.050	-	75	58-135
1,1-Dichloroethene	ND	0.0392	0.0050	0.050	-	78	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/26/15  
**Date Analyzed:** 5/27/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 105422  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105422  
 1505989-001AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0380	0.0050	0.050	-	76	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0367	0.0050	0.050	-	73	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0345	0.0050	0.050	-	69	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0446	0.0050	0.050	-	89	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0428	0.0050	0.050	-	86	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.105	0.105		0.12	84	84	70-130
Toluene-d8	0.116	0.115		0.12	93	92	70-130
4-BFB	0.0112	0.0117		0.012	90	93	70-130
Benzene-d6	0.0733	0.0628		0.10	73	63	60-140
Ethylbenzene-d10	0.0917	0.0822		0.10	92	82	60-140
1,2-DCB-d4	0.0724	0.0697		0.10	72	70	60-140

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/26/15  
**Date Analyzed:** 5/27/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 105422  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105422  
 1505989-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0332	0.0326	0.050	ND	66,F1	65,F1	70-130	1.71	20
Benzene	0.0374	0.0370	0.050	ND	75	74	70-130	1.08	20
t-Butyl alcohol (TBA)	0.127	0.125	0.20	ND	63,F1	63,F1	70-130	0	20
Chlorobenzene	0.0409	0.0401	0.050	ND	82	80	70-130	2.08	20
1,2-Dibromoethane (EDB)	0.0361	0.0356	0.050	ND	72	71	70-130	1.28	20
1,2-Dichloroethane (1,2-DCA)	0.0355	0.0347	0.050	ND	71	69,F1	70-130	2.28	20
1,1-Dichloroethene	0.0366	0.0353	0.050	ND	73	71	70-130	3.61	20
Diisopropyl ether (DIPE)	0.0358	0.0352	0.050	ND	72	70	70-130	1.80	20
Ethyl tert-butyl ether (ETBE)	0.0347	0.0344	0.050	ND	69,F1	69,F1	70-130	0	20
Methyl-t-butyl ether (MTBE)	0.0333	0.0322	0.050	ND	67,F1	64,F1	70-130	3.34	20
Toluene	0.0417	0.0405	0.050	ND	83	81	70-130	2.89	20
Trichloroethene	0.0408	0.0392	0.050	ND	82	78	70-130	4.03	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.105	0.104	0.12		84	83	70-130	0.719	20
Toluene-d8	0.112	0.111	0.12		90	89	70-130	0.806	20
4-BFB	0.0113	0.0117	0.012		91	94	70-130	3.37	20
Benzene-d6	0.0599	0.0590	0.10		60	59,F3	60-140	1.61	20
Ethylbenzene-d10	0.0788	0.0771	0.10		79	77	60-140	2.31	20
1,2-DCB-d4	0.0694	0.0686	0.10		69	69	60-140	0	20



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/27/15  
**Date Analyzed:** 5/27/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 105448  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105448  
 1505A25-001AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.578	0.40	0.60	-	96	70-130
MTBE	ND	0.0927	0.050	0.10	-	93	70-130
Benzene	ND	0.0987	0.0050	0.10	-	99	70-130
Toluene	ND	0.0965	0.0050	0.10	-	96	70-130
Ethylbenzene	ND	0.104	0.0050	0.10	-	104	70-130
Xylenes	ND	0.326	0.0050	0.30	-	109	70-130

### Surrogate Recovery

2-Fluorotoluene	0.110	0.106		0.10	110	105	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.528	0.492	0.60	ND	88	82	70-130	6.99	20
MTBE	0.0853	0.0843	0.10	ND	85	84	70-130	1.21	20
Benzene	0.0802	0.0878	0.10	ND	80	88	70-130	9.05	20
Toluene	0.0823	0.0879	0.10	ND	82	88	70-130	6.58	20
Ethylbenzene	0.0905	0.0949	0.10	ND	91	95	70-130	4.72	20
Xylenes	0.287	0.290	0.30	ND	96	97	70-130	0.929	20

### Surrogate Recovery

2-Fluorotoluene	0.0882	0.0960	0.10		88	96	70-130	8.47	20
-----------------	--------	--------	------	--	----	----	--------	------	----





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/27/15  
**Date Analyzed:** 5/28/15  
**Instrument:** GC11A  
**Matrix:** Soil  
**Project:** #731637001; 3090 Broadway

**WorkOrder:** 1505580  
**BatchID:** 105464  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105464  
 1505580-004AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	38.6	1.0	40	-	95	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	24.5	24.5		25	98	98	70-130
----	------	------	--	----	----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	42.1	40.4	40	1.984	100	96	70-130	4.15	30

**Surrogate Recovery**

C9	24.8	24.4	25		99	98	70-130	1.77	30
----	------	------	----	--	----	----	--------	------	----



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505580 **A** ClientCode: TWRF

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  Fax  
 Email  
 HardCopy  
 ThirdParty  
 J-flag

**Report to:**  
 Adrian Angel  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 (415) 955-5200    FAX: (415) 955-9041

Email: aangel@langan.com  
 cc/3rd Party:  
 PO:  
 ProjectNo: #731637001; 3090 Broadway

**Bill to:**  
 Accounts Payable  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 Langan\_InvoiceCapture@concur.soluio

**Requested TAT: 5 days**  
**Date Received: 05/14/2015**  
**Date Add-On: 05/27/2015**  
**Date Printed: 05/27/2015**

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	
1505580-004	MW-18-17.5'	Soil	5/13/2015 13:20	<input type="checkbox"/>	A	A	A										

**Test Legend:**

1	8260VOC_S	2	G-MBTEX_S	3	TPH(D)WSG_S	4		5	
6		7		8		9		10	
11		12							

**Prepared by: Maria Venegas**  
**Add-On Prepared By: Maria Venegas**

**Comments:**    SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505580

**Project:** #731637001; 3090 Broadway

**Client Contact:** Adrian Angel

**Date Received:** 5/14/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** aangel@langan.com

**Date Add-On:** 5/27/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505580-004A	MW-18-17.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	5/13/2015 13:20	5 days		<input type="checkbox"/>	
			SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>				5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1505580

## CHAIN OF CUSTODY RECORD

009085

Page \_\_\_ of \_\_\_

- 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Adrian Angel  
 Samplers: AA + ZT  
 Recorder (Signature Required): [Signature]

**Turnaround Time**

---

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks	
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH - gas (2015)	TPH - diesel (2015)	MIBTEX (2260)	Naphthalene	1,2-DCA									
MW-18-2.5'	5/13/15	0820		X																			X	Silica gel cleanup on all diesel	
MW-18-7.5'		1305																							
MW-18-12.5'		1313																							
MW-18-17.5'		1320																							
MW-18-21.5'		1330																							
MW-18-26.5'		1401																							
MW-18-31.5'		1410																							
MW-19-2.5'		MV 0820 08500																							
MW-19-7.5'		MV 1305 0910																							
MW-19-12.5'		MV 1313 0920																							
MW-19-14.0'		1316																							
MW-19-21.5' 221		MV 1330 09450																							
MW-19-26.5' 27.5'		MV 1401 0952																							
MW-19-31.5' 32.5'		MV 1410 1000																							

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/14/15</u>	Time <u>0140</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-14-15</u>	Time <u>1340</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-14-15</u>	Time <u>1615</u>	Received by: (Signature) <u>[Signature]</u>	Date	Time
Relinquished by: (Signature) <u>[Signature]</u>	Date	Time	Received by Lab: (Signature) <u>[Signature]</u>	Date <u>5/14/15</u>	Time <u>1615</u>

Sent to Laboratory (Name): \_\_\_\_\_  
 Laboratory Comments/Notes: \_\_\_\_\_

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name) \_\_\_\_\_

White Copy - Original      Yellow Copy - Laboratory

MW-19-17.5      5/13/15 0935 - Analyze for same as above.

ICE# 1505580  
 GOOD CONDITION \_\_\_\_\_  
 HEADSPACE ARSENITE \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 PRESERVATION VOAS O&G METALS OTHER

APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_  
 COC Number: \_\_\_\_\_



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505677

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/18/2015

Analytical Report reviewed & approved for release on 05/27/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505677

### Glossary Abbreviation

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



## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505677

### Analytical Qualifiers

S spike recovery outside accepted recovery limits  
a2 sample diluted due to cluttered chromatogram  
c1 surrogate recovery outside of the control limits due to the dilution of the sample.  
c2 surrogate recovery outside of the control limits due to matrix interference.  
d1 weakly modified or unmodified gasoline is significant  
d2 heavier gasoline range compounds are significant (aged gasoline?)  
d7 strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram  
e1 unmodified or weakly modified diesel is significant  
e2 diesel range compounds are significant; no recognizable pattern  
e3 aged diesel is significant  
e4 gasoline range compounds are significant.  
e7 oil range compounds are significant  
e11 stoddard solvent/mineral spirit (?)

### Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.  
F2 LCS recovery for this compound is outside of acceptance limits.



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC22	104997

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/19/2015 00:55
a-BHC	ND	0.0010	1	05/19/2015 00:55
b-BHC	ND	0.0010	1	05/19/2015 00:55
d-BHC	ND	0.0010	1	05/19/2015 00:55
g-BHC	ND	0.0010	1	05/19/2015 00:55
Chlordane (Technical)	ND	0.025	1	05/19/2015 00:55
a-Chlordane	ND	0.0010	1	05/19/2015 00:55
g-Chlordane	ND	0.0010	1	05/19/2015 00:55
p,p-DDD	ND	0.0010	1	05/19/2015 00:55
p,p-DDE	ND	0.0010	1	05/19/2015 00:55
p,p-DDT	ND	0.0010	1	05/19/2015 00:55
Dieldrin	ND	0.0010	1	05/19/2015 00:55
Endosulfan I	ND	0.0010	1	05/19/2015 00:55
Endosulfan II	ND	0.0010	1	05/19/2015 00:55
Endosulfan sulfate	ND	0.0010	1	05/19/2015 00:55
Endrin	ND	0.0010	1	05/19/2015 00:55
Endrin aldehyde	ND	0.0010	1	05/19/2015 00:55
Endrin ketone	ND	0.0010	1	05/19/2015 00:55
Heptachlor	ND	0.0010	1	05/19/2015 00:55
Heptachlor epoxide	ND	0.0010	1	05/19/2015 00:55
Hexachlorobenzene	ND	0.010	1	05/19/2015 00:55
Hexachlorocyclopentadiene	ND	0.020	1	05/19/2015 00:55
Methoxychlor	ND	0.0010	1	05/19/2015 00:55
Toxaphene	ND	0.050	1	05/19/2015 00:55
Aroclor1016	ND	0.050	1	05/19/2015 00:55
Aroclor1221	ND	0.050	1	05/19/2015 00:55
Aroclor1232	ND	0.050	1	05/19/2015 00:55
Aroclor1242	ND	0.050	1	05/19/2015 00:55
Aroclor1248	ND	0.050	1	05/19/2015 00:55
Aroclor1254	ND	0.050	1	05/19/2015 00:55
Aroclor1260	ND	0.050	1	05/19/2015 00:55
PCBs, total	ND	0.050	1	05/19/2015 00:55

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	100	70-130	05/19/2015 00:55

Analyst(s): CK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-22	1505677-002A	Soil	05/15/2015 10:05	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/23/2015 19:40
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/23/2015 19:40
Benzene	ND	0.0050	1	05/23/2015 19:40
Bromobenzene	ND	0.0050	1	05/23/2015 19:40
Bromochloromethane	ND	0.0050	1	05/23/2015 19:40
Bromodichloromethane	ND	0.0050	1	05/23/2015 19:40
Bromoform	ND	0.0050	1	05/23/2015 19:40
Bromomethane	ND	0.0050	1	05/23/2015 19:40
2-Butanone (MEK)	ND	0.020	1	05/23/2015 19:40
t-Butyl alcohol (TBA)	ND	0.050	1	05/23/2015 19:40
n-Butyl benzene	ND	0.0050	1	05/23/2015 19:40
sec-Butyl benzene	ND	0.0050	1	05/23/2015 19:40
tert-Butyl benzene	ND	0.0050	1	05/23/2015 19:40
Carbon Disulfide	ND	0.0050	1	05/23/2015 19:40
Carbon Tetrachloride	ND	0.0050	1	05/23/2015 19:40
Chlorobenzene	ND	0.0050	1	05/23/2015 19:40
Chloroethane	ND	0.0050	1	05/23/2015 19:40
Chloroform	ND	0.0050	1	05/23/2015 19:40
Chloromethane	ND	0.0050	1	05/23/2015 19:40
2-Chlorotoluene	ND	0.0050	1	05/23/2015 19:40
4-Chlorotoluene	ND	0.0050	1	05/23/2015 19:40
Dibromochloromethane	ND	0.0050	1	05/23/2015 19:40
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/23/2015 19:40
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/23/2015 19:40
Dibromomethane	ND	0.0050	1	05/23/2015 19:40
1,2-Dichlorobenzene	ND	0.0050	1	05/23/2015 19:40
1,3-Dichlorobenzene	ND	0.0050	1	05/23/2015 19:40
1,4-Dichlorobenzene	ND	0.0050	1	05/23/2015 19:40
Dichlorodifluoromethane	ND	0.0050	1	05/23/2015 19:40
1,1-Dichloroethane	ND	0.0050	1	05/23/2015 19:40
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/23/2015 19:40
1,1-Dichloroethene	ND	0.0050	1	05/23/2015 19:40
cis-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 19:40
trans-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 19:40
1,2-Dichloropropane	ND	0.0050	1	05/23/2015 19:40
1,3-Dichloropropane	ND	0.0050	1	05/23/2015 19:40
2,2-Dichloropropane	ND	0.0050	1	05/23/2015 19:40
1,1-Dichloropropene	ND	0.0050	1	05/23/2015 19:40

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-22	1505677-002A	Soil	05/15/2015 10:05	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/23/2015 19:40
trans-1,3-Dichloropropene	ND	0.0050	1	05/23/2015 19:40
Diisopropyl ether (DIPE)	ND	0.0050	1	05/23/2015 19:40
Ethylbenzene	ND	0.0050	1	05/23/2015 19:40
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/23/2015 19:40
Freon 113	ND	0.0050	1	05/23/2015 19:40
Hexachlorobutadiene	ND	0.0050	1	05/23/2015 19:40
Hexachloroethane	ND	0.0050	1	05/23/2015 19:40
2-Hexanone	ND	0.0050	1	05/23/2015 19:40
Isopropylbenzene	ND	0.0050	1	05/23/2015 19:40
4-Isopropyl toluene	ND	0.0050	1	05/23/2015 19:40
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/23/2015 19:40
Methylene chloride	ND	0.0050	1	05/23/2015 19:40
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/23/2015 19:40
Naphthalene	ND	0.0050	1	05/23/2015 19:40
n-Propyl benzene	ND	0.0050	1	05/23/2015 19:40
Styrene	ND	0.0050	1	05/23/2015 19:40
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/23/2015 19:40
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/23/2015 19:40
Tetrachloroethene	ND	0.0050	1	05/23/2015 19:40
Toluene	ND	0.0050	1	05/23/2015 19:40
1,2,3-Trichlorobenzene	ND	0.0050	1	05/23/2015 19:40
1,2,4-Trichlorobenzene	ND	0.0050	1	05/23/2015 19:40
1,1,1-Trichloroethane	ND	0.0050	1	05/23/2015 19:40
1,1,2-Trichloroethane	ND	0.0050	1	05/23/2015 19:40
Trichloroethene	ND	0.0050	1	05/23/2015 19:40
Trichlorofluoromethane	ND	0.0050	1	05/23/2015 19:40
1,2,3-Trichloropropane	ND	0.0050	1	05/23/2015 19:40
1,2,4-Trimethylbenzene	ND	0.0050	1	05/23/2015 19:40
1,3,5-Trimethylbenzene	ND	0.0050	1	05/23/2015 19:40
Vinyl Chloride	ND	0.0050	1	05/23/2015 19:40
Xylenes, Total	ND	0.0050	1	05/23/2015 19:40

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-22	1505677-002A	Soil	05/15/2015 10:05	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	107	70-130		05/23/2015 19:40
Toluene-d8	96	70-130		05/23/2015 19:40
4-BFB	116	70-130		05/23/2015 19:40
Benzene-d6	81	60-140		05/23/2015 19:40
Ethylbenzene-d10	93	60-140		05/23/2015 19:40
1,2-DCB-d4	75	60-140		05/23/2015 19:40

Analyst(s): KBO



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-24	1505677-003A	Soil	05/15/2015 10:10	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/23/2015 20:21
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/23/2015 20:21
Benzene	ND	0.0050	1	05/23/2015 20:21
Bromobenzene	ND	0.0050	1	05/23/2015 20:21
Bromochloromethane	ND	0.0050	1	05/23/2015 20:21
Bromodichloromethane	ND	0.0050	1	05/23/2015 20:21
Bromoform	ND	0.0050	1	05/23/2015 20:21
Bromomethane	ND	0.0050	1	05/23/2015 20:21
2-Butanone (MEK)	ND	0.020	1	05/23/2015 20:21
t-Butyl alcohol (TBA)	ND	0.050	1	05/23/2015 20:21
n-Butyl benzene	ND	0.0050	1	05/23/2015 20:21
sec-Butyl benzene	ND	0.0050	1	05/23/2015 20:21
tert-Butyl benzene	ND	0.0050	1	05/23/2015 20:21
Carbon Disulfide	ND	0.0050	1	05/23/2015 20:21
Carbon Tetrachloride	ND	0.0050	1	05/23/2015 20:21
Chlorobenzene	ND	0.0050	1	05/23/2015 20:21
Chloroethane	ND	0.0050	1	05/23/2015 20:21
Chloroform	ND	0.0050	1	05/23/2015 20:21
Chloromethane	ND	0.0050	1	05/23/2015 20:21
2-Chlorotoluene	ND	0.0050	1	05/23/2015 20:21
4-Chlorotoluene	ND	0.0050	1	05/23/2015 20:21
Dibromochloromethane	ND	0.0050	1	05/23/2015 20:21
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/23/2015 20:21
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/23/2015 20:21
Dibromomethane	ND	0.0050	1	05/23/2015 20:21
1,2-Dichlorobenzene	ND	0.0050	1	05/23/2015 20:21
1,3-Dichlorobenzene	ND	0.0050	1	05/23/2015 20:21
1,4-Dichlorobenzene	ND	0.0050	1	05/23/2015 20:21
Dichlorodifluoromethane	ND	0.0050	1	05/23/2015 20:21
1,1-Dichloroethane	ND	0.0050	1	05/23/2015 20:21
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/23/2015 20:21
1,1-Dichloroethene	ND	0.0050	1	05/23/2015 20:21
cis-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 20:21
trans-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 20:21
1,2-Dichloropropane	ND	0.0050	1	05/23/2015 20:21
1,3-Dichloropropane	ND	0.0050	1	05/23/2015 20:21
2,2-Dichloropropane	ND	0.0050	1	05/23/2015 20:21
1,1-Dichloropropene	ND	0.0050	1	05/23/2015 20:21

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-24	1505677-003A	Soil	05/15/2015 10:10	GC10	105009
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
cis-1,3-Dichloropropene	ND		0.0050	1	05/23/2015 20:21
trans-1,3-Dichloropropene	ND		0.0050	1	05/23/2015 20:21
Diisopropyl ether (DIPE)	ND		0.0050	1	05/23/2015 20:21
Ethylbenzene	ND		0.0050	1	05/23/2015 20:21
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	05/23/2015 20:21
Freon 113	ND		0.0050	1	05/23/2015 20:21
Hexachlorobutadiene	ND		0.0050	1	05/23/2015 20:21
Hexachloroethane	ND		0.0050	1	05/23/2015 20:21
2-Hexanone	ND		0.0050	1	05/23/2015 20:21
Isopropylbenzene	ND		0.0050	1	05/23/2015 20:21
4-Isopropyl toluene	ND		0.0050	1	05/23/2015 20:21
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	05/23/2015 20:21
Methylene chloride	ND		0.0050	1	05/23/2015 20:21
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	05/23/2015 20:21
Naphthalene	ND		0.0050	1	05/23/2015 20:21
n-Propyl benzene	ND		0.0050	1	05/23/2015 20:21
Styrene	ND		0.0050	1	05/23/2015 20:21
1,1,1,2-Tetrachloroethane	ND		0.0050	1	05/23/2015 20:21
1,1,2,2-Tetrachloroethane	ND		0.0050	1	05/23/2015 20:21
Tetrachloroethene	ND		0.0050	1	05/23/2015 20:21
Toluene	ND		0.0050	1	05/23/2015 20:21
1,2,3-Trichlorobenzene	ND		0.0050	1	05/23/2015 20:21
1,2,4-Trichlorobenzene	ND		0.0050	1	05/23/2015 20:21
1,1,1-Trichloroethane	ND		0.0050	1	05/23/2015 20:21
1,1,2-Trichloroethane	ND		0.0050	1	05/23/2015 20:21
Trichloroethene	ND		0.0050	1	05/23/2015 20:21
Trichlorofluoromethane	ND		0.0050	1	05/23/2015 20:21
1,2,3-Trichloropropane	ND		0.0050	1	05/23/2015 20:21
1,2,4-Trimethylbenzene	ND		0.0050	1	05/23/2015 20:21
1,3,5-Trimethylbenzene	ND		0.0050	1	05/23/2015 20:21
Vinyl Chloride	ND		0.0050	1	05/23/2015 20:21
Xylenes, Total	ND		0.0050	1	05/23/2015 20:21

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-24	1505677-003A	Soil	05/15/2015 10:10	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	105	70-130		05/23/2015 20:21
Toluene-d8	95	70-130		05/23/2015 20:21
4-BFB	123	70-130		05/23/2015 20:21
Benzene-d6	85	60-140		05/23/2015 20:21
Ethylbenzene-d10	94	60-140		05/23/2015 20:21
1,2-DCB-d4	82	60-140		05/23/2015 20:21

Analyst(s): KBO



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-26	1505677-004A	Soil	05/15/2015 10:15	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	1,000	05/23/2015 23:18
tert-Amyl methyl ether (TAME)	ND	5.0	1,000	05/23/2015 23:18
Benzene	ND	5.0	1,000	05/23/2015 23:18
Bromobenzene	ND	5.0	1,000	05/23/2015 23:18
Bromochloromethane	ND	5.0	1,000	05/23/2015 23:18
Bromodichloromethane	ND	5.0	1,000	05/23/2015 23:18
Bromoform	ND	5.0	1,000	05/23/2015 23:18
Bromomethane	ND	5.0	1,000	05/23/2015 23:18
2-Butanone (MEK)	ND	20	1,000	05/23/2015 23:18
t-Butyl alcohol (TBA)	ND	50	1,000	05/23/2015 23:18
n-Butyl benzene	17	5.0	1,000	05/23/2015 23:18
sec-Butyl benzene	ND	5.0	1,000	05/23/2015 23:18
tert-Butyl benzene	ND	5.0	1,000	05/23/2015 23:18
Carbon Disulfide	ND	5.0	1,000	05/23/2015 23:18
Carbon Tetrachloride	ND	5.0	1,000	05/23/2015 23:18
Chlorobenzene	ND	5.0	1,000	05/23/2015 23:18
Chloroethane	ND	5.0	1,000	05/23/2015 23:18
Chloroform	ND	5.0	1,000	05/23/2015 23:18
Chloromethane	ND	5.0	1,000	05/23/2015 23:18
2-Chlorotoluene	ND	5.0	1,000	05/23/2015 23:18
4-Chlorotoluene	ND	5.0	1,000	05/23/2015 23:18
Dibromochloromethane	ND	5.0	1,000	05/23/2015 23:18
1,2-Dibromo-3-chloropropane	ND	4.0	1,000	05/23/2015 23:18
1,2-Dibromoethane (EDB)	ND	4.0	1,000	05/23/2015 23:18
Dibromomethane	ND	5.0	1,000	05/23/2015 23:18
1,2-Dichlorobenzene	ND	5.0	1,000	05/23/2015 23:18
1,3-Dichlorobenzene	ND	5.0	1,000	05/23/2015 23:18
1,4-Dichlorobenzene	ND	5.0	1,000	05/23/2015 23:18
Dichlorodifluoromethane	ND	5.0	1,000	05/23/2015 23:18
1,1-Dichloroethane	ND	5.0	1,000	05/23/2015 23:18
1,2-Dichloroethane (1,2-DCA)	ND	4.0	1,000	05/23/2015 23:18
1,1-Dichloroethene	ND	5.0	1,000	05/23/2015 23:18
cis-1,2-Dichloroethene	ND	5.0	1,000	05/23/2015 23:18
trans-1,2-Dichloroethene	ND	5.0	1,000	05/23/2015 23:18
1,2-Dichloropropane	ND	5.0	1,000	05/23/2015 23:18
1,3-Dichloropropane	ND	5.0	1,000	05/23/2015 23:18
2,2-Dichloropropane	ND	5.0	1,000	05/23/2015 23:18
1,1-Dichloropropene	ND	5.0	1,000	05/23/2015 23:18

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-26	1505677-004A	Soil	05/15/2015 10:15	GC16	105009
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
cis-1,3-Dichloropropene	ND		5.0	1,000	05/23/2015 23:18
trans-1,3-Dichloropropene	ND		5.0	1,000	05/23/2015 23:18
Diisopropyl ether (DIPE)	ND		5.0	1,000	05/23/2015 23:18
Ethylbenzene	ND		5.0	1,000	05/23/2015 23:18
Ethyl tert-butyl ether (ETBE)	ND		5.0	1,000	05/23/2015 23:18
Freon 113	ND		5.0	1,000	05/23/2015 23:18
Hexachlorobutadiene	ND		5.0	1,000	05/23/2015 23:18
Hexachloroethane	ND		5.0	1,000	05/23/2015 23:18
2-Hexanone	ND		5.0	1,000	05/23/2015 23:18
Isopropylbenzene	ND		5.0	1,000	05/23/2015 23:18
4-Isopropyl toluene	<b>6.2</b>		5.0	1,000	05/23/2015 23:18
Methyl-t-butyl ether (MTBE)	ND		5.0	1,000	05/23/2015 23:18
Methylene chloride	ND		5.0	1,000	05/23/2015 23:18
4-Methyl-2-pentanone (MIBK)	ND		5.0	1,000	05/23/2015 23:18
Naphthalene	<b>25</b>		5.0	1,000	05/23/2015 23:18
n-Propyl benzene	<b>13</b>		5.0	1,000	05/23/2015 23:18
Styrene	ND		5.0	1,000	05/23/2015 23:18
1,1,1,2-Tetrachloroethane	ND		5.0	1,000	05/23/2015 23:18
1,1,2,2-Tetrachloroethane	ND		5.0	1,000	05/23/2015 23:18
Tetrachloroethene	ND		5.0	1,000	05/23/2015 23:18
Toluene	ND		5.0	1,000	05/23/2015 23:18
1,2,3-Trichlorobenzene	ND		5.0	1,000	05/23/2015 23:18
1,2,4-Trichlorobenzene	ND		5.0	1,000	05/23/2015 23:18
1,1,1-Trichloroethane	ND		5.0	1,000	05/23/2015 23:18
1,1,2-Trichloroethane	ND		5.0	1,000	05/23/2015 23:18
Trichloroethene	ND		5.0	1,000	05/23/2015 23:18
Trichlorofluoromethane	ND		5.0	1,000	05/23/2015 23:18
1,2,3-Trichloropropane	ND		5.0	1,000	05/23/2015 23:18
1,2,4-Trimethylbenzene	<b>130</b>		5.0	1,000	05/23/2015 23:18
1,3,5-Trimethylbenzene	<b>43</b>		5.0	1,000	05/23/2015 23:18
Vinyl Chloride	ND		5.0	1,000	05/23/2015 23:18
Xylenes, Total	<b>50</b>		5.0	1,000	05/23/2015 23:18

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-26	1505677-004A	Soil	05/15/2015 10:15	GC16	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	85		70-130		05/23/2015 23:18
Toluene-d8	83		70-130		05/23/2015 23:18
4-BFB	86		70-130		05/23/2015 23:18
Benzene-d6	145	S	60-140		05/23/2015 23:18
Ethylbenzene-d10	278	S	60-140		05/23/2015 23:18
1,2-DCB-d4	585	S	60-140		05/23/2015 23:18

Analyst(s): AK

Analytical Comments: c1



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-28	1505677-005A	Soil	05/15/2015 10:20	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	200	2,000	05/24/2015 00:01
tert-Amyl methyl ether (TAME)	ND	10	2,000	05/24/2015 00:01
Benzene	<b>14</b>	10	2,000	05/24/2015 00:01
Bromobenzene	ND	10	2,000	05/24/2015 00:01
Bromochloromethane	ND	10	2,000	05/24/2015 00:01
Bromodichloromethane	ND	10	2,000	05/24/2015 00:01
Bromoform	ND	10	2,000	05/24/2015 00:01
Bromomethane	ND	10	2,000	05/24/2015 00:01
2-Butanone (MEK)	ND	40	2,000	05/24/2015 00:01
t-Butyl alcohol (TBA)	ND	100	2,000	05/24/2015 00:01
n-Butyl benzene	<b>21</b>	10	2,000	05/24/2015 00:01
sec-Butyl benzene	ND	10	2,000	05/24/2015 00:01
tert-Butyl benzene	ND	10	2,000	05/24/2015 00:01
Carbon Disulfide	ND	10	2,000	05/24/2015 00:01
Carbon Tetrachloride	ND	10	2,000	05/24/2015 00:01
Chlorobenzene	ND	10	2,000	05/24/2015 00:01
Chloroethane	ND	10	2,000	05/24/2015 00:01
Chloroform	ND	10	2,000	05/24/2015 00:01
Chloromethane	ND	10	2,000	05/24/2015 00:01
2-Chlorotoluene	ND	10	2,000	05/24/2015 00:01
4-Chlorotoluene	ND	10	2,000	05/24/2015 00:01
Dibromochloromethane	ND	10	2,000	05/24/2015 00:01
1,2-Dibromo-3-chloropropane	ND	8.0	2,000	05/24/2015 00:01
1,2-Dibromoethane (EDB)	ND	8.0	2,000	05/24/2015 00:01
Dibromomethane	ND	10	2,000	05/24/2015 00:01
1,2-Dichlorobenzene	ND	10	2,000	05/24/2015 00:01
1,3-Dichlorobenzene	ND	10	2,000	05/24/2015 00:01
1,4-Dichlorobenzene	ND	10	2,000	05/24/2015 00:01
Dichlorodifluoromethane	ND	10	2,000	05/24/2015 00:01
1,1-Dichloroethane	ND	10	2,000	05/24/2015 00:01
1,2-Dichloroethane (1,2-DCA)	ND	8.0	2,000	05/24/2015 00:01
1,1-Dichloroethene	ND	10	2,000	05/24/2015 00:01
cis-1,2-Dichloroethene	ND	10	2,000	05/24/2015 00:01
trans-1,2-Dichloroethene	ND	10	2,000	05/24/2015 00:01
1,2-Dichloropropane	ND	10	2,000	05/24/2015 00:01
1,3-Dichloropropane	ND	10	2,000	05/24/2015 00:01
2,2-Dichloropropane	ND	10	2,000	05/24/2015 00:01
1,1-Dichloropropene	ND	10	2,000	05/24/2015 00:01

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-28	1505677-005A	Soil	05/15/2015 10:20	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	10	2,000	05/24/2015 00:01
trans-1,3-Dichloropropene	ND	10	2,000	05/24/2015 00:01
Diisopropyl ether (DIPE)	ND	10	2,000	05/24/2015 00:01
Ethylbenzene	<b>77</b>	10	2,000	05/24/2015 00:01
Ethyl tert-butyl ether (ETBE)	ND	10	2,000	05/24/2015 00:01
Freon 113	ND	10	2,000	05/24/2015 00:01
Hexachlorobutadiene	ND	10	2,000	05/24/2015 00:01
Hexachloroethane	ND	10	2,000	05/24/2015 00:01
2-Hexanone	ND	10	2,000	05/24/2015 00:01
Isopropylbenzene	<b>10</b>	10	2,000	05/24/2015 00:01
4-Isopropyl toluene	ND	10	2,000	05/24/2015 00:01
Methyl-t-butyl ether (MTBE)	ND	10	2,000	05/24/2015 00:01
Methylene chloride	ND	10	2,000	05/24/2015 00:01
4-Methyl-2-pentanone (MIBK)	ND	10	2,000	05/24/2015 00:01
Naphthalene	<b>40</b>	10	2,000	05/24/2015 00:01
n-Propyl benzene	<b>40</b>	10	2,000	05/24/2015 00:01
Styrene	ND	10	2,000	05/24/2015 00:01
1,1,1,2-Tetrachloroethane	ND	10	2,000	05/24/2015 00:01
1,1,2,2-Tetrachloroethane	ND	10	2,000	05/24/2015 00:01
Tetrachloroethene	ND	10	2,000	05/24/2015 00:01
Toluene	<b>210</b>	10	2,000	05/24/2015 00:01
1,2,3-Trichlorobenzene	ND	10	2,000	05/24/2015 00:01
1,2,4-Trichlorobenzene	ND	10	2,000	05/24/2015 00:01
1,1,1-Trichloroethane	ND	10	2,000	05/24/2015 00:01
1,1,2-Trichloroethane	ND	10	2,000	05/24/2015 00:01
Trichloroethene	ND	10	2,000	05/24/2015 00:01
Trichlorofluoromethane	ND	10	2,000	05/24/2015 00:01
1,2,3-Trichloropropane	ND	10	2,000	05/24/2015 00:01
1,2,4-Trimethylbenzene	<b>220</b>	10	2,000	05/24/2015 00:01
1,3,5-Trimethylbenzene	<b>75</b>	10	2,000	05/24/2015 00:01
Vinyl Chloride	ND	10	2,000	05/24/2015 00:01
Xylenes, Total	<b>390</b>	10	2,000	05/24/2015 00:01

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-28	1505677-005A	Soil	05/15/2015 10:20	GC16	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	87		70-130		05/24/2015 00:01
Toluene-d8	83		70-130		05/24/2015 00:01
4-BFB	87		70-130		05/24/2015 00:01
Benzene-d6	136		60-140		05/24/2015 00:01
Ethylbenzene-d10	303	S	60-140		05/24/2015 00:01
1,2-DCB-d4	488	S	60-140		05/24/2015 00:01

Analyst(s): AK

Analytical Comments: c1



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-30	1505677-006A	Soil	05/15/2015 10:25	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	1,000	05/24/2015 00:43
tert-Amyl methyl ether (TAME)	ND	5.0	1,000	05/24/2015 00:43
Benzene	ND	5.0	1,000	05/24/2015 00:43
Bromobenzene	ND	5.0	1,000	05/24/2015 00:43
Bromochloromethane	ND	5.0	1,000	05/24/2015 00:43
Bromodichloromethane	ND	5.0	1,000	05/24/2015 00:43
Bromoform	ND	5.0	1,000	05/24/2015 00:43
Bromomethane	ND	5.0	1,000	05/24/2015 00:43
2-Butanone (MEK)	ND	20	1,000	05/24/2015 00:43
t-Butyl alcohol (TBA)	ND	50	1,000	05/24/2015 00:43
n-Butyl benzene	11	5.0	1,000	05/24/2015 00:43
sec-Butyl benzene	ND	5.0	1,000	05/24/2015 00:43
tert-Butyl benzene	ND	5.0	1,000	05/24/2015 00:43
Carbon Disulfide	ND	5.0	1,000	05/24/2015 00:43
Carbon Tetrachloride	ND	5.0	1,000	05/24/2015 00:43
Chlorobenzene	ND	5.0	1,000	05/24/2015 00:43
Chloroethane	ND	5.0	1,000	05/24/2015 00:43
Chloroform	ND	5.0	1,000	05/24/2015 00:43
Chloromethane	ND	5.0	1,000	05/24/2015 00:43
2-Chlorotoluene	ND	5.0	1,000	05/24/2015 00:43
4-Chlorotoluene	ND	5.0	1,000	05/24/2015 00:43
Dibromochloromethane	ND	5.0	1,000	05/24/2015 00:43
1,2-Dibromo-3-chloropropane	ND	4.0	1,000	05/24/2015 00:43
1,2-Dibromoethane (EDB)	ND	4.0	1,000	05/24/2015 00:43
Dibromomethane	ND	5.0	1,000	05/24/2015 00:43
1,2-Dichlorobenzene	ND	5.0	1,000	05/24/2015 00:43
1,3-Dichlorobenzene	ND	5.0	1,000	05/24/2015 00:43
1,4-Dichlorobenzene	ND	5.0	1,000	05/24/2015 00:43
Dichlorodifluoromethane	ND	5.0	1,000	05/24/2015 00:43
1,1-Dichloroethane	ND	5.0	1,000	05/24/2015 00:43
1,2-Dichloroethane (1,2-DCA)	ND	4.0	1,000	05/24/2015 00:43
1,1-Dichloroethene	ND	5.0	1,000	05/24/2015 00:43
cis-1,2-Dichloroethene	ND	5.0	1,000	05/24/2015 00:43
trans-1,2-Dichloroethene	ND	5.0	1,000	05/24/2015 00:43
1,2-Dichloropropane	ND	5.0	1,000	05/24/2015 00:43
1,3-Dichloropropane	ND	5.0	1,000	05/24/2015 00:43
2,2-Dichloropropane	ND	5.0	1,000	05/24/2015 00:43
1,1-Dichloropropene	ND	5.0	1,000	05/24/2015 00:43

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-30	1505677-006A	Soil	05/15/2015 10:25	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	5.0	1,000	05/24/2015 00:43
trans-1,3-Dichloropropene	ND	5.0	1,000	05/24/2015 00:43
Diisopropyl ether (DIPE)	ND	5.0	1,000	05/24/2015 00:43
Ethylbenzene	13	5.0	1,000	05/24/2015 00:43
Ethyl tert-butyl ether (ETBE)	ND	5.0	1,000	05/24/2015 00:43
Freon 113	ND	5.0	1,000	05/24/2015 00:43
Hexachlorobutadiene	ND	5.0	1,000	05/24/2015 00:43
Hexachloroethane	ND	5.0	1,000	05/24/2015 00:43
2-Hexanone	ND	5.0	1,000	05/24/2015 00:43
Isopropylbenzene	ND	5.0	1,000	05/24/2015 00:43
4-Isopropyl toluene	ND	5.0	1,000	05/24/2015 00:43
Methyl-t-butyl ether (MTBE)	ND	5.0	1,000	05/24/2015 00:43
Methylene chloride	ND	5.0	1,000	05/24/2015 00:43
4-Methyl-2-pentanone (MIBK)	ND	5.0	1,000	05/24/2015 00:43
Naphthalene	8.7	5.0	1,000	05/24/2015 00:43
n-Propyl benzene	14	5.0	1,000	05/24/2015 00:43
Styrene	ND	5.0	1,000	05/24/2015 00:43
1,1,1,2-Tetrachloroethane	ND	5.0	1,000	05/24/2015 00:43
1,1,2,2-Tetrachloroethane	ND	5.0	1,000	05/24/2015 00:43
Tetrachloroethene	ND	5.0	1,000	05/24/2015 00:43
Toluene	ND	5.0	1,000	05/24/2015 00:43
1,2,3-Trichlorobenzene	ND	5.0	1,000	05/24/2015 00:43
1,2,4-Trichlorobenzene	ND	5.0	1,000	05/24/2015 00:43
1,1,1-Trichloroethane	ND	5.0	1,000	05/24/2015 00:43
1,1,2-Trichloroethane	ND	5.0	1,000	05/24/2015 00:43
Trichloroethene	ND	5.0	1,000	05/24/2015 00:43
Trichlorofluoromethane	ND	5.0	1,000	05/24/2015 00:43
1,2,3-Trichloropropane	ND	5.0	1,000	05/24/2015 00:43
1,2,4-Trimethylbenzene	82	5.0	1,000	05/24/2015 00:43
1,3,5-Trimethylbenzene	28	5.0	1,000	05/24/2015 00:43
Vinyl Chloride	ND	5.0	1,000	05/24/2015 00:43
Xylenes, Total	43	5.0	1,000	05/24/2015 00:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-30	1505677-006A	Soil	05/15/2015 10:25	GC16	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	86		70-130		05/24/2015 00:43
Toluene-d8	83		70-130		05/24/2015 00:43
4-BFB	91		70-130		05/24/2015 00:43
Benzene-d6	107		60-140		05/24/2015 00:43
Ethylbenzene-d10	246	S	60-140		05/24/2015 00:43
1,2-DCB-d4	195	S	60-140		05/24/2015 00:43

Analyst(s): AK

Analytical Comments: c1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-32	1505677-007A	Soil	05/15/2015 10:30	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/26/2015 17:20
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/26/2015 17:20
Benzene	<b>0.0055</b>	0.0050	1	05/26/2015 17:20
Bromobenzene	ND	0.0050	1	05/26/2015 17:20
Bromochloromethane	ND	0.0050	1	05/26/2015 17:20
Bromodichloromethane	ND	0.0050	1	05/26/2015 17:20
Bromoform	ND	0.0050	1	05/26/2015 17:20
Bromomethane	ND	0.0050	1	05/26/2015 17:20
2-Butanone (MEK)	ND	0.020	1	05/26/2015 17:20
t-Butyl alcohol (TBA)	ND	0.050	1	05/26/2015 17:20
n-Butyl benzene	ND	0.0050	1	05/26/2015 17:20
sec-Butyl benzene	ND	0.0050	1	05/26/2015 17:20
tert-Butyl benzene	ND	0.0050	1	05/26/2015 17:20
Carbon Disulfide	ND	0.0050	1	05/26/2015 17:20
Carbon Tetrachloride	ND	0.0050	1	05/26/2015 17:20
Chlorobenzene	ND	0.0050	1	05/26/2015 17:20
Chloroethane	ND	0.0050	1	05/26/2015 17:20
Chloroform	ND	0.0050	1	05/26/2015 17:20
Chloromethane	ND	0.0050	1	05/26/2015 17:20
2-Chlorotoluene	ND	0.0050	1	05/26/2015 17:20
4-Chlorotoluene	ND	0.0050	1	05/26/2015 17:20
Dibromochloromethane	ND	0.0050	1	05/26/2015 17:20
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/26/2015 17:20
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/26/2015 17:20
Dibromomethane	ND	0.0050	1	05/26/2015 17:20
1,2-Dichlorobenzene	ND	0.0050	1	05/26/2015 17:20
1,3-Dichlorobenzene	ND	0.0050	1	05/26/2015 17:20
1,4-Dichlorobenzene	ND	0.0050	1	05/26/2015 17:20
Dichlorodifluoromethane	ND	0.0050	1	05/26/2015 17:20
1,1-Dichloroethane	ND	0.0050	1	05/26/2015 17:20
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/26/2015 17:20
1,1-Dichloroethene	ND	0.0050	1	05/26/2015 17:20
cis-1,2-Dichloroethene	ND	0.0050	1	05/26/2015 17:20
trans-1,2-Dichloroethene	ND	0.0050	1	05/26/2015 17:20
1,2-Dichloropropane	ND	0.0050	1	05/26/2015 17:20
1,3-Dichloropropane	ND	0.0050	1	05/26/2015 17:20
2,2-Dichloropropane	ND	0.0050	1	05/26/2015 17:20
1,1-Dichloropropene	ND	0.0050	1	05/26/2015 17:20

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-32	1505677-007A	Soil	05/15/2015 10:30	GC16	105009
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
cis-1,3-Dichloropropene	ND		0.0050	1	05/26/2015 17:20
trans-1,3-Dichloropropene	ND		0.0050	1	05/26/2015 17:20
Diisopropyl ether (DIPE)	ND		0.0050	1	05/26/2015 17:20
Ethylbenzene	<b>0.0090</b>		0.0050	1	05/26/2015 17:20
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	05/26/2015 17:20
Freon 113	ND		0.0050	1	05/26/2015 17:20
Hexachlorobutadiene	ND		0.0050	1	05/26/2015 17:20
Hexachloroethane	ND		0.0050	1	05/26/2015 17:20
2-Hexanone	ND		0.0050	1	05/26/2015 17:20
Isopropylbenzene	ND		0.0050	1	05/26/2015 17:20
4-Isopropyl toluene	ND		0.0050	1	05/26/2015 17:20
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	05/26/2015 17:20
Methylene chloride	ND		0.0050	1	05/26/2015 17:20
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	05/26/2015 17:20
Naphthalene	ND		0.0050	1	05/26/2015 17:20
n-Propyl benzene	<b>0.0072</b>		0.0050	1	05/26/2015 17:20
Styrene	ND		0.0050	1	05/26/2015 17:20
1,1,1,2-Tetrachloroethane	ND		0.0050	1	05/26/2015 17:20
1,1,2,2-Tetrachloroethane	ND		0.0050	1	05/26/2015 17:20
Tetrachloroethene	ND		0.0050	1	05/26/2015 17:20
Toluene	ND		0.0050	1	05/26/2015 17:20
1,2,3-Trichlorobenzene	ND		0.0050	1	05/26/2015 17:20
1,2,4-Trichlorobenzene	ND		0.0050	1	05/26/2015 17:20
1,1,1-Trichloroethane	ND		0.0050	1	05/26/2015 17:20
1,1,2-Trichloroethane	ND		0.0050	1	05/26/2015 17:20
Trichloroethene	ND		0.0050	1	05/26/2015 17:20
Trichlorofluoromethane	ND		0.0050	1	05/26/2015 17:20
1,2,3-Trichloropropane	ND		0.0050	1	05/26/2015 17:20
1,2,4-Trimethylbenzene	ND		0.0050	1	05/26/2015 17:20
1,3,5-Trimethylbenzene	ND		0.0050	1	05/26/2015 17:20
Vinyl Chloride	ND		0.0050	1	05/26/2015 17:20
Xylenes, Total	ND		0.0050	1	05/26/2015 17:20

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-32	1505677-007A	Soil	05/15/2015 10:30	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/26/2015 17:20
Toluene-d8	89	70-130		05/26/2015 17:20
4-BFB	92	70-130		05/26/2015 17:20
Benzene-d6	72	60-140		05/26/2015 17:20
Ethylbenzene-d10	90	60-140		05/26/2015 17:20
1,2-DCB-d4	71	60-140		05/26/2015 17:20

Analyst(s): AK



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-34	1505677-008A	Soil	05/15/2015 10:35	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/23/2015 21:43
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/23/2015 21:43
Benzene	ND	0.0050	1	05/23/2015 21:43
Bromobenzene	ND	0.0050	1	05/23/2015 21:43
Bromochloromethane	ND	0.0050	1	05/23/2015 21:43
Bromodichloromethane	ND	0.0050	1	05/23/2015 21:43
Bromoform	ND	0.0050	1	05/23/2015 21:43
Bromomethane	ND	0.0050	1	05/23/2015 21:43
2-Butanone (MEK)	ND	0.020	1	05/23/2015 21:43
t-Butyl alcohol (TBA)	ND	0.050	1	05/23/2015 21:43
n-Butyl benzene	ND	0.0050	1	05/23/2015 21:43
sec-Butyl benzene	ND	0.0050	1	05/23/2015 21:43
tert-Butyl benzene	ND	0.0050	1	05/23/2015 21:43
Carbon Disulfide	ND	0.0050	1	05/23/2015 21:43
Carbon Tetrachloride	ND	0.0050	1	05/23/2015 21:43
Chlorobenzene	ND	0.0050	1	05/23/2015 21:43
Chloroethane	ND	0.0050	1	05/23/2015 21:43
Chloroform	ND	0.0050	1	05/23/2015 21:43
Chloromethane	ND	0.0050	1	05/23/2015 21:43
2-Chlorotoluene	ND	0.0050	1	05/23/2015 21:43
4-Chlorotoluene	ND	0.0050	1	05/23/2015 21:43
Dibromochloromethane	ND	0.0050	1	05/23/2015 21:43
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/23/2015 21:43
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/23/2015 21:43
Dibromomethane	ND	0.0050	1	05/23/2015 21:43
1,2-Dichlorobenzene	ND	0.0050	1	05/23/2015 21:43
1,3-Dichlorobenzene	ND	0.0050	1	05/23/2015 21:43
1,4-Dichlorobenzene	ND	0.0050	1	05/23/2015 21:43
Dichlorodifluoromethane	ND	0.0050	1	05/23/2015 21:43
1,1-Dichloroethane	ND	0.0050	1	05/23/2015 21:43
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/23/2015 21:43
1,1-Dichloroethene	ND	0.0050	1	05/23/2015 21:43
cis-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 21:43
trans-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 21:43
1,2-Dichloropropane	ND	0.0050	1	05/23/2015 21:43
1,3-Dichloropropane	ND	0.0050	1	05/23/2015 21:43
2,2-Dichloropropane	ND	0.0050	1	05/23/2015 21:43
1,1-Dichloropropene	ND	0.0050	1	05/23/2015 21:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-34	1505677-008A	Soil	05/15/2015 10:35	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/23/2015 21:43
trans-1,3-Dichloropropene	ND	0.0050	1	05/23/2015 21:43
Diisopropyl ether (DIPE)	ND	0.0050	1	05/23/2015 21:43
Ethylbenzene	ND	0.0050	1	05/23/2015 21:43
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/23/2015 21:43
Freon 113	ND	0.0050	1	05/23/2015 21:43
Hexachlorobutadiene	ND	0.0050	1	05/23/2015 21:43
Hexachloroethane	ND	0.0050	1	05/23/2015 21:43
2-Hexanone	ND	0.0050	1	05/23/2015 21:43
Isopropylbenzene	ND	0.0050	1	05/23/2015 21:43
4-Isopropyl toluene	ND	0.0050	1	05/23/2015 21:43
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/23/2015 21:43
Methylene chloride	ND	0.0050	1	05/23/2015 21:43
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/23/2015 21:43
Naphthalene	ND	0.0050	1	05/23/2015 21:43
n-Propyl benzene	ND	0.0050	1	05/23/2015 21:43
Styrene	ND	0.0050	1	05/23/2015 21:43
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/23/2015 21:43
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/23/2015 21:43
Tetrachloroethene	ND	0.0050	1	05/23/2015 21:43
Toluene	ND	0.0050	1	05/23/2015 21:43
1,2,3-Trichlorobenzene	ND	0.0050	1	05/23/2015 21:43
1,2,4-Trichlorobenzene	ND	0.0050	1	05/23/2015 21:43
1,1,1-Trichloroethane	ND	0.0050	1	05/23/2015 21:43
1,1,2-Trichloroethane	ND	0.0050	1	05/23/2015 21:43
Trichloroethene	ND	0.0050	1	05/23/2015 21:43
Trichlorofluoromethane	ND	0.0050	1	05/23/2015 21:43
1,2,3-Trichloropropane	ND	0.0050	1	05/23/2015 21:43
1,2,4-Trimethylbenzene	ND	0.0050	1	05/23/2015 21:43
1,3,5-Trimethylbenzene	ND	0.0050	1	05/23/2015 21:43
Vinyl Chloride	ND	0.0050	1	05/23/2015 21:43
Xylenes, Total	ND	0.0050	1	05/23/2015 21:43

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-34	1505677-008A	Soil	05/15/2015 10:35	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	103	70-130		05/23/2015 21:43
Toluene-d8	95	70-130		05/23/2015 21:43
4-BFB	122	70-130		05/23/2015 21:43
Benzene-d6	85	60-140		05/23/2015 21:43
Ethylbenzene-d10	94	60-140		05/23/2015 21:43
1,2-DCB-d4	84	60-140		05/23/2015 21:43

Analyst(s): KBO



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-36	1505677-009A	Soil	05/15/2015 10:40	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/26/2015 18:03
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/26/2015 18:03
Benzene	ND	0.0050	1	05/26/2015 18:03
Bromobenzene	ND	0.0050	1	05/26/2015 18:03
Bromochloromethane	ND	0.0050	1	05/26/2015 18:03
Bromodichloromethane	ND	0.0050	1	05/26/2015 18:03
Bromoform	ND	0.0050	1	05/26/2015 18:03
Bromomethane	ND	0.0050	1	05/26/2015 18:03
2-Butanone (MEK)	ND	0.020	1	05/26/2015 18:03
t-Butyl alcohol (TBA)	ND	0.050	1	05/26/2015 18:03
n-Butyl benzene	ND	0.0050	1	05/26/2015 18:03
sec-Butyl benzene	ND	0.0050	1	05/26/2015 18:03
tert-Butyl benzene	ND	0.0050	1	05/26/2015 18:03
Carbon Disulfide	ND	0.0050	1	05/26/2015 18:03
Carbon Tetrachloride	ND	0.0050	1	05/26/2015 18:03
Chlorobenzene	ND	0.0050	1	05/26/2015 18:03
Chloroethane	ND	0.0050	1	05/26/2015 18:03
Chloroform	ND	0.0050	1	05/26/2015 18:03
Chloromethane	ND	0.0050	1	05/26/2015 18:03
2-Chlorotoluene	ND	0.0050	1	05/26/2015 18:03
4-Chlorotoluene	ND	0.0050	1	05/26/2015 18:03
Dibromochloromethane	ND	0.0050	1	05/26/2015 18:03
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/26/2015 18:03
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/26/2015 18:03
Dibromomethane	ND	0.0050	1	05/26/2015 18:03
1,2-Dichlorobenzene	ND	0.0050	1	05/26/2015 18:03
1,3-Dichlorobenzene	ND	0.0050	1	05/26/2015 18:03
1,4-Dichlorobenzene	ND	0.0050	1	05/26/2015 18:03
Dichlorodifluoromethane	ND	0.0050	1	05/26/2015 18:03
1,1-Dichloroethane	ND	0.0050	1	05/26/2015 18:03
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/26/2015 18:03
1,1-Dichloroethene	ND	0.0050	1	05/26/2015 18:03
cis-1,2-Dichloroethene	ND	0.0050	1	05/26/2015 18:03
trans-1,2-Dichloroethene	ND	0.0050	1	05/26/2015 18:03
1,2-Dichloropropane	ND	0.0050	1	05/26/2015 18:03
1,3-Dichloropropane	ND	0.0050	1	05/26/2015 18:03
2,2-Dichloropropane	ND	0.0050	1	05/26/2015 18:03
1,1-Dichloropropene	ND	0.0050	1	05/26/2015 18:03

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-36	1505677-009A	Soil	05/15/2015 10:40	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/26/2015 18:03
trans-1,3-Dichloropropene	ND	0.0050	1	05/26/2015 18:03
Diisopropyl ether (DIPE)	ND	0.0050	1	05/26/2015 18:03
Ethylbenzene	ND	0.0050	1	05/26/2015 18:03
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/26/2015 18:03
Freon 113	ND	0.0050	1	05/26/2015 18:03
Hexachlorobutadiene	ND	0.0050	1	05/26/2015 18:03
Hexachloroethane	ND	0.0050	1	05/26/2015 18:03
2-Hexanone	ND	0.0050	1	05/26/2015 18:03
Isopropylbenzene	ND	0.0050	1	05/26/2015 18:03
4-Isopropyl toluene	ND	0.0050	1	05/26/2015 18:03
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/26/2015 18:03
Methylene chloride	ND	0.0050	1	05/26/2015 18:03
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/26/2015 18:03
Naphthalene	ND	0.0050	1	05/26/2015 18:03
n-Propyl benzene	ND	0.0050	1	05/26/2015 18:03
Styrene	ND	0.0050	1	05/26/2015 18:03
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/26/2015 18:03
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/26/2015 18:03
Tetrachloroethene	ND	0.0050	1	05/26/2015 18:03
Toluene	ND	0.0050	1	05/26/2015 18:03
1,2,3-Trichlorobenzene	ND	0.0050	1	05/26/2015 18:03
1,2,4-Trichlorobenzene	ND	0.0050	1	05/26/2015 18:03
1,1,1-Trichloroethane	ND	0.0050	1	05/26/2015 18:03
1,1,2-Trichloroethane	ND	0.0050	1	05/26/2015 18:03
Trichloroethene	ND	0.0050	1	05/26/2015 18:03
Trichlorofluoromethane	ND	0.0050	1	05/26/2015 18:03
1,2,3-Trichloropropane	ND	0.0050	1	05/26/2015 18:03
1,2,4-Trimethylbenzene	ND	0.0050	1	05/26/2015 18:03
1,3,5-Trimethylbenzene	ND	0.0050	1	05/26/2015 18:03
Vinyl Chloride	ND	0.0050	1	05/26/2015 18:03
Xylenes, Total	ND	0.0050	1	05/26/2015 18:03

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-36	1505677-009A	Soil	05/15/2015 10:40	GC16	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	81	70-130		05/26/2015 18:03
Toluene-d8	92	70-130		05/26/2015 18:03
4-BFB	87	70-130		05/26/2015 18:03
Benzene-d6	71	60-140		05/26/2015 18:03
Ethylbenzene-d10	85	60-140		05/26/2015 18:03
1,2-DCB-d4	69	60-140		05/26/2015 18:03

Analyst(s): AK





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-38	1505677-010A	Soil	05/15/2015 10:45	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/27/2015 08:11
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/27/2015 08:11
Benzene	ND	0.0050	1	05/27/2015 08:11
Bromobenzene	ND	0.0050	1	05/27/2015 08:11
Bromochloromethane	ND	0.0050	1	05/27/2015 08:11
Bromodichloromethane	ND	0.0050	1	05/27/2015 08:11
Bromoform	ND	0.0050	1	05/27/2015 08:11
Bromomethane	ND	0.0050	1	05/27/2015 08:11
2-Butanone (MEK)	ND	0.020	1	05/27/2015 08:11
t-Butyl alcohol (TBA)	ND	0.050	1	05/27/2015 08:11
n-Butyl benzene	ND	0.0050	1	05/27/2015 08:11
sec-Butyl benzene	ND	0.0050	1	05/27/2015 08:11
tert-Butyl benzene	ND	0.0050	1	05/27/2015 08:11
Carbon Disulfide	ND	0.0050	1	05/27/2015 08:11
Carbon Tetrachloride	ND	0.0050	1	05/27/2015 08:11
Chlorobenzene	ND	0.0050	1	05/27/2015 08:11
Chloroethane	ND	0.0050	1	05/27/2015 08:11
Chloroform	ND	0.0050	1	05/27/2015 08:11
Chloromethane	ND	0.0050	1	05/27/2015 08:11
2-Chlorotoluene	ND	0.0050	1	05/27/2015 08:11
4-Chlorotoluene	ND	0.0050	1	05/27/2015 08:11
Dibromochloromethane	ND	0.0050	1	05/27/2015 08:11
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/27/2015 08:11
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/27/2015 08:11
Dibromomethane	ND	0.0050	1	05/27/2015 08:11
1,2-Dichlorobenzene	ND	0.0050	1	05/27/2015 08:11
1,3-Dichlorobenzene	ND	0.0050	1	05/27/2015 08:11
1,4-Dichlorobenzene	ND	0.0050	1	05/27/2015 08:11
Dichlorodifluoromethane	ND	0.0050	1	05/27/2015 08:11
1,1-Dichloroethane	ND	0.0050	1	05/27/2015 08:11
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/27/2015 08:11
1,1-Dichloroethene	ND	0.0050	1	05/27/2015 08:11
cis-1,2-Dichloroethene	ND	0.0050	1	05/27/2015 08:11
trans-1,2-Dichloroethene	ND	0.0050	1	05/27/2015 08:11
1,2-Dichloropropane	ND	0.0050	1	05/27/2015 08:11
1,3-Dichloropropane	ND	0.0050	1	05/27/2015 08:11
2,2-Dichloropropane	ND	0.0050	1	05/27/2015 08:11
1,1-Dichloropropene	ND	0.0050	1	05/27/2015 08:11

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-38	1505677-010A	Soil	05/15/2015 10:45	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/27/2015 08:11
trans-1,3-Dichloropropene	ND	0.0050	1	05/27/2015 08:11
Diisopropyl ether (DIPE)	ND	0.0050	1	05/27/2015 08:11
Ethylbenzene	ND	0.0050	1	05/27/2015 08:11
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/27/2015 08:11
Freon 113	ND	0.0050	1	05/27/2015 08:11
Hexachlorobutadiene	ND	0.0050	1	05/27/2015 08:11
Hexachloroethane	ND	0.0050	1	05/27/2015 08:11
2-Hexanone	ND	0.0050	1	05/27/2015 08:11
Isopropylbenzene	ND	0.0050	1	05/27/2015 08:11
4-Isopropyl toluene	ND	0.0050	1	05/27/2015 08:11
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/27/2015 08:11
Methylene chloride	ND	0.0050	1	05/27/2015 08:11
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/27/2015 08:11
Naphthalene	ND	0.0050	1	05/27/2015 08:11
n-Propyl benzene	ND	0.0050	1	05/27/2015 08:11
Styrene	ND	0.0050	1	05/27/2015 08:11
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/27/2015 08:11
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/27/2015 08:11
Tetrachloroethene	ND	0.0050	1	05/27/2015 08:11
Toluene	ND	0.0050	1	05/27/2015 08:11
1,2,3-Trichlorobenzene	ND	0.0050	1	05/27/2015 08:11
1,2,4-Trichlorobenzene	ND	0.0050	1	05/27/2015 08:11
1,1,1-Trichloroethane	ND	0.0050	1	05/27/2015 08:11
1,1,2-Trichloroethane	ND	0.0050	1	05/27/2015 08:11
Trichloroethene	ND	0.0050	1	05/27/2015 08:11
Trichlorofluoromethane	ND	0.0050	1	05/27/2015 08:11
1,2,3-Trichloropropane	ND	0.0050	1	05/27/2015 08:11
1,2,4-Trimethylbenzene	ND	0.0050	1	05/27/2015 08:11
1,3,5-Trimethylbenzene	ND	0.0050	1	05/27/2015 08:11
Vinyl Chloride	ND	0.0050	1	05/27/2015 08:11
Xylenes, Total	ND	0.0050	1	05/27/2015 08:11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-38	1505677-010A	Soil	05/15/2015 10:45	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		05/27/2015 08:11
Toluene-d8	92	70-130		05/27/2015 08:11
4-BFB	96	70-130		05/27/2015 08:11
Benzene-d6	79	60-140		05/27/2015 08:11
Ethylbenzene-d10	91	60-140		05/27/2015 08:11
1,2-DCB-d4	79	60-140		05/27/2015 08:11

Analyst(s): KBO



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-40	1505677-011A	Soil	05/15/2015 10:50	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/23/2015 23:46
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/23/2015 23:46
Benzene	ND	0.0050	1	05/23/2015 23:46
Bromobenzene	ND	0.0050	1	05/23/2015 23:46
Bromochloromethane	ND	0.0050	1	05/23/2015 23:46
Bromodichloromethane	ND	0.0050	1	05/23/2015 23:46
Bromoform	ND	0.0050	1	05/23/2015 23:46
Bromomethane	ND	0.0050	1	05/23/2015 23:46
2-Butanone (MEK)	ND	0.020	1	05/23/2015 23:46
t-Butyl alcohol (TBA)	ND	0.050	1	05/23/2015 23:46
n-Butyl benzene	ND	0.0050	1	05/23/2015 23:46
sec-Butyl benzene	ND	0.0050	1	05/23/2015 23:46
tert-Butyl benzene	ND	0.0050	1	05/23/2015 23:46
Carbon Disulfide	ND	0.0050	1	05/23/2015 23:46
Carbon Tetrachloride	ND	0.0050	1	05/23/2015 23:46
Chlorobenzene	ND	0.0050	1	05/23/2015 23:46
Chloroethane	ND	0.0050	1	05/23/2015 23:46
Chloroform	ND	0.0050	1	05/23/2015 23:46
Chloromethane	ND	0.0050	1	05/23/2015 23:46
2-Chlorotoluene	ND	0.0050	1	05/23/2015 23:46
4-Chlorotoluene	ND	0.0050	1	05/23/2015 23:46
Dibromochloromethane	ND	0.0050	1	05/23/2015 23:46
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/23/2015 23:46
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/23/2015 23:46
Dibromomethane	ND	0.0050	1	05/23/2015 23:46
1,2-Dichlorobenzene	ND	0.0050	1	05/23/2015 23:46
1,3-Dichlorobenzene	ND	0.0050	1	05/23/2015 23:46
1,4-Dichlorobenzene	ND	0.0050	1	05/23/2015 23:46
Dichlorodifluoromethane	ND	0.0050	1	05/23/2015 23:46
1,1-Dichloroethane	ND	0.0050	1	05/23/2015 23:46
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/23/2015 23:46
1,1-Dichloroethene	ND	0.0050	1	05/23/2015 23:46
cis-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 23:46
trans-1,2-Dichloroethene	ND	0.0050	1	05/23/2015 23:46
1,2-Dichloropropane	ND	0.0050	1	05/23/2015 23:46
1,3-Dichloropropane	ND	0.0050	1	05/23/2015 23:46
2,2-Dichloropropane	ND	0.0050	1	05/23/2015 23:46
1,1-Dichloropropene	ND	0.0050	1	05/23/2015 23:46

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-40	1505677-011A	Soil	05/15/2015 10:50	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/23/2015 23:46
trans-1,3-Dichloropropene	ND	0.0050	1	05/23/2015 23:46
Diisopropyl ether (DIPE)	ND	0.0050	1	05/23/2015 23:46
Ethylbenzene	ND	0.0050	1	05/23/2015 23:46
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/23/2015 23:46
Freon 113	ND	0.0050	1	05/23/2015 23:46
Hexachlorobutadiene	ND	0.0050	1	05/23/2015 23:46
Hexachloroethane	ND	0.0050	1	05/23/2015 23:46
2-Hexanone	ND	0.0050	1	05/23/2015 23:46
Isopropylbenzene	ND	0.0050	1	05/23/2015 23:46
4-Isopropyl toluene	ND	0.0050	1	05/23/2015 23:46
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/23/2015 23:46
Methylene chloride	ND	0.0050	1	05/23/2015 23:46
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/23/2015 23:46
Naphthalene	ND	0.0050	1	05/23/2015 23:46
n-Propyl benzene	ND	0.0050	1	05/23/2015 23:46
Styrene	ND	0.0050	1	05/23/2015 23:46
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/23/2015 23:46
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/23/2015 23:46
Tetrachloroethene	ND	0.0050	1	05/23/2015 23:46
Toluene	ND	0.0050	1	05/23/2015 23:46
1,2,3-Trichlorobenzene	ND	0.0050	1	05/23/2015 23:46
1,2,4-Trichlorobenzene	ND	0.0050	1	05/23/2015 23:46
1,1,1-Trichloroethane	ND	0.0050	1	05/23/2015 23:46
1,1,2-Trichloroethane	ND	0.0050	1	05/23/2015 23:46
Trichloroethene	ND	0.0050	1	05/23/2015 23:46
Trichlorofluoromethane	ND	0.0050	1	05/23/2015 23:46
1,2,3-Trichloropropane	ND	0.0050	1	05/23/2015 23:46
1,2,4-Trimethylbenzene	ND	0.0050	1	05/23/2015 23:46
1,3,5-Trimethylbenzene	ND	0.0050	1	05/23/2015 23:46
Vinyl Chloride	ND	0.0050	1	05/23/2015 23:46
Xylenes, Total	ND	0.0050	1	05/23/2015 23:46

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-40	1505677-011A	Soil	05/15/2015 10:50	GC10	105009

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	104	70-130		05/23/2015 23:46
Toluene-d8	95	70-130		05/23/2015 23:46
4-BFB	113	70-130		05/23/2015 23:46
Benzene-d6	82	60-140		05/23/2015 23:46
Ethylbenzene-d10	91	60-140		05/23/2015 23:46
1,2-DCB-d4	80	60-140		05/23/2015 23:46

Analyst(s): KBO



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-22	1505677-013A	Soil	05/15/2015 11:30	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	400	4,000	05/22/2015 03:49
tert-Amyl methyl ether (TAME)	ND	20	4,000	05/22/2015 03:49
Benzene	ND	20	4,000	05/22/2015 03:49
Bromobenzene	ND	20	4,000	05/22/2015 03:49
Bromochloromethane	ND	20	4,000	05/22/2015 03:49
Bromodichloromethane	ND	20	4,000	05/22/2015 03:49
Bromoform	ND	20	4,000	05/22/2015 03:49
Bromomethane	ND	20	4,000	05/22/2015 03:49
2-Butanone (MEK)	ND	80	4,000	05/22/2015 03:49
t-Butyl alcohol (TBA)	ND	200	4,000	05/22/2015 03:49
n-Butyl benzene	<b>26</b>	20	4,000	05/22/2015 03:49
sec-Butyl benzene	ND	20	4,000	05/22/2015 03:49
tert-Butyl benzene	ND	20	4,000	05/22/2015 03:49
Carbon Disulfide	ND	20	4,000	05/22/2015 03:49
Carbon Tetrachloride	ND	20	4,000	05/22/2015 03:49
Chlorobenzene	ND	20	4,000	05/22/2015 03:49
Chloroethane	ND	20	4,000	05/22/2015 03:49
Chloroform	ND	20	4,000	05/22/2015 03:49
Chloromethane	ND	20	4,000	05/22/2015 03:49
2-Chlorotoluene	ND	20	4,000	05/22/2015 03:49
4-Chlorotoluene	ND	20	4,000	05/22/2015 03:49
Dibromochloromethane	ND	20	4,000	05/22/2015 03:49
1,2-Dibromo-3-chloropropane	ND	16	4,000	05/22/2015 03:49
1,2-Dibromoethane (EDB)	ND	16	4,000	05/22/2015 03:49
Dibromomethane	ND	20	4,000	05/22/2015 03:49
1,2-Dichlorobenzene	ND	20	4,000	05/22/2015 03:49
1,3-Dichlorobenzene	ND	20	4,000	05/22/2015 03:49
1,4-Dichlorobenzene	ND	20	4,000	05/22/2015 03:49
Dichlorodifluoromethane	ND	20	4,000	05/22/2015 03:49
1,1-Dichloroethane	ND	20	4,000	05/22/2015 03:49
1,2-Dichloroethane (1,2-DCA)	ND	16	4,000	05/22/2015 03:49
1,1-Dichloroethene	ND	20	4,000	05/22/2015 03:49
cis-1,2-Dichloroethene	ND	20	4,000	05/22/2015 03:49
trans-1,2-Dichloroethene	ND	20	4,000	05/22/2015 03:49
1,2-Dichloropropane	ND	20	4,000	05/22/2015 03:49
1,3-Dichloropropane	ND	20	4,000	05/22/2015 03:49
2,2-Dichloropropane	ND	20	4,000	05/22/2015 03:49
1,1-Dichloropropene	ND	20	4,000	05/22/2015 03:49

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-22	1505677-013A	Soil	05/15/2015 11:30	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	20	4,000	05/22/2015 03:49
trans-1,3-Dichloropropene	ND	20	4,000	05/22/2015 03:49
Diisopropyl ether (DIPE)	ND	20	4,000	05/22/2015 03:49
Ethylbenzene	160	20	4,000	05/22/2015 03:49
Ethyl tert-butyl ether (ETBE)	ND	20	4,000	05/22/2015 03:49
Freon 113	ND	20	4,000	05/22/2015 03:49
Hexachlorobutadiene	ND	20	4,000	05/22/2015 03:49
Hexachloroethane	ND	20	4,000	05/22/2015 03:49
2-Hexanone	ND	20	4,000	05/22/2015 03:49
Isopropylbenzene	ND	20	4,000	05/22/2015 03:49
4-Isopropyl toluene	ND	20	4,000	05/22/2015 03:49
Methyl-t-butyl ether (MTBE)	ND	20	4,000	05/22/2015 03:49
Methylene chloride	ND	20	4,000	05/22/2015 03:49
4-Methyl-2-pentanone (MIBK)	ND	20	4,000	05/22/2015 03:49
Naphthalene	55	20	4,000	05/22/2015 03:49
n-Propyl benzene	45	20	4,000	05/22/2015 03:49
Styrene	ND	20	4,000	05/22/2015 03:49
1,1,1,2-Tetrachloroethane	ND	20	4,000	05/22/2015 03:49
1,1,2,2-Tetrachloroethane	ND	20	4,000	05/22/2015 03:49
Tetrachloroethene	ND	20	4,000	05/22/2015 03:49
Toluene	250	20	4,000	05/22/2015 03:49
1,2,3-Trichlorobenzene	ND	20	4,000	05/22/2015 03:49
1,2,4-Trichlorobenzene	ND	20	4,000	05/22/2015 03:49
1,1,1-Trichloroethane	ND	20	4,000	05/22/2015 03:49
1,1,2-Trichloroethane	ND	20	4,000	05/22/2015 03:49
Trichloroethene	ND	20	4,000	05/22/2015 03:49
Trichlorofluoromethane	ND	20	4,000	05/22/2015 03:49
1,2,3-Trichloropropane	ND	20	4,000	05/22/2015 03:49
1,2,4-Trimethylbenzene	460	20	4,000	05/22/2015 03:49
1,3,5-Trimethylbenzene	100	20	4,000	05/22/2015 03:49
Vinyl Chloride	ND	20	4,000	05/22/2015 03:49
Xylenes, Total	940	20	4,000	05/22/2015 03:49

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-22	1505677-013A	Soil	05/15/2015 11:30	GC28	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	114		70-130		05/22/2015 03:49
Toluene-d8	108		70-130		05/22/2015 03:49
4-BFB	93		70-130		05/22/2015 03:49
Benzene-d6	127		60-140		05/22/2015 03:49
Ethylbenzene-d10	365	S	60-140		05/22/2015 03:49
1,2-DCB-d4	8995	S	60-140		05/22/2015 03:49

Analyst(s): KBO

Analytical Comments: c1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-24	1505677-014A	Soil	05/15/2015 11:35	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	1000	10,000	05/22/2015 04:27
tert-Amyl methyl ether (TAME)	ND	50	10,000	05/22/2015 04:27
Benzene	<b>120</b>	50	10,000	05/22/2015 04:27
Bromobenzene	ND	50	10,000	05/22/2015 04:27
Bromochloromethane	ND	50	10,000	05/22/2015 04:27
Bromodichloromethane	ND	50	10,000	05/22/2015 04:27
Bromoform	ND	50	10,000	05/22/2015 04:27
Bromomethane	ND	50	10,000	05/22/2015 04:27
2-Butanone (MEK)	ND	200	10,000	05/22/2015 04:27
t-Butyl alcohol (TBA)	ND	500	10,000	05/22/2015 04:27
n-Butyl benzene	ND	50	10,000	05/22/2015 04:27
sec-Butyl benzene	ND	50	10,000	05/22/2015 04:27
tert-Butyl benzene	ND	50	10,000	05/22/2015 04:27
Carbon Disulfide	ND	50	10,000	05/22/2015 04:27
Carbon Tetrachloride	ND	50	10,000	05/22/2015 04:27
Chlorobenzene	ND	50	10,000	05/22/2015 04:27
Chloroethane	ND	50	10,000	05/22/2015 04:27
Chloroform	ND	50	10,000	05/22/2015 04:27
Chloromethane	ND	50	10,000	05/22/2015 04:27
2-Chlorotoluene	ND	50	10,000	05/22/2015 04:27
4-Chlorotoluene	ND	50	10,000	05/22/2015 04:27
Dibromochloromethane	ND	50	10,000	05/22/2015 04:27
1,2-Dibromo-3-chloropropane	ND	40	10,000	05/22/2015 04:27
1,2-Dibromoethane (EDB)	ND	40	10,000	05/22/2015 04:27
Dibromomethane	ND	50	10,000	05/22/2015 04:27
1,2-Dichlorobenzene	ND	50	10,000	05/22/2015 04:27
1,3-Dichlorobenzene	ND	50	10,000	05/22/2015 04:27
1,4-Dichlorobenzene	ND	50	10,000	05/22/2015 04:27
Dichlorodifluoromethane	ND	50	10,000	05/22/2015 04:27
1,1-Dichloroethane	ND	50	10,000	05/22/2015 04:27
1,2-Dichloroethane (1,2-DCA)	ND	40	10,000	05/22/2015 04:27
1,1-Dichloroethene	ND	50	10,000	05/22/2015 04:27
cis-1,2-Dichloroethene	ND	50	10,000	05/22/2015 04:27
trans-1,2-Dichloroethene	ND	50	10,000	05/22/2015 04:27
1,2-Dichloropropane	ND	50	10,000	05/22/2015 04:27
1,3-Dichloropropane	ND	50	10,000	05/22/2015 04:27
2,2-Dichloropropane	ND	50	10,000	05/22/2015 04:27
1,1-Dichloropropene	ND	50	10,000	05/22/2015 04:27

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-24	1505677-014A	Soil	05/15/2015 11:35	GC28	105009
<b>Analytes</b>	<b>Result</b>	<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>	
cis-1,3-Dichloropropene	ND	50	10,000	05/22/2015 04:27	
trans-1,3-Dichloropropene	ND	50	10,000	05/22/2015 04:27	
Diisopropyl ether (DIPE)	ND	50	10,000	05/22/2015 04:27	
Ethylbenzene	<b>150</b>	50	10,000	05/22/2015 04:27	
Ethyl tert-butyl ether (ETBE)	ND	50	10,000	05/22/2015 04:27	
Freon 113	ND	50	10,000	05/22/2015 04:27	
Hexachlorobutadiene	ND	50	10,000	05/22/2015 04:27	
Hexachloroethane	ND	50	10,000	05/22/2015 04:27	
2-Hexanone	ND	50	10,000	05/22/2015 04:27	
Isopropylbenzene	ND	50	10,000	05/22/2015 04:27	
4-Isopropyl toluene	ND	50	10,000	05/22/2015 04:27	
Methyl-t-butyl ether (MTBE)	ND	50	10,000	05/22/2015 04:27	
Methylene chloride	ND	50	10,000	05/22/2015 04:27	
4-Methyl-2-pentanone (MIBK)	ND	50	10,000	05/22/2015 04:27	
Naphthalene	<b>57</b>	50	10,000	05/22/2015 04:27	
n-Propyl benzene	ND	50	10,000	05/22/2015 04:27	
Styrene	ND	50	10,000	05/22/2015 04:27	
1,1,1,2-Tetrachloroethane	ND	50	10,000	05/22/2015 04:27	
1,1,2,2-Tetrachloroethane	ND	50	10,000	05/22/2015 04:27	
Tetrachloroethene	ND	50	10,000	05/22/2015 04:27	
Toluene	<b>640</b>	50	10,000	05/22/2015 04:27	
1,2,3-Trichlorobenzene	ND	50	10,000	05/22/2015 04:27	
1,2,4-Trichlorobenzene	ND	50	10,000	05/22/2015 04:27	
1,1,1-Trichloroethane	ND	50	10,000	05/22/2015 04:27	
1,1,2-Trichloroethane	ND	50	10,000	05/22/2015 04:27	
Trichloroethene	ND	50	10,000	05/22/2015 04:27	
Trichlorofluoromethane	ND	50	10,000	05/22/2015 04:27	
1,2,3-Trichloropropane	ND	50	10,000	05/22/2015 04:27	
1,2,4-Trimethylbenzene	<b>330</b>	50	10,000	05/22/2015 04:27	
1,3,5-Trimethylbenzene	<b>76</b>	50	10,000	05/22/2015 04:27	
Vinyl Chloride	ND	50	10,000	05/22/2015 04:27	
Xylenes, Total	<b>850</b>	50	10,000	05/22/2015 04:27	

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-24	1505677-014A	Soil	05/15/2015 11:35	GC28	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	112		70-130		05/22/2015 04:27
Toluene-d8	108		70-130		05/22/2015 04:27
4-BFB	98		70-130		05/22/2015 04:27
Benzene-d6	234	S	60-140		05/22/2015 04:27
Ethylbenzene-d10	48	S	60-140		05/22/2015 04:27
1,2-DCB-d4	22378	S	60-140		05/22/2015 04:27

Analyst(s): KBO

Analytical Comments: c1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-26	1505677-015A	Soil	05/15/2015 11:40	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	2000	20,000	05/22/2015 05:04
tert-Amyl methyl ether (TAME)	ND	100	20,000	05/22/2015 05:04
Benzene	<b>100</b>	100	20,000	05/22/2015 05:04
Bromobenzene	ND	100	20,000	05/22/2015 05:04
Bromochloromethane	ND	100	20,000	05/22/2015 05:04
Bromodichloromethane	ND	100	20,000	05/22/2015 05:04
Bromoform	ND	100	20,000	05/22/2015 05:04
Bromomethane	ND	100	20,000	05/22/2015 05:04
2-Butanone (MEK)	ND	400	20,000	05/22/2015 05:04
t-Butyl alcohol (TBA)	ND	1000	20,000	05/22/2015 05:04
n-Butyl benzene	ND	100	20,000	05/22/2015 05:04
sec-Butyl benzene	ND	100	20,000	05/22/2015 05:04
tert-Butyl benzene	ND	100	20,000	05/22/2015 05:04
Carbon Disulfide	ND	100	20,000	05/22/2015 05:04
Carbon Tetrachloride	ND	100	20,000	05/22/2015 05:04
Chlorobenzene	ND	100	20,000	05/22/2015 05:04
Chloroethane	ND	100	20,000	05/22/2015 05:04
Chloroform	ND	100	20,000	05/22/2015 05:04
Chloromethane	ND	100	20,000	05/22/2015 05:04
2-Chlorotoluene	ND	100	20,000	05/22/2015 05:04
4-Chlorotoluene	ND	100	20,000	05/22/2015 05:04
Dibromochloromethane	ND	100	20,000	05/22/2015 05:04
1,2-Dibromo-3-chloropropane	ND	80	20,000	05/22/2015 05:04
1,2-Dibromoethane (EDB)	ND	80	20,000	05/22/2015 05:04
Dibromomethane	ND	100	20,000	05/22/2015 05:04
1,2-Dichlorobenzene	ND	100	20,000	05/22/2015 05:04
1,3-Dichlorobenzene	ND	100	20,000	05/22/2015 05:04
1,4-Dichlorobenzene	ND	100	20,000	05/22/2015 05:04
Dichlorodifluoromethane	ND	100	20,000	05/22/2015 05:04
1,1-Dichloroethane	ND	100	20,000	05/22/2015 05:04
1,2-Dichloroethane (1,2-DCA)	ND	80	20,000	05/22/2015 05:04
1,1-Dichloroethene	ND	100	20,000	05/22/2015 05:04
cis-1,2-Dichloroethene	ND	100	20,000	05/22/2015 05:04
trans-1,2-Dichloroethene	ND	100	20,000	05/22/2015 05:04
1,2-Dichloropropane	ND	100	20,000	05/22/2015 05:04
1,3-Dichloropropane	ND	100	20,000	05/22/2015 05:04
2,2-Dichloropropane	ND	100	20,000	05/22/2015 05:04
1,1-Dichloropropene	ND	100	20,000	05/22/2015 05:04

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-26	1505677-015A	Soil	05/15/2015 11:40	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	100	20,000	05/22/2015 05:04
trans-1,3-Dichloropropene	ND	100	20,000	05/22/2015 05:04
Diisopropyl ether (DIPE)	ND	100	20,000	05/22/2015 05:04
Ethylbenzene	<b>140</b>	100	20,000	05/22/2015 05:04
Ethyl tert-butyl ether (ETBE)	ND	100	20,000	05/22/2015 05:04
Freon 113	ND	100	20,000	05/22/2015 05:04
Hexachlorobutadiene	ND	100	20,000	05/22/2015 05:04
Hexachloroethane	ND	100	20,000	05/22/2015 05:04
2-Hexanone	ND	100	20,000	05/22/2015 05:04
Isopropylbenzene	ND	100	20,000	05/22/2015 05:04
4-Isopropyl toluene	ND	100	20,000	05/22/2015 05:04
Methyl-t-butyl ether (MTBE)	ND	100	20,000	05/22/2015 05:04
Methylene chloride	ND	100	20,000	05/22/2015 05:04
4-Methyl-2-pentanone (MIBK)	ND	100	20,000	05/22/2015 05:04
Naphthalene	ND	100	20,000	05/22/2015 05:04
n-Propyl benzene	ND	100	20,000	05/22/2015 05:04
Styrene	ND	100	20,000	05/22/2015 05:04
1,1,1,2-Tetrachloroethane	ND	100	20,000	05/22/2015 05:04
1,1,2,2-Tetrachloroethane	ND	100	20,000	05/22/2015 05:04
Tetrachloroethene	ND	100	20,000	05/22/2015 05:04
Toluene	<b>640</b>	100	20,000	05/22/2015 05:04
1,2,3-Trichlorobenzene	ND	100	20,000	05/22/2015 05:04
1,2,4-Trichlorobenzene	ND	100	20,000	05/22/2015 05:04
1,1,1-Trichloroethane	ND	100	20,000	05/22/2015 05:04
1,1,2-Trichloroethane	ND	100	20,000	05/22/2015 05:04
Trichloroethene	ND	100	20,000	05/22/2015 05:04
Trichlorofluoromethane	ND	100	20,000	05/22/2015 05:04
1,2,3-Trichloropropane	ND	100	20,000	05/22/2015 05:04
1,2,4-Trimethylbenzene	<b>260</b>	100	20,000	05/22/2015 05:04
1,3,5-Trimethylbenzene	ND	100	20,000	05/22/2015 05:04
Vinyl Chloride	ND	100	20,000	05/22/2015 05:04
Xylenes, Total	<b>770</b>	100	20,000	05/22/2015 05:04

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-26	1505677-015A	Soil	05/15/2015 11:40	GC28	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	112		70-130		05/22/2015 05:04
Toluene-d8	107		70-130		05/22/2015 05:04
4-BFB	102		70-130		05/22/2015 05:04
Benzene-d6	309	S	60-140		05/22/2015 05:04
Ethylbenzene-d10	296	S	60-140		05/22/2015 05:04

Analyst(s): KBO

Analytical Comments: c1



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-28	1505677-016A	Soil	05/15/2015 11:45	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	200	2,000	05/22/2015 05:42
tert-Amyl methyl ether (TAME)	ND	10	2,000	05/22/2015 05:42
Benzene	11	10	2,000	05/22/2015 05:42
Bromobenzene	ND	10	2,000	05/22/2015 05:42
Bromochloromethane	ND	10	2,000	05/22/2015 05:42
Bromodichloromethane	ND	10	2,000	05/22/2015 05:42
Bromoform	ND	10	2,000	05/22/2015 05:42
Bromomethane	ND	10	2,000	05/22/2015 05:42
2-Butanone (MEK)	ND	40	2,000	05/22/2015 05:42
t-Butyl alcohol (TBA)	ND	100	2,000	05/22/2015 05:42
n-Butyl benzene	14	10	2,000	05/22/2015 05:42
sec-Butyl benzene	ND	10	2,000	05/22/2015 05:42
tert-Butyl benzene	ND	10	2,000	05/22/2015 05:42
Carbon Disulfide	ND	10	2,000	05/22/2015 05:42
Carbon Tetrachloride	ND	10	2,000	05/22/2015 05:42
Chlorobenzene	ND	10	2,000	05/22/2015 05:42
Chloroethane	ND	10	2,000	05/22/2015 05:42
Chloroform	ND	10	2,000	05/22/2015 05:42
Chloromethane	ND	10	2,000	05/22/2015 05:42
2-Chlorotoluene	ND	10	2,000	05/22/2015 05:42
4-Chlorotoluene	ND	10	2,000	05/22/2015 05:42
Dibromochloromethane	ND	10	2,000	05/22/2015 05:42
1,2-Dibromo-3-chloropropane	ND	8.0	2,000	05/22/2015 05:42
1,2-Dibromoethane (EDB)	ND	8.0	2,000	05/22/2015 05:42
Dibromomethane	ND	10	2,000	05/22/2015 05:42
1,2-Dichlorobenzene	ND	10	2,000	05/22/2015 05:42
1,3-Dichlorobenzene	ND	10	2,000	05/22/2015 05:42
1,4-Dichlorobenzene	ND	10	2,000	05/22/2015 05:42
Dichlorodifluoromethane	ND	10	2,000	05/22/2015 05:42
1,1-Dichloroethane	ND	10	2,000	05/22/2015 05:42
1,2-Dichloroethane (1,2-DCA)	ND	8.0	2,000	05/22/2015 05:42
1,1-Dichloroethene	ND	10	2,000	05/22/2015 05:42
cis-1,2-Dichloroethene	ND	10	2,000	05/22/2015 05:42
trans-1,2-Dichloroethene	ND	10	2,000	05/22/2015 05:42
1,2-Dichloropropane	ND	10	2,000	05/22/2015 05:42
1,3-Dichloropropane	ND	10	2,000	05/22/2015 05:42
2,2-Dichloropropane	ND	10	2,000	05/22/2015 05:42
1,1-Dichloropropene	ND	10	2,000	05/22/2015 05:42

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-28	1505677-016A	Soil	05/15/2015 11:45	GC28	105009

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	10	2,000	05/22/2015 05:42
trans-1,3-Dichloropropene	ND	10	2,000	05/22/2015 05:42
Diisopropyl ether (DIPE)	ND	10	2,000	05/22/2015 05:42
Ethylbenzene	70	10	2,000	05/22/2015 05:42
Ethyl tert-butyl ether (ETBE)	ND	10	2,000	05/22/2015 05:42
Freon 113	ND	10	2,000	05/22/2015 05:42
Hexachlorobutadiene	ND	10	2,000	05/22/2015 05:42
Hexachloroethane	ND	10	2,000	05/22/2015 05:42
2-Hexanone	ND	10	2,000	05/22/2015 05:42
Isopropylbenzene	ND	10	2,000	05/22/2015 05:42
4-Isopropyl toluene	ND	10	2,000	05/22/2015 05:42
Methyl-t-butyl ether (MTBE)	ND	10	2,000	05/22/2015 05:42
Methylene chloride	ND	10	2,000	05/22/2015 05:42
4-Methyl-2-pentanone (MIBK)	ND	10	2,000	05/22/2015 05:42
Naphthalene	24	10	2,000	05/22/2015 05:42
n-Propyl benzene	22	10	2,000	05/22/2015 05:42
Styrene	ND	10	2,000	05/22/2015 05:42
1,1,1,2-Tetrachloroethane	ND	10	2,000	05/22/2015 05:42
1,1,2,2-Tetrachloroethane	ND	10	2,000	05/22/2015 05:42
Tetrachloroethene	ND	10	2,000	05/22/2015 05:42
Toluene	150	10	2,000	05/22/2015 05:42
1,2,3-Trichlorobenzene	ND	10	2,000	05/22/2015 05:42
1,2,4-Trichlorobenzene	ND	10	2,000	05/22/2015 05:42
1,1,1-Trichloroethane	ND	10	2,000	05/22/2015 05:42
1,1,2-Trichloroethane	ND	10	2,000	05/22/2015 05:42
Trichloroethene	ND	10	2,000	05/22/2015 05:42
Trichlorofluoromethane	ND	10	2,000	05/22/2015 05:42
1,2,3-Trichloropropane	ND	10	2,000	05/22/2015 05:42
1,2,4-Trimethylbenzene	230	10	2,000	05/22/2015 05:42
1,3,5-Trimethylbenzene	52	10	2,000	05/22/2015 05:42
Vinyl Chloride	ND	10	2,000	05/22/2015 05:42
Xylenes, Total	400	10	2,000	05/22/2015 05:42

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-28	1505677-016A	Soil	05/15/2015 11:45	GC28	105009

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	114		70-130		05/22/2015 05:42
Toluene-d8	107		70-130		05/22/2015 05:42
4-BFB	94		70-130		05/22/2015 05:42
Benzene-d6	113		60-140		05/22/2015 05:42
Ethylbenzene-d10	45	S	60-140		05/22/2015 05:42
1,2-DCB-d4	4550	S	60-140		05/22/2015 05:42

Analyst(s): KBO

Analytical Comments: c1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-30	1505677-017A	Soil	05/15/2015 11:50	GC28	105018

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	200	2,000	05/22/2015 06:19
tert-Amyl methyl ether (TAME)	ND	10	2,000	05/22/2015 06:19
Benzene	ND	10	2,000	05/22/2015 06:19
Bromobenzene	ND	10	2,000	05/22/2015 06:19
Bromochloromethane	ND	10	2,000	05/22/2015 06:19
Bromodichloromethane	ND	10	2,000	05/22/2015 06:19
Bromoform	ND	10	2,000	05/22/2015 06:19
Bromomethane	ND	10	2,000	05/22/2015 06:19
2-Butanone (MEK)	ND	40	2,000	05/22/2015 06:19
t-Butyl alcohol (TBA)	ND	100	2,000	05/22/2015 06:19
n-Butyl benzene	ND	10	2,000	05/22/2015 06:19
sec-Butyl benzene	ND	10	2,000	05/22/2015 06:19
tert-Butyl benzene	ND	10	2,000	05/22/2015 06:19
Carbon Disulfide	ND	10	2,000	05/22/2015 06:19
Carbon Tetrachloride	ND	10	2,000	05/22/2015 06:19
Chlorobenzene	ND	10	2,000	05/22/2015 06:19
Chloroethane	ND	10	2,000	05/22/2015 06:19
Chloroform	ND	10	2,000	05/22/2015 06:19
Chloromethane	ND	10	2,000	05/22/2015 06:19
2-Chlorotoluene	ND	10	2,000	05/22/2015 06:19
4-Chlorotoluene	ND	10	2,000	05/22/2015 06:19
Dibromochloromethane	ND	10	2,000	05/22/2015 06:19
1,2-Dibromo-3-chloropropane	ND	8.0	2,000	05/22/2015 06:19
1,2-Dibromoethane (EDB)	ND	8.0	2,000	05/22/2015 06:19
Dibromomethane	ND	10	2,000	05/22/2015 06:19
1,2-Dichlorobenzene	ND	10	2,000	05/22/2015 06:19
1,3-Dichlorobenzene	ND	10	2,000	05/22/2015 06:19
1,4-Dichlorobenzene	ND	10	2,000	05/22/2015 06:19
Dichlorodifluoromethane	ND	10	2,000	05/22/2015 06:19
1,1-Dichloroethane	ND	10	2,000	05/22/2015 06:19
1,2-Dichloroethane (1,2-DCA)	ND	8.0	2,000	05/22/2015 06:19
1,1-Dichloroethene	ND	10	2,000	05/22/2015 06:19
cis-1,2-Dichloroethene	ND	10	2,000	05/22/2015 06:19
trans-1,2-Dichloroethene	ND	10	2,000	05/22/2015 06:19
1,2-Dichloropropane	ND	10	2,000	05/22/2015 06:19
1,3-Dichloropropane	ND	10	2,000	05/22/2015 06:19
2,2-Dichloropropane	ND	10	2,000	05/22/2015 06:19
1,1-Dichloropropene	ND	10	2,000	05/22/2015 06:19

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-30	1505677-017A	Soil	05/15/2015 11:50	GC28	105018

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	10	2,000	05/22/2015 06:19
trans-1,3-Dichloropropene	ND	10	2,000	05/22/2015 06:19
Diisopropyl ether (DIPE)	ND	10	2,000	05/22/2015 06:19
Ethylbenzene	<b>28</b>	10	2,000	05/22/2015 06:19
Ethyl tert-butyl ether (ETBE)	ND	10	2,000	05/22/2015 06:19
Freon 113	ND	10	2,000	05/22/2015 06:19
Hexachlorobutadiene	ND	10	2,000	05/22/2015 06:19
Hexachloroethane	ND	10	2,000	05/22/2015 06:19
2-Hexanone	ND	10	2,000	05/22/2015 06:19
Isopropylbenzene	ND	10	2,000	05/22/2015 06:19
4-Isopropyl toluene	ND	10	2,000	05/22/2015 06:19
Methyl-t-butyl ether (MTBE)	ND	10	2,000	05/22/2015 06:19
Methylene chloride	ND	10	2,000	05/22/2015 06:19
4-Methyl-2-pentanone (MIBK)	ND	10	2,000	05/22/2015 06:19
Naphthalene	<b>11</b>	10	2,000	05/22/2015 06:19
n-Propyl benzene	<b>11</b>	10	2,000	05/22/2015 06:19
Styrene	ND	10	2,000	05/22/2015 06:19
1,1,1,2-Tetrachloroethane	ND	10	2,000	05/22/2015 06:19
1,1,2,2-Tetrachloroethane	ND	10	2,000	05/22/2015 06:19
Tetrachloroethene	ND	10	2,000	05/22/2015 06:19
Toluene	<b>74</b>	10	2,000	05/22/2015 06:19
1,2,3-Trichlorobenzene	ND	10	2,000	05/22/2015 06:19
1,2,4-Trichlorobenzene	ND	10	2,000	05/22/2015 06:19
1,1,1-Trichloroethane	ND	10	2,000	05/22/2015 06:19
1,1,2-Trichloroethane	ND	10	2,000	05/22/2015 06:19
Trichloroethene	ND	10	2,000	05/22/2015 06:19
Trichlorofluoromethane	ND	10	2,000	05/22/2015 06:19
1,2,3-Trichloropropane	ND	10	2,000	05/22/2015 06:19
1,2,4-Trimethylbenzene	<b>87</b>	10	2,000	05/22/2015 06:19
1,3,5-Trimethylbenzene	<b>21</b>	10	2,000	05/22/2015 06:19
Vinyl Chloride	ND	10	2,000	05/22/2015 06:19
Xylenes, Total	<b>160</b>	10	2,000	05/22/2015 06:19

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-30	1505677-017A	Soil	05/15/2015 11:50	GC28	105018

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
Dibromofluoromethane	111		70-130	05/22/2015 06:19
Toluene-d8	106		70-130	05/22/2015 06:19
4-BFB	98		70-130	05/22/2015 06:19
Benzene-d6	103		60-140	05/22/2015 06:19
Ethylbenzene-d10	50	S	60-140	05/22/2015 06:19
1,2-DCB-d4	4520	S	60-140	05/22/2015 06:19

Analyst(s): KBO

Analytical Comments: c1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-32	1505677-018A	Soil	05/15/2015 11:55	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.50	5	05/24/2015 01:26
tert-Amyl methyl ether (TAME)	ND	0.025	5	05/24/2015 01:26
Benzene	<b>0.24</b>	0.025	5	05/24/2015 01:26
Bromobenzene	ND	0.025	5	05/24/2015 01:26
Bromochloromethane	ND	0.025	5	05/24/2015 01:26
Bromodichloromethane	ND	0.025	5	05/24/2015 01:26
Bromoform	ND	0.025	5	05/24/2015 01:26
Bromomethane	ND	0.025	5	05/24/2015 01:26
2-Butanone (MEK)	ND	0.10	5	05/24/2015 01:26
t-Butyl alcohol (TBA)	<b>0.33</b>	0.25	5	05/24/2015 01:26
n-Butyl benzene	ND	0.025	5	05/24/2015 01:26
sec-Butyl benzene	ND	0.025	5	05/24/2015 01:26
tert-Butyl benzene	ND	0.025	5	05/24/2015 01:26
Carbon Disulfide	ND	0.025	5	05/24/2015 01:26
Carbon Tetrachloride	ND	0.025	5	05/24/2015 01:26
Chlorobenzene	ND	0.025	5	05/24/2015 01:26
Chloroethane	ND	0.025	5	05/24/2015 01:26
Chloroform	ND	0.025	5	05/24/2015 01:26
Chloromethane	ND	0.025	5	05/24/2015 01:26
2-Chlorotoluene	ND	0.025	5	05/24/2015 01:26
4-Chlorotoluene	ND	0.025	5	05/24/2015 01:26
Dibromochloromethane	ND	0.025	5	05/24/2015 01:26
1,2-Dibromo-3-chloropropane	ND	0.020	5	05/24/2015 01:26
1,2-Dibromoethane (EDB)	ND	0.020	5	05/24/2015 01:26
Dibromomethane	ND	0.025	5	05/24/2015 01:26
1,2-Dichlorobenzene	ND	0.025	5	05/24/2015 01:26
1,3-Dichlorobenzene	ND	0.025	5	05/24/2015 01:26
1,4-Dichlorobenzene	ND	0.025	5	05/24/2015 01:26
Dichlorodifluoromethane	ND	0.025	5	05/24/2015 01:26
1,1-Dichloroethane	ND	0.025	5	05/24/2015 01:26
1,2-Dichloroethane (1,2-DCA)	<b>0.034</b>	0.020	5	05/24/2015 01:26
1,1-Dichloroethene	ND	0.025	5	05/24/2015 01:26
cis-1,2-Dichloroethene	ND	0.025	5	05/24/2015 01:26
trans-1,2-Dichloroethene	ND	0.025	5	05/24/2015 01:26
1,2-Dichloropropane	ND	0.025	5	05/24/2015 01:26
1,3-Dichloropropane	ND	0.025	5	05/24/2015 01:26
2,2-Dichloropropane	ND	0.025	5	05/24/2015 01:26
1,1-Dichloropropene	ND	0.025	5	05/24/2015 01:26

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-32	1505677-018A	Soil	05/15/2015 11:55	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.025	5	05/24/2015 01:26
trans-1,3-Dichloropropene	ND	0.025	5	05/24/2015 01:26
Diisopropyl ether (DIPE)	ND	0.025	5	05/24/2015 01:26
Ethylbenzene	<b>0.051</b>	0.025	5	05/24/2015 01:26
Ethyl tert-butyl ether (ETBE)	ND	0.025	5	05/24/2015 01:26
Freon 113	ND	0.025	5	05/24/2015 01:26
Hexachlorobutadiene	ND	0.025	5	05/24/2015 01:26
Hexachloroethane	ND	0.025	5	05/24/2015 01:26
2-Hexanone	ND	0.025	5	05/24/2015 01:26
Isopropylbenzene	ND	0.025	5	05/24/2015 01:26
4-Isopropyl toluene	ND	0.025	5	05/24/2015 01:26
Methyl-t-butyl ether (MTBE)	ND	0.025	5	05/24/2015 01:26
Methylene chloride	ND	0.025	5	05/24/2015 01:26
4-Methyl-2-pentanone (MIBK)	<b>0.062</b>	0.025	5	05/24/2015 01:26
Naphthalene	<b>0.085</b>	0.025	5	05/24/2015 01:26
n-Propyl benzene	ND	0.025	5	05/24/2015 01:26
Styrene	ND	0.025	5	05/24/2015 01:26
1,1,1,2-Tetrachloroethane	ND	0.025	5	05/24/2015 01:26
1,1,2,2-Tetrachloroethane	ND	0.025	5	05/24/2015 01:26
Tetrachloroethene	ND	0.025	5	05/24/2015 01:26
Toluene	<b>0.060</b>	0.025	5	05/24/2015 01:26
1,2,3-Trichlorobenzene	ND	0.025	5	05/24/2015 01:26
1,2,4-Trichlorobenzene	ND	0.025	5	05/24/2015 01:26
1,1,1-Trichloroethane	ND	0.025	5	05/24/2015 01:26
1,1,2-Trichloroethane	ND	0.025	5	05/24/2015 01:26
Trichloroethene	ND	0.025	5	05/24/2015 01:26
Trichlorofluoromethane	ND	0.025	5	05/24/2015 01:26
1,2,3-Trichloropropane	ND	0.025	5	05/24/2015 01:26
1,2,4-Trimethylbenzene	<b>0.36</b>	0.025	5	05/24/2015 01:26
1,3,5-Trimethylbenzene	<b>0.11</b>	0.025	5	05/24/2015 01:26
Vinyl Chloride	ND	0.025	5	05/24/2015 01:26
Xylenes, Total	<b>0.37</b>	0.025	5	05/24/2015 01:26

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-32	1505677-018A	Soil	05/15/2015 11:55	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	84	70-130		05/24/2015 01:26
Toluene-d8	83	70-130		05/24/2015 01:26
4-BFB	86	70-130		05/24/2015 01:26
Benzene-d6	87	60-140		05/24/2015 01:26
Ethylbenzene-d10	97	60-140		05/24/2015 01:26
1,2-DCB-d4	81	60-140		05/24/2015 01:26

Analyst(s): AK

Analytical Comments: c1





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-34	1505677-019A	Soil	05/15/2015 12:00	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	2.0	20	05/26/2015 12:10
tert-Amyl methyl ether (TAME)	ND	0.10	20	05/26/2015 12:10
Benzene	<b>0.10</b>	0.10	20	05/26/2015 12:10
Bromobenzene	ND	0.10	20	05/26/2015 12:10
Bromochloromethane	ND	0.10	20	05/26/2015 12:10
Bromodichloromethane	ND	0.10	20	05/26/2015 12:10
Bromoform	ND	0.10	20	05/26/2015 12:10
Bromomethane	ND	0.10	20	05/26/2015 12:10
2-Butanone (MEK)	ND	0.40	20	05/26/2015 12:10
t-Butyl alcohol (TBA)	ND	1.0	20	05/26/2015 12:10
n-Butyl benzene	<b>0.14</b>	0.10	20	05/26/2015 12:10
sec-Butyl benzene	ND	0.10	20	05/26/2015 12:10
tert-Butyl benzene	ND	0.10	20	05/26/2015 12:10
Carbon Disulfide	ND	0.10	20	05/26/2015 12:10
Carbon Tetrachloride	ND	0.10	20	05/26/2015 12:10
Chlorobenzene	ND	0.10	20	05/26/2015 12:10
Chloroethane	ND	0.10	20	05/26/2015 12:10
Chloroform	ND	0.10	20	05/26/2015 12:10
Chloromethane	ND	0.10	20	05/26/2015 12:10
2-Chlorotoluene	ND	0.10	20	05/26/2015 12:10
4-Chlorotoluene	ND	0.10	20	05/26/2015 12:10
Dibromochloromethane	ND	0.10	20	05/26/2015 12:10
1,2-Dibromo-3-chloropropane	ND	0.080	20	05/26/2015 12:10
1,2-Dibromoethane (EDB)	ND	0.080	20	05/26/2015 12:10
Dibromomethane	ND	0.10	20	05/26/2015 12:10
1,2-Dichlorobenzene	ND	0.10	20	05/26/2015 12:10
1,3-Dichlorobenzene	ND	0.10	20	05/26/2015 12:10
1,4-Dichlorobenzene	ND	0.10	20	05/26/2015 12:10
Dichlorodifluoromethane	ND	0.10	20	05/26/2015 12:10
1,1-Dichloroethane	ND	0.10	20	05/26/2015 12:10
1,2-Dichloroethane (1,2-DCA)	ND	0.080	20	05/26/2015 12:10
1,1-Dichloroethene	ND	0.10	20	05/26/2015 12:10
cis-1,2-Dichloroethene	ND	0.10	20	05/26/2015 12:10
trans-1,2-Dichloroethene	ND	0.10	20	05/26/2015 12:10
1,2-Dichloropropane	ND	0.10	20	05/26/2015 12:10
1,3-Dichloropropane	ND	0.10	20	05/26/2015 12:10
2,2-Dichloropropane	ND	0.10	20	05/26/2015 12:10
1,1-Dichloropropene	ND	0.10	20	05/26/2015 12:10

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-34	1505677-019A	Soil	05/15/2015 12:00	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.10	20	05/26/2015 12:10
trans-1,3-Dichloropropene	ND	0.10	20	05/26/2015 12:10
Diisopropyl ether (DIPE)	ND	0.10	20	05/26/2015 12:10
Ethylbenzene	ND	0.10	20	05/26/2015 12:10
Ethyl tert-butyl ether (ETBE)	ND	0.10	20	05/26/2015 12:10
Freon 113	ND	0.10	20	05/26/2015 12:10
Hexachlorobutadiene	ND	0.10	20	05/26/2015 12:10
Hexachloroethane	ND	0.10	20	05/26/2015 12:10
2-Hexanone	ND	0.10	20	05/26/2015 12:10
Isopropylbenzene	ND	0.10	20	05/26/2015 12:10
4-Isopropyl toluene	ND	0.10	20	05/26/2015 12:10
Methyl-t-butyl ether (MTBE)	ND	0.10	20	05/26/2015 12:10
Methylene chloride	ND	0.10	20	05/26/2015 12:10
4-Methyl-2-pentanone (MIBK)	ND	0.10	20	05/26/2015 12:10
Naphthalene	<b>0.26</b>	0.10	20	05/26/2015 12:10
n-Propyl benzene	ND	0.10	20	05/26/2015 12:10
Styrene	ND	0.10	20	05/26/2015 12:10
1,1,1,2-Tetrachloroethane	ND	0.10	20	05/26/2015 12:10
1,1,2,2-Tetrachloroethane	ND	0.10	20	05/26/2015 12:10
Tetrachloroethene	ND	0.10	20	05/26/2015 12:10
Toluene	ND	0.10	20	05/26/2015 12:10
1,2,3-Trichlorobenzene	ND	0.10	20	05/26/2015 12:10
1,2,4-Trichlorobenzene	ND	0.10	20	05/26/2015 12:10
1,1,1-Trichloroethane	ND	0.10	20	05/26/2015 12:10
1,1,2-Trichloroethane	ND	0.10	20	05/26/2015 12:10
Trichloroethene	ND	0.10	20	05/26/2015 12:10
Trichlorofluoromethane	ND	0.10	20	05/26/2015 12:10
1,2,3-Trichloropropane	ND	0.10	20	05/26/2015 12:10
1,2,4-Trimethylbenzene	<b>1.6</b>	0.10	20	05/26/2015 12:10
1,3,5-Trimethylbenzene	<b>0.52</b>	0.10	20	05/26/2015 12:10
Vinyl Chloride	ND	0.10	20	05/26/2015 12:10
Xylenes, Total	<b>0.48</b>	0.10	20	05/26/2015 12:10

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-34	1505677-019A	Soil	05/15/2015 12:00	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	84	70-130		05/26/2015 12:10
Toluene-d8	85	70-130		05/26/2015 12:10
4-BFB	85	70-130		05/26/2015 12:10
Benzene-d6	79	60-140		05/26/2015 12:10
Ethylbenzene-d10	98	60-140		05/26/2015 12:10
1,2-DCB-d4	87	60-140		05/26/2015 12:10

Analyst(s): AK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-36	1505677-020A	Soil	05/15/2015 12:05	GC28	105018

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	40	400	05/22/2015 06:57
tert-Amyl methyl ether (TAME)	ND	2.0	400	05/22/2015 06:57
Benzene	ND	2.0	400	05/22/2015 06:57
Bromobenzene	ND	2.0	400	05/22/2015 06:57
Bromochloromethane	ND	2.0	400	05/22/2015 06:57
Bromodichloromethane	ND	2.0	400	05/22/2015 06:57
Bromoform	ND	2.0	400	05/22/2015 06:57
Bromomethane	ND	2.0	400	05/22/2015 06:57
2-Butanone (MEK)	ND	8.0	400	05/22/2015 06:57
t-Butyl alcohol (TBA)	ND	20	400	05/22/2015 06:57
n-Butyl benzene	ND	2.0	400	05/22/2015 06:57
sec-Butyl benzene	ND	2.0	400	05/22/2015 06:57
tert-Butyl benzene	ND	2.0	400	05/22/2015 06:57
Carbon Disulfide	ND	2.0	400	05/22/2015 06:57
Carbon Tetrachloride	ND	2.0	400	05/22/2015 06:57
Chlorobenzene	ND	2.0	400	05/22/2015 06:57
Chloroethane	ND	2.0	400	05/22/2015 06:57
Chloroform	ND	2.0	400	05/22/2015 06:57
Chloromethane	ND	2.0	400	05/22/2015 06:57
2-Chlorotoluene	ND	2.0	400	05/22/2015 06:57
4-Chlorotoluene	ND	2.0	400	05/22/2015 06:57
Dibromochloromethane	ND	2.0	400	05/22/2015 06:57
1,2-Dibromo-3-chloropropane	ND	1.6	400	05/22/2015 06:57
1,2-Dibromoethane (EDB)	ND	1.6	400	05/22/2015 06:57
Dibromomethane	ND	2.0	400	05/22/2015 06:57
1,2-Dichlorobenzene	ND	2.0	400	05/22/2015 06:57
1,3-Dichlorobenzene	ND	2.0	400	05/22/2015 06:57
1,4-Dichlorobenzene	ND	2.0	400	05/22/2015 06:57
Dichlorodifluoromethane	ND	2.0	400	05/22/2015 06:57
1,1-Dichloroethane	ND	2.0	400	05/22/2015 06:57
1,2-Dichloroethane (1,2-DCA)	ND	1.6	400	05/22/2015 06:57
1,1-Dichloroethene	ND	2.0	400	05/22/2015 06:57
cis-1,2-Dichloroethene	ND	2.0	400	05/22/2015 06:57
trans-1,2-Dichloroethene	ND	2.0	400	05/22/2015 06:57
1,2-Dichloropropane	ND	2.0	400	05/22/2015 06:57
1,3-Dichloropropane	ND	2.0	400	05/22/2015 06:57
2,2-Dichloropropane	ND	2.0	400	05/22/2015 06:57
1,1-Dichloropropene	ND	2.0	400	05/22/2015 06:57

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-36	1505677-020A	Soil	05/15/2015 12:05	GC28	105018

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	2.0	400	05/22/2015 06:57
trans-1,3-Dichloropropene	ND	2.0	400	05/22/2015 06:57
Diisopropyl ether (DIPE)	ND	2.0	400	05/22/2015 06:57
Ethylbenzene	2.1	2.0	400	05/22/2015 06:57
Ethyl tert-butyl ether (ETBE)	ND	2.0	400	05/22/2015 06:57
Freon 113	ND	2.0	400	05/22/2015 06:57
Hexachlorobutadiene	ND	2.0	400	05/22/2015 06:57
Hexachloroethane	ND	2.0	400	05/22/2015 06:57
2-Hexanone	ND	2.0	400	05/22/2015 06:57
Isopropylbenzene	ND	2.0	400	05/22/2015 06:57
4-Isopropyl toluene	ND	2.0	400	05/22/2015 06:57
Methyl-t-butyl ether (MTBE)	ND	2.0	400	05/22/2015 06:57
Methylene chloride	ND	2.0	400	05/22/2015 06:57
4-Methyl-2-pentanone (MIBK)	ND	2.0	400	05/22/2015 06:57
Naphthalene	ND	2.0	400	05/22/2015 06:57
n-Propyl benzene	ND	2.0	400	05/22/2015 06:57
Styrene	ND	2.0	400	05/22/2015 06:57
1,1,1,2-Tetrachloroethane	ND	2.0	400	05/22/2015 06:57
1,1,2,2-Tetrachloroethane	ND	2.0	400	05/22/2015 06:57
Tetrachloroethene	ND	2.0	400	05/22/2015 06:57
Toluene	ND	2.0	400	05/22/2015 06:57
1,2,3-Trichlorobenzene	ND	2.0	400	05/22/2015 06:57
1,2,4-Trichlorobenzene	ND	2.0	400	05/22/2015 06:57
1,1,1-Trichloroethane	ND	2.0	400	05/22/2015 06:57
1,1,2-Trichloroethane	ND	2.0	400	05/22/2015 06:57
Trichloroethene	ND	2.0	400	05/22/2015 06:57
Trichlorofluoromethane	ND	2.0	400	05/22/2015 06:57
1,2,3-Trichloropropane	ND	2.0	400	05/22/2015 06:57
1,2,4-Trimethylbenzene	12	2.0	400	05/22/2015 06:57
1,3,5-Trimethylbenzene	3.4	2.0	400	05/22/2015 06:57
Vinyl Chloride	ND	2.0	400	05/22/2015 06:57
Xylenes, Total	14	2.0	400	05/22/2015 06:57

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-36	1505677-020A	Soil	05/15/2015 12:05	GC28	105018

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	111		70-130		05/22/2015 06:57
Toluene-d8	108		70-130		05/22/2015 06:57
4-BFB	99		70-130		05/22/2015 06:57
Benzene-d6	88		60-140		05/22/2015 06:57
Ethylbenzene-d10	98		60-140		05/22/2015 06:57
1,2-DCB-d4	968	S	60-140		05/22/2015 06:57

Analyst(s): KBO

Analytical Comments: c1



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-38	1505677-021A	Soil	05/15/2015 12:10	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.50	5	05/24/2015 02:50
tert-Amyl methyl ether (TAME)	ND	0.025	5	05/24/2015 02:50
Benzene	<b>0.48</b>	0.025	5	05/24/2015 02:50
Bromobenzene	ND	0.025	5	05/24/2015 02:50
Bromochloromethane	ND	0.025	5	05/24/2015 02:50
Bromodichloromethane	ND	0.025	5	05/24/2015 02:50
Bromoform	ND	0.025	5	05/24/2015 02:50
Bromomethane	ND	0.025	5	05/24/2015 02:50
2-Butanone (MEK)	ND	0.10	5	05/24/2015 02:50
t-Butyl alcohol (TBA)	<b>0.58</b>	0.25	5	05/24/2015 02:50
n-Butyl benzene	ND	0.025	5	05/24/2015 02:50
sec-Butyl benzene	ND	0.025	5	05/24/2015 02:50
tert-Butyl benzene	ND	0.025	5	05/24/2015 02:50
Carbon Disulfide	ND	0.025	5	05/24/2015 02:50
Carbon Tetrachloride	ND	0.025	5	05/24/2015 02:50
Chlorobenzene	ND	0.025	5	05/24/2015 02:50
Chloroethane	ND	0.025	5	05/24/2015 02:50
Chloroform	ND	0.025	5	05/24/2015 02:50
Chloromethane	ND	0.025	5	05/24/2015 02:50
2-Chlorotoluene	ND	0.025	5	05/24/2015 02:50
4-Chlorotoluene	ND	0.025	5	05/24/2015 02:50
Dibromochloromethane	ND	0.025	5	05/24/2015 02:50
1,2-Dibromo-3-chloropropane	ND	0.020	5	05/24/2015 02:50
1,2-Dibromoethane (EDB)	ND	0.020	5	05/24/2015 02:50
Dibromomethane	ND	0.025	5	05/24/2015 02:50
1,2-Dichlorobenzene	ND	0.025	5	05/24/2015 02:50
1,3-Dichlorobenzene	ND	0.025	5	05/24/2015 02:50
1,4-Dichlorobenzene	ND	0.025	5	05/24/2015 02:50
Dichlorodifluoromethane	ND	0.025	5	05/24/2015 02:50
1,1-Dichloroethane	ND	0.025	5	05/24/2015 02:50
1,2-Dichloroethane (1,2-DCA)	<b>0.064</b>	0.020	5	05/24/2015 02:50
1,1-Dichloroethene	ND	0.025	5	05/24/2015 02:50
cis-1,2-Dichloroethene	ND	0.025	5	05/24/2015 02:50
trans-1,2-Dichloroethene	ND	0.025	5	05/24/2015 02:50
1,2-Dichloropropane	ND	0.025	5	05/24/2015 02:50
1,3-Dichloropropane	ND	0.025	5	05/24/2015 02:50
2,2-Dichloropropane	ND	0.025	5	05/24/2015 02:50
1,1-Dichloropropene	ND	0.025	5	05/24/2015 02:50

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-38	1505677-021A	Soil	05/15/2015 12:10	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.025	5	05/24/2015 02:50
trans-1,3-Dichloropropene	ND	0.025	5	05/24/2015 02:50
Diisopropyl ether (DIPE)	ND	0.025	5	05/24/2015 02:50
Ethylbenzene	<b>0.16</b>	0.025	5	05/24/2015 02:50
Ethyl tert-butyl ether (ETBE)	ND	0.025	5	05/24/2015 02:50
Freon 113	ND	0.025	5	05/24/2015 02:50
Hexachlorobutadiene	ND	0.025	5	05/24/2015 02:50
Hexachloroethane	ND	0.025	5	05/24/2015 02:50
2-Hexanone	ND	0.025	5	05/24/2015 02:50
Isopropylbenzene	ND	0.025	5	05/24/2015 02:50
4-Isopropyl toluene	ND	0.025	5	05/24/2015 02:50
Methyl-t-butyl ether (MTBE)	ND	0.025	5	05/24/2015 02:50
Methylene chloride	ND	0.025	5	05/24/2015 02:50
4-Methyl-2-pentanone (MIBK)	<b>0.063</b>	0.025	5	05/24/2015 02:50
Naphthalene	<b>0.078</b>	0.025	5	05/24/2015 02:50
n-Propyl benzene	<b>0.042</b>	0.025	5	05/24/2015 02:50
Styrene	ND	0.025	5	05/24/2015 02:50
1,1,1,2-Tetrachloroethane	ND	0.025	5	05/24/2015 02:50
1,1,2,2-Tetrachloroethane	ND	0.025	5	05/24/2015 02:50
Tetrachloroethene	ND	0.025	5	05/24/2015 02:50
Toluene	<b>0.066</b>	0.025	5	05/24/2015 02:50
1,2,3-Trichlorobenzene	ND	0.025	5	05/24/2015 02:50
1,2,4-Trichlorobenzene	ND	0.025	5	05/24/2015 02:50
1,1,1-Trichloroethane	ND	0.025	5	05/24/2015 02:50
1,1,2-Trichloroethane	ND	0.025	5	05/24/2015 02:50
Trichloroethene	ND	0.025	5	05/24/2015 02:50
Trichlorofluoromethane	ND	0.025	5	05/24/2015 02:50
1,2,3-Trichloropropane	ND	0.025	5	05/24/2015 02:50
1,2,4-Trimethylbenzene	<b>0.29</b>	0.025	5	05/24/2015 02:50
1,3,5-Trimethylbenzene	<b>0.085</b>	0.025	5	05/24/2015 02:50
Vinyl Chloride	ND	0.025	5	05/24/2015 02:50
Xylenes, Total	<b>0.74</b>	0.025	5	05/24/2015 02:50

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-38	1505677-021A	Soil	05/15/2015 12:10	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	84	70-130		05/24/2015 02:50
Toluene-d8	84	70-130		05/24/2015 02:50
4-BFB	85	70-130		05/24/2015 02:50
Benzene-d6	84	60-140		05/24/2015 02:50
Ethylbenzene-d10	91	60-140		05/24/2015 02:50
1,2-DCB-d4	80	60-140		05/24/2015 02:50

Analyst(s): AK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-40	1505677-022A	Soil	05/15/2015 12:15	GC16	105018
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
Acetone	ND		1.0	10	05/24/2015 03:33
tert-Amyl methyl ether (TAME)	ND		0.050	10	05/24/2015 03:33
Benzene	<b>0.68</b>		0.050	10	05/24/2015 03:33
Bromobenzene	ND		0.050	10	05/24/2015 03:33
Bromochloromethane	ND		0.050	10	05/24/2015 03:33
Bromodichloromethane	ND		0.050	10	05/24/2015 03:33
Bromoform	ND		0.050	10	05/24/2015 03:33
Bromomethane	ND		0.050	10	05/24/2015 03:33
2-Butanone (MEK)	<b>0.52</b>		0.20	10	05/24/2015 03:33
t-Butyl alcohol (TBA)	<b>0.82</b>		0.50	10	05/24/2015 03:33
n-Butyl benzene	ND		0.050	10	05/24/2015 03:33
sec-Butyl benzene	ND		0.050	10	05/24/2015 03:33
tert-Butyl benzene	ND		0.050	10	05/24/2015 03:33
Carbon Disulfide	ND		0.050	10	05/24/2015 03:33
Carbon Tetrachloride	ND		0.050	10	05/24/2015 03:33
Chlorobenzene	ND		0.050	10	05/24/2015 03:33
Chloroethane	ND		0.050	10	05/24/2015 03:33
Chloroform	ND		0.050	10	05/24/2015 03:33
Chloromethane	ND		0.050	10	05/24/2015 03:33
2-Chlorotoluene	ND		0.050	10	05/24/2015 03:33
4-Chlorotoluene	ND		0.050	10	05/24/2015 03:33
Dibromochloromethane	ND		0.050	10	05/24/2015 03:33
1,2-Dibromo-3-chloropropane	ND		0.040	10	05/24/2015 03:33
1,2-Dibromoethane (EDB)	ND		0.040	10	05/24/2015 03:33
Dibromomethane	ND		0.050	10	05/24/2015 03:33
1,2-Dichlorobenzene	ND		0.050	10	05/24/2015 03:33
1,3-Dichlorobenzene	ND		0.050	10	05/24/2015 03:33
1,4-Dichlorobenzene	ND		0.050	10	05/24/2015 03:33
Dichlorodifluoromethane	ND		0.050	10	05/24/2015 03:33
1,1-Dichloroethane	ND		0.050	10	05/24/2015 03:33
1,2-Dichloroethane (1,2-DCA)	<b>0.077</b>		0.040	10	05/24/2015 03:33
1,1-Dichloroethene	ND		0.050	10	05/24/2015 03:33
cis-1,2-Dichloroethene	ND		0.050	10	05/24/2015 03:33
trans-1,2-Dichloroethene	ND		0.050	10	05/24/2015 03:33
1,2-Dichloropropane	ND		0.050	10	05/24/2015 03:33
1,3-Dichloropropane	ND		0.050	10	05/24/2015 03:33
2,2-Dichloropropane	ND		0.050	10	05/24/2015 03:33
1,1-Dichloropropene	ND		0.050	10	05/24/2015 03:33

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-40	1505677-022A	Soil	05/15/2015 12:15	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.050	10	05/24/2015 03:33
trans-1,3-Dichloropropene	ND	0.050	10	05/24/2015 03:33
Diisopropyl ether (DIPE)	ND	0.050	10	05/24/2015 03:33
Ethylbenzene	<b>0.066</b>	0.050	10	05/24/2015 03:33
Ethyl tert-butyl ether (ETBE)	ND	0.050	10	05/24/2015 03:33
Freon 113	ND	0.050	10	05/24/2015 03:33
Hexachlorobutadiene	ND	0.050	10	05/24/2015 03:33
Hexachloroethane	ND	0.050	10	05/24/2015 03:33
2-Hexanone	ND	0.050	10	05/24/2015 03:33
Isopropylbenzene	ND	0.050	10	05/24/2015 03:33
4-Isopropyl toluene	ND	0.050	10	05/24/2015 03:33
Methyl-t-butyl ether (MTBE)	ND	0.050	10	05/24/2015 03:33
Methylene chloride	ND	0.050	10	05/24/2015 03:33
4-Methyl-2-pentanone (MIBK)	<b>0.086</b>	0.050	10	05/24/2015 03:33
Naphthalene	ND	0.050	10	05/24/2015 03:33
n-Propyl benzene	ND	0.050	10	05/24/2015 03:33
Styrene	ND	0.050	10	05/24/2015 03:33
1,1,1,2-Tetrachloroethane	ND	0.050	10	05/24/2015 03:33
1,1,2,2-Tetrachloroethane	ND	0.050	10	05/24/2015 03:33
Tetrachloroethene	ND	0.050	10	05/24/2015 03:33
Toluene	<b>0.34</b>	0.050	10	05/24/2015 03:33
1,2,3-Trichlorobenzene	ND	0.050	10	05/24/2015 03:33
1,2,4-Trichlorobenzene	ND	0.050	10	05/24/2015 03:33
1,1,1-Trichloroethane	ND	0.050	10	05/24/2015 03:33
1,1,2-Trichloroethane	ND	0.050	10	05/24/2015 03:33
Trichloroethene	ND	0.050	10	05/24/2015 03:33
Trichlorofluoromethane	ND	0.050	10	05/24/2015 03:33
1,2,3-Trichloropropane	ND	0.050	10	05/24/2015 03:33
1,2,4-Trimethylbenzene	<b>0.065</b>	0.050	10	05/24/2015 03:33
1,3,5-Trimethylbenzene	ND	0.050	10	05/24/2015 03:33
Vinyl Chloride	ND	0.050	10	05/24/2015 03:33
Xylenes, Total	<b>0.29</b>	0.050	10	05/24/2015 03:33

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-40	1505677-022A	Soil	05/15/2015 12:15	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	85	70-130		05/24/2015 03:33
Toluene-d8	84	70-130		05/24/2015 03:33
4-BFB	88	70-130		05/24/2015 03:33
Benzene-d6	87	60-140		05/24/2015 03:33
Ethylbenzene-d10	90	60-140		05/24/2015 03:33
1,2-DCB-d4	85	60-140		05/24/2015 03:33

Analyst(s): AK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC10	105018
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
Acetone	ND		0.10	1	05/27/2015 08:52
tert-Amyl methyl ether (TAME)	ND		0.0050	1	05/27/2015 08:52
Benzene	ND		0.0050	1	05/27/2015 08:52
Bromobenzene	ND		0.0050	1	05/27/2015 08:52
Bromochloromethane	ND		0.0050	1	05/27/2015 08:52
Bromodichloromethane	ND		0.0050	1	05/27/2015 08:52
Bromoform	ND		0.0050	1	05/27/2015 08:52
Bromomethane	ND		0.0050	1	05/27/2015 08:52
2-Butanone (MEK)	ND		0.020	1	05/27/2015 08:52
t-Butyl alcohol (TBA)	ND		0.050	1	05/27/2015 08:52
n-Butyl benzene	ND		0.0050	1	05/27/2015 08:52
sec-Butyl benzene	ND		0.0050	1	05/27/2015 08:52
tert-Butyl benzene	ND		0.0050	1	05/27/2015 08:52
Carbon Disulfide	ND		0.0050	1	05/27/2015 08:52
Carbon Tetrachloride	ND		0.0050	1	05/27/2015 08:52
Chlorobenzene	ND		0.0050	1	05/27/2015 08:52
Chloroethane	ND		0.0050	1	05/27/2015 08:52
Chloroform	ND		0.0050	1	05/27/2015 08:52
Chloromethane	ND		0.0050	1	05/27/2015 08:52
2-Chlorotoluene	ND		0.0050	1	05/27/2015 08:52
4-Chlorotoluene	ND		0.0050	1	05/27/2015 08:52
Dibromochloromethane	ND		0.0050	1	05/27/2015 08:52
1,2-Dibromo-3-chloropropane	ND		0.0040	1	05/27/2015 08:52
1,2-Dibromoethane (EDB)	ND		0.0040	1	05/27/2015 08:52
Dibromomethane	ND		0.0050	1	05/27/2015 08:52
1,2-Dichlorobenzene	ND		0.0050	1	05/27/2015 08:52
1,3-Dichlorobenzene	ND		0.0050	1	05/27/2015 08:52
1,4-Dichlorobenzene	ND		0.0050	1	05/27/2015 08:52
Dichlorodifluoromethane	ND		0.0050	1	05/27/2015 08:52
1,1-Dichloroethane	ND		0.0050	1	05/27/2015 08:52
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	05/27/2015 08:52
1,1-Dichloroethene	ND		0.0050	1	05/27/2015 08:52
cis-1,2-Dichloroethene	ND		0.0050	1	05/27/2015 08:52
trans-1,2-Dichloroethene	ND		0.0050	1	05/27/2015 08:52
1,2-Dichloropropane	ND		0.0050	1	05/27/2015 08:52
1,3-Dichloropropane	ND		0.0050	1	05/27/2015 08:52
2,2-Dichloropropane	ND		0.0050	1	05/27/2015 08:52
1,1-Dichloropropene	ND		0.0050	1	05/27/2015 08:52

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC10	105018
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
cis-1,3-Dichloropropene	ND		0.0050	1	05/27/2015 08:52
trans-1,3-Dichloropropene	ND		0.0050	1	05/27/2015 08:52
Diisopropyl ether (DIPE)	ND		0.0050	1	05/27/2015 08:52
Ethylbenzene	ND		0.0050	1	05/27/2015 08:52
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	05/27/2015 08:52
Freon 113	ND		0.0050	1	05/27/2015 08:52
Hexachlorobutadiene	ND		0.0050	1	05/27/2015 08:52
Hexachloroethane	ND		0.0050	1	05/27/2015 08:52
2-Hexanone	ND		0.0050	1	05/27/2015 08:52
Isopropylbenzene	ND		0.0050	1	05/27/2015 08:52
4-Isopropyl toluene	ND		0.0050	1	05/27/2015 08:52
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	05/27/2015 08:52
Methylene chloride	ND		0.0050	1	05/27/2015 08:52
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	05/27/2015 08:52
Naphthalene	ND		0.0050	1	05/27/2015 08:52
n-Propyl benzene	ND		0.0050	1	05/27/2015 08:52
Styrene	ND		0.0050	1	05/27/2015 08:52
1,1,1,2-Tetrachloroethane	ND		0.0050	1	05/27/2015 08:52
1,1,2,2-Tetrachloroethane	ND		0.0050	1	05/27/2015 08:52
Tetrachloroethene	ND		0.0050	1	05/27/2015 08:52
Toluene	ND		0.0050	1	05/27/2015 08:52
1,2,3-Trichlorobenzene	ND		0.0050	1	05/27/2015 08:52
1,2,4-Trichlorobenzene	ND		0.0050	1	05/27/2015 08:52
1,1,1-Trichloroethane	ND		0.0050	1	05/27/2015 08:52
1,1,2-Trichloroethane	ND		0.0050	1	05/27/2015 08:52
Trichloroethene	ND		0.0050	1	05/27/2015 08:52
Trichlorofluoromethane	ND		0.0050	1	05/27/2015 08:52
1,2,3-Trichloropropane	ND		0.0050	1	05/27/2015 08:52
1,2,4-Trimethylbenzene	ND		0.0050	1	05/27/2015 08:52
1,3,5-Trimethylbenzene	ND		0.0050	1	05/27/2015 08:52
Vinyl Chloride	ND		0.0050	1	05/27/2015 08:52
Xylenes, Total	ND		0.0050	1	05/27/2015 08:52

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC10	105018

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		05/27/2015 08:52
Toluene-d8	91	70-130		05/27/2015 08:52
4-BFB	93	70-130		05/27/2015 08:52
Benzene-d6	84	60-140		05/27/2015 08:52
Ethylbenzene-d10	95	60-140		05/27/2015 08:52
1,2-DCB-d4	85	60-140		05/27/2015 08:52

Analyst(s): KBO



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

## Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-3.0	1505677-032A	Soil	05/15/2015 09:11	GC16	105018

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.25	50	05/24/2015 04:15
1,2-Dichloroethane (1,2-DCA)	ND	0.20	50	05/24/2015 04:15
Ethylbenzene	ND	0.25	50	05/24/2015 04:15
Methyl-t-butyl ether (MTBE)	ND	0.25	50	05/24/2015 04:15
Naphthalene	ND	0.25	50	05/24/2015 04:15
Toluene	ND	0.25	50	05/24/2015 04:15
Xylenes, Total	ND	0.25	50	05/24/2015 04:15

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	85	70-130	05/24/2015 04:15
Toluene-d8	83	70-130	05/24/2015 04:15
4-BFB	113	70-130	05/24/2015 04:15
Benzene-d6	86	60-140	05/24/2015 04:15
Ethylbenzene-d10	97	60-140	05/24/2015 04:15
1,2-DCB-d4	92	60-140	05/24/2015 04:15

Analyst(s): AK

Analytical Comments: a2





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-5-12.5	1505677-023A	Soil	05/15/2015 13:40	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 17:15
Acenaphthylene	ND	0.010	1	05/19/2015 17:15
Anthracene	ND	0.010	1	05/19/2015 17:15
Benzo (a) anthracene	ND	0.010	1	05/19/2015 17:15
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 17:15
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 17:15
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 17:15
Benzo (a) pyrene	ND	0.010	1	05/19/2015 17:15
Chrysene	ND	0.010	1	05/19/2015 17:15
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 17:15
Fluoranthene	ND	0.010	1	05/19/2015 17:15
Fluorene	ND	0.010	1	05/19/2015 17:15
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 17:15
1-Methylnaphthalene	ND	0.010	1	05/19/2015 17:15
2-Methylnaphthalene	ND	0.010	1	05/19/2015 17:15
Naphthalene	ND	0.010	1	05/19/2015 17:15
Phenanthrene	ND	0.010	1	05/19/2015 17:15
Pyrene	ND	0.010	1	05/19/2015 17:15

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	92	30-130	05/19/2015 17:15
2-Fluorobiphenyl	93	30-130	05/19/2015 17:15

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-5-17.5	1505677-024A	Soil	05/15/2015 13:45	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 17:45
Acenaphthylene	ND	0.010	1	05/19/2015 17:45
Anthracene	ND	0.010	1	05/19/2015 17:45
Benzo (a) anthracene	ND	0.010	1	05/19/2015 17:45
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 17:45
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 17:45
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 17:45
Benzo (a) pyrene	ND	0.010	1	05/19/2015 17:45
Chrysene	ND	0.010	1	05/19/2015 17:45
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 17:45
Fluoranthene	ND	0.010	1	05/19/2015 17:45
Fluorene	ND	0.010	1	05/19/2015 17:45
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 17:45
1-Methylnaphthalene	ND	0.010	1	05/19/2015 17:45
2-Methylnaphthalene	ND	0.010	1	05/19/2015 17:45
Naphthalene	ND	0.010	1	05/19/2015 17:45
Phenanthrene	ND	0.010	1	05/19/2015 17:45
Pyrene	ND	0.010	1	05/19/2015 17:45
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	99	30-130		05/19/2015 17:45
2-Fluorobiphenyl	99	30-130		05/19/2015 17:45

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 18:14
Acenaphthylene	ND	0.010	1	05/19/2015 18:14
Anthracene	ND	0.010	1	05/19/2015 18:14
Benzo (a) anthracene	ND	0.010	1	05/19/2015 18:14
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 18:14
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 18:14
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 18:14
Benzo (a) pyrene	ND	0.010	1	05/19/2015 18:14
Chrysene	ND	0.010	1	05/19/2015 18:14
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 18:14
Fluoranthene	ND	0.010	1	05/19/2015 18:14
Fluorene	ND	0.010	1	05/19/2015 18:14
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 18:14
1-Methylnaphthalene	ND	0.010	1	05/19/2015 18:14
2-Methylnaphthalene	ND	0.010	1	05/19/2015 18:14
Naphthalene	ND	0.010	1	05/19/2015 18:14
Phenanthrene	ND	0.010	1	05/19/2015 18:14
Pyrene	ND	0.010	1	05/19/2015 18:14
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	97	30-130		05/19/2015 18:14
2-Fluorobiphenyl	96	30-130		05/19/2015 18:14

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-12.5	1505677-026A	Soil	05/15/2015 14:25	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 18:42
Acenaphthylene	ND	0.010	1	05/19/2015 18:42
Anthracene	ND	0.010	1	05/19/2015 18:42
Benzo (a) anthracene	ND	0.010	1	05/19/2015 18:42
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 18:42
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 18:42
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 18:42
Benzo (a) pyrene	ND	0.010	1	05/19/2015 18:42
Chrysene	ND	0.010	1	05/19/2015 18:42
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 18:42
Fluoranthene	ND	0.010	1	05/19/2015 18:42
Fluorene	ND	0.010	1	05/19/2015 18:42
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 18:42
1-Methylnaphthalene	ND	0.010	1	05/19/2015 18:42
2-Methylnaphthalene	ND	0.010	1	05/19/2015 18:42
Naphthalene	ND	0.010	1	05/19/2015 18:42
Phenanthrene	ND	0.010	1	05/19/2015 18:42
Pyrene	ND	0.010	1	05/19/2015 18:42

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	101	30-130	05/19/2015 18:42
2-Fluorobiphenyl	100	30-130	05/19/2015 18:42

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-17.5	1505677-027A	Soil	05/15/2015 14:35	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 19:11
Acenaphthylene	ND	0.010	1	05/19/2015 19:11
Anthracene	ND	0.010	1	05/19/2015 19:11
Benzo (a) anthracene	ND	0.010	1	05/19/2015 19:11
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 19:11
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 19:11
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 19:11
Benzo (a) pyrene	ND	0.010	1	05/19/2015 19:11
Chrysene	ND	0.010	1	05/19/2015 19:11
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 19:11
Fluoranthene	ND	0.010	1	05/19/2015 19:11
Fluorene	ND	0.010	1	05/19/2015 19:11
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 19:11
1-Methylnaphthalene	ND	0.010	1	05/19/2015 19:11
2-Methylnaphthalene	ND	0.010	1	05/19/2015 19:11
Naphthalene	ND	0.010	1	05/19/2015 19:11
Phenanthrene	ND	0.010	1	05/19/2015 19:11
Pyrene	ND	0.010	1	05/19/2015 19:11

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	93	30-130	05/19/2015 19:11
2-Fluorobiphenyl	92	30-130	05/19/2015 19:11

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2-12.5	1505677-028A	Soil	05/15/2015 14:55	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 19:39
Acenaphthylene	ND	0.010	1	05/19/2015 19:39
Anthracene	ND	0.010	1	05/19/2015 19:39
Benzo (a) anthracene	ND	0.010	1	05/19/2015 19:39
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 19:39
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 19:39
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 19:39
Benzo (a) pyrene	ND	0.010	1	05/19/2015 19:39
Chrysene	ND	0.010	1	05/19/2015 19:39
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 19:39
Fluoranthene	ND	0.010	1	05/19/2015 19:39
Fluorene	ND	0.010	1	05/19/2015 19:39
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 19:39
1-Methylnaphthalene	ND	0.010	1	05/19/2015 19:39
2-Methylnaphthalene	ND	0.010	1	05/19/2015 19:39
Naphthalene	ND	0.010	1	05/19/2015 19:39
Phenanthrene	ND	0.010	1	05/19/2015 19:39
Pyrene	ND	0.010	1	05/19/2015 19:39
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	97	30-130		05/19/2015 19:39
2-Fluorobiphenyl	100	30-130		05/19/2015 19:39

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2-17.5	1505677-029A	Soil	05/15/2015 15:05	GC35	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	5.0	500	05/21/2015 04:42
Acenaphthylene	ND	5.0	500	05/21/2015 04:42
Anthracene	ND	5.0	500	05/21/2015 04:42
Benzo (a) anthracene	ND	5.0	500	05/21/2015 04:42
Benzo (b) fluoranthene	ND	5.0	500	05/21/2015 04:42
Benzo (k) fluoranthene	ND	5.0	500	05/21/2015 04:42
Benzo (g,h,i) perylene	ND	5.0	500	05/21/2015 04:42
Benzo (a) pyrene	ND	5.0	500	05/21/2015 04:42
Chrysene	ND	5.0	500	05/21/2015 04:42
Dibenzo (a,h) anthracene	ND	5.0	500	05/21/2015 04:42
Fluoranthene	ND	5.0	500	05/21/2015 04:42
Fluorene	ND	5.0	500	05/21/2015 04:42
Indeno (1,2,3-cd) pyrene	ND	5.0	500	05/21/2015 04:42
1-Methylnaphthalene	<b>16</b>	5.0	500	05/21/2015 04:42
2-Methylnaphthalene	<b>27</b>	5.0	500	05/21/2015 04:42
Naphthalene	<b>22</b>	5.0	500	05/21/2015 04:42
Phenanthrene	ND	5.0	500	05/21/2015 04:42
Pyrene	ND	5.0	500	05/21/2015 04:42

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
1-Fluoronaphthalene	259	S	30-130	05/21/2015 04:42
2-Fluorobiphenyl	129		30-130	05/21/2015 04:42

**Analyst(s):** HK

**Analytical Comments:** c1



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6-12.5	1505677-030A	Soil	05/15/2015 15:35	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 20:36
Acenaphthylene	ND	0.010	1	05/19/2015 20:36
Anthracene	ND	0.010	1	05/19/2015 20:36
Benzo (a) anthracene	ND	0.010	1	05/19/2015 20:36
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 20:36
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 20:36
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 20:36
Benzo (a) pyrene	ND	0.010	1	05/19/2015 20:36
Chrysene	ND	0.010	1	05/19/2015 20:36
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 20:36
Fluoranthene	ND	0.010	1	05/19/2015 20:36
Fluorene	ND	0.010	1	05/19/2015 20:36
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 20:36
1-Methylnaphthalene	ND	0.010	1	05/19/2015 20:36
2-Methylnaphthalene	ND	0.010	1	05/19/2015 20:36
Naphthalene	ND	0.010	1	05/19/2015 20:36
Phenanthrene	ND	0.010	1	05/19/2015 20:36
Pyrene	ND	0.010	1	05/19/2015 20:36
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	100	30-130		05/19/2015 20:36
2-Fluorobiphenyl	101	30-130		05/19/2015 20:36

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6-17.5	1505677-031A	Soil	05/15/2015 15:43	GC17	104983

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/19/2015 21:05
Acenaphthylene	ND	0.010	1	05/19/2015 21:05
Anthracene	ND	0.010	1	05/19/2015 21:05
Benzo (a) anthracene	ND	0.010	1	05/19/2015 21:05
Benzo (b) fluoranthene	ND	0.010	1	05/19/2015 21:05
Benzo (k) fluoranthene	ND	0.010	1	05/19/2015 21:05
Benzo (g,h,i) perylene	ND	0.010	1	05/19/2015 21:05
Benzo (a) pyrene	ND	0.010	1	05/19/2015 21:05
Chrysene	ND	0.010	1	05/19/2015 21:05
Dibenzo (a,h) anthracene	ND	0.010	1	05/19/2015 21:05
Fluoranthene	ND	0.010	1	05/19/2015 21:05
Fluorene	ND	0.010	1	05/19/2015 21:05
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/19/2015 21:05
1-Methylnaphthalene	ND	0.010	1	05/19/2015 21:05
2-Methylnaphthalene	ND	0.010	1	05/19/2015 21:05
Naphthalene	ND	0.010	1	05/19/2015 21:05
Phenanthrene	ND	0.010	1	05/19/2015 21:05
Pyrene	ND	0.010	1	05/19/2015 21:05
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	99	30-130		05/19/2015 21:05
2-Fluorobiphenyl	101	30-130		05/19/2015 21:05

**Analyst(s):** HK



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC21	105030

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/20/2015 14:18
Acenaphthylene	ND	0.25	1	05/20/2015 14:18
Acetochlor	ND	0.25	1	05/20/2015 14:18
Anthracene	ND	0.25	1	05/20/2015 14:18
Benzidine	ND	1.3	1	05/20/2015 14:18
Benzo (a) anthracene	ND	0.25	1	05/20/2015 14:18
Benzo (b) fluoranthene	ND	0.25	1	05/20/2015 14:18
Benzo (k) fluoranthene	ND	0.25	1	05/20/2015 14:18
Benzo (g,h,i) perylene	ND	0.25	1	05/20/2015 14:18
Benzo (a) pyrene	ND	0.25	1	05/20/2015 14:18
Benzyl Alcohol	ND	1.3	1	05/20/2015 14:18
1,1-Biphenyl	ND	0.25	1	05/20/2015 14:18
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/20/2015 14:18
Bis (2-chloroethyl) Ether	ND	0.25	1	05/20/2015 14:18
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/20/2015 14:18
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/20/2015 14:18
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/20/2015 14:18
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/20/2015 14:18
Butylbenzyl Phthalate	ND	0.25	1	05/20/2015 14:18
4-Chloroaniline	ND	0.50	1	05/20/2015 14:18
4-Chloro-3-methylphenol	ND	0.25	1	05/20/2015 14:18
2-Chloronaphthalene	ND	0.25	1	05/20/2015 14:18
2-Chlorophenol	ND	0.25	1	05/20/2015 14:18
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/20/2015 14:18
Chrysene	ND	0.25	1	05/20/2015 14:18
Dibenzo (a,h) anthracene	ND	0.25	1	05/20/2015 14:18
Dibenzofuran	ND	0.25	1	05/20/2015 14:18
Di-n-butyl Phthalate	ND	0.25	1	05/20/2015 14:18
1,2-Dichlorobenzene	ND	0.25	1	05/20/2015 14:18
1,3-Dichlorobenzene	ND	0.25	1	05/20/2015 14:18
1,4-Dichlorobenzene	ND	0.25	1	05/20/2015 14:18
3,3-Dichlorobenzidine	ND	0.50	1	05/20/2015 14:18
2,4-Dichlorophenol	ND	0.25	1	05/20/2015 14:18
Diethyl Phthalate	ND	0.25	1	05/20/2015 14:18
2,4-Dimethylphenol	ND	0.25	1	05/20/2015 14:18
Dimethyl Phthalate	ND	0.25	1	05/20/2015 14:18
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/20/2015 14:18
2,4-Dinitrophenol	ND	6.3	1	05/20/2015 14:18

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC21	105030

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/20/2015 14:18
2,6-Dinitrotoluene	ND	0.25	1	05/20/2015 14:18
Di-n-octyl Phthalate	ND	0.50	1	05/20/2015 14:18
1,2-Diphenylhydrazine	ND	0.25	1	05/20/2015 14:18
Fluoranthene	ND	0.25	1	05/20/2015 14:18
Fluorene	ND	0.25	1	05/20/2015 14:18
Hexachlorobenzene	ND	0.25	1	05/20/2015 14:18
Hexachlorobutadiene	ND	0.25	1	05/20/2015 14:18
Hexachlorocyclopentadiene	ND	1.3	1	05/20/2015 14:18
Hexachloroethane	ND	0.25	1	05/20/2015 14:18
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/20/2015 14:18
Isophorone	ND	0.25	1	05/20/2015 14:18
2-Methylnaphthalene	ND	0.25	1	05/20/2015 14:18
2-Methylphenol (o-Cresol)	ND	0.25	1	05/20/2015 14:18
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/20/2015 14:18
Naphthalene	ND	0.25	1	05/20/2015 14:18
2-Nitroaniline	ND	1.3	1	05/20/2015 14:18
3-Nitroaniline	ND	1.3	1	05/20/2015 14:18
4-Nitroaniline	ND	1.3	1	05/20/2015 14:18
Nitrobenzene	ND	0.25	1	05/20/2015 14:18
2-Nitrophenol	ND	1.3	1	05/20/2015 14:18
4-Nitrophenol	ND	1.3	1	05/20/2015 14:18
N-Nitrosodiphenylamine	ND	0.25	1	05/20/2015 14:18
N-Nitrosodi-n-propylamine	ND	0.25	1	05/20/2015 14:18
Pentachlorophenol	ND	1.3	1	05/20/2015 14:18
Phenanthrene	ND	0.25	1	05/20/2015 14:18
Phenol	ND	0.25	1	05/20/2015 14:18
Pyrene	ND	0.25	1	05/20/2015 14:18
1,2,4-Trichlorobenzene	ND	0.25	1	05/20/2015 14:18
2,4,5-Trichlorophenol	ND	0.25	1	05/20/2015 14:18
2,4,6-Trichlorophenol	ND	0.25	1	05/20/2015 14:18

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC21	105030

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	125		30-130	05/20/2015 14:18
Phenol-d5	120		30-130	05/20/2015 14:18
Nitrobenzene-d5	88		30-130	05/20/2015 14:18
2-Fluorobiphenyl	82		30-130	05/20/2015 14:18
2,4,6-Tribromophenol	55		16-130	05/20/2015 14:18
4-Terphenyl-d14	105		30-130	05/20/2015 14:18

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	ICP-MS1	104986

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/19/2015 20:40
Arsenic	4.4	0.50	1	05/19/2015 20:40
Barium	130	5.0	1	05/19/2015 20:40
Beryllium	0.58	0.50	1	05/19/2015 20:40
Cadmium	ND	0.25	1	05/19/2015 20:40
Chromium	57	0.50	1	05/19/2015 20:40
Cobalt	12	0.50	1	05/19/2015 20:40
Copper	15	0.50	1	05/19/2015 20:40
Lead	7.1	0.50	1	05/19/2015 20:40
Mercury	ND	0.050	1	05/19/2015 20:40
Molybdenum	0.50	0.50	1	05/19/2015 20:40
Nickel	59	0.50	1	05/19/2015 20:40
Selenium	ND	0.50	1	05/19/2015 20:40
Silver	ND	0.50	1	05/19/2015 20:40
Thallium	ND	0.50	1	05/19/2015 20:40
Vanadium	49	0.50	1	05/19/2015 20:40
Zinc	29	5.0	1	05/19/2015 20:40
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	102	70-130		05/19/2015 20:40

**Analyst(s):** BBO



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-22	1505677-002A	Soil	05/15/2015 10:05	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 22:27
MTBE	---	0.050	1	05/22/2015 22:27
Benzene	---	0.0050	1	05/22/2015 22:27
Toluene	---	0.0050	1	05/22/2015 22:27
Ethylbenzene	---	0.0050	1	05/22/2015 22:27
Xylenes	---	0.0050	1	05/22/2015 22:27

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	100	70-130	05/22/2015 22:27

**Analyst(s):** SS **Analytical Comments:** d7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-24	1505677-003A	Soil	05/15/2015 10:10	GC19	105105

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 20:38
MTBE	---	0.050	1	05/20/2015 20:38
Benzene	---	0.0050	1	05/20/2015 20:38
Toluene	---	0.0050	1	05/20/2015 20:38
Ethylbenzene	---	0.0050	1	05/20/2015 20:38
Xylenes	---	0.0050	1	05/20/2015 20:38

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	104	70-130	05/20/2015 20:38

**Analyst(s):** SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-26	1505677-004A	Soil	05/15/2015 10:15	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	2100	100	100	05/19/2015 15:01
MTBE	---	5.0	100	05/19/2015 15:01
Benzene	---	0.50	100	05/19/2015 15:01
Toluene	---	0.50	100	05/19/2015 15:01
Ethylbenzene	---	0.50	100	05/19/2015 15:01
Xylenes	---	0.50	100	05/19/2015 15:01

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	117	70-130	05/19/2015 15:01

Analyst(s): SS Analytical Comments: d2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-28	1505677-005A	Soil	05/15/2015 10:20	GC7	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	7200	200	200	05/18/2015 23:31
MTBE	---	10	200	05/18/2015 23:31
Benzene	---	1.0	200	05/18/2015 23:31
Toluene	---	1.0	200	05/18/2015 23:31
Ethylbenzene	---	1.0	200	05/18/2015 23:31
Xylenes	---	1.0	200	05/18/2015 23:31

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	0	S	70-130	05/18/2015 23:31

Analyst(s): SS Analytical Comments: d1,c2

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-30	1505677-006A	Soil	05/15/2015 10:25	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	1500	100	100	05/19/2015 16:33
MTBE	---	5.0	100	05/19/2015 16:33
Benzene	---	0.50	100	05/19/2015 16:33
Toluene	---	0.50	100	05/19/2015 16:33
Ethylbenzene	---	0.50	100	05/19/2015 16:33
Xylenes	---	0.50	100	05/19/2015 16:33

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	353	S	70-130	05/19/2015 16:33

Analyst(s): SS

Analytical Comments: d1,c2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-32	1505677-007A	Soil	05/15/2015 10:30	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2015 18:06
MTBE	---	0.050	1	05/19/2015 18:06
Benzene	---	0.0050	1	05/19/2015 18:06
Toluene	---	0.0050	1	05/19/2015 18:06
Ethylbenzene	---	0.0050	1	05/19/2015 18:06
Xylenes	---	0.0050	1	05/19/2015 18:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	05/19/2015 18:06

Analyst(s): SS





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-34	1505677-008A	Soil	05/15/2015 10:35	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	1.0	1.0	1	05/19/2015 18:36
MTBE	---	0.050	1	05/19/2015 18:36
Benzene	---	0.0050	1	05/19/2015 18:36
Toluene	---	0.0050	1	05/19/2015 18:36
Ethylbenzene	---	0.0050	1	05/19/2015 18:36
Xylenes	---	0.0050	1	05/19/2015 18:36

Surrogates	REC (%)	Limits
2-Fluorotoluene	100	70-130

**Analyst(s):** SS **Analytical Comments:** d1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-36	1505677-009A	Soil	05/15/2015 10:40	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2015 19:07
MTBE	---	0.050	1	05/19/2015 19:07
Benzene	---	0.0050	1	05/19/2015 19:07
Toluene	---	0.0050	1	05/19/2015 19:07
Ethylbenzene	---	0.0050	1	05/19/2015 19:07
Xylenes	---	0.0050	1	05/19/2015 19:07

Surrogates	REC (%)	Limits
2-Fluorotoluene	100	70-130

**Analyst(s):** SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-38	1505677-010A	Soil	05/15/2015 10:45	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2015 19:37
MTBE	---	0.050	1	05/19/2015 19:37
Benzene	---	0.0050	1	05/19/2015 19:37
Toluene	---	0.0050	1	05/19/2015 19:37
Ethylbenzene	---	0.0050	1	05/19/2015 19:37
Xylenes	---	0.0050	1	05/19/2015 19:37

Surrogates	REC (%)	Limits
2-Fluorotoluene	95	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-40	1505677-011A	Soil	05/15/2015 10:50	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2015 20:08
MTBE	---	0.050	1	05/19/2015 20:08
Benzene	---	0.0050	1	05/19/2015 20:08
Toluene	---	0.0050	1	05/19/2015 20:08
Ethylbenzene	---	0.0050	1	05/19/2015 20:08
Xylenes	---	0.0050	1	05/19/2015 20:08

Surrogates	REC (%)	Limits
2-Fluorotoluene	100	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-22	1505677-013A	Soil	05/15/2015 11:30	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	<b>10,000</b>	1000	1,000	05/20/2015 16:34
MTBE	---	50	1,000	05/20/2015 16:34
Benzene	---	5.0	1,000	05/20/2015 16:34
Toluene	---	5.0	1,000	05/20/2015 16:34
Ethylbenzene	---	5.0	1,000	05/20/2015 16:34
Xylenes	---	5.0	1,000	05/20/2015 16:34

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	126	70-130	05/20/2015 16:34

Analyst(s): SS Analytical Comments: d2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-24	1505677-014A	Soil	05/15/2015 11:35	GC19	104989

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	<b>13,000</b>	1000	1,000	05/20/2015 17:35
MTBE	---	50	1,000	05/20/2015 17:35
Benzene	---	5.0	1,000	05/20/2015 17:35
Toluene	---	5.0	1,000	05/20/2015 17:35
Ethylbenzene	---	5.0	1,000	05/20/2015 17:35
Xylenes	---	5.0	1,000	05/20/2015 17:35

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	1838	S	70-130	05/20/2015 17:35

Analyst(s): SS Analytical Comments: d1,c2



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-26	1505677-015A	Soil	05/15/2015 11:40	GC19	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	22,000	1000	1,000	05/20/2015 18:06
MTBE	---	50	1,000	05/20/2015 18:06
Benzene	---	5.0	1,000	05/20/2015 18:06
Toluene	---	5.0	1,000	05/20/2015 18:06
Ethylbenzene	---	5.0	1,000	05/20/2015 18:06
Xylenes	---	5.0	1,000	05/20/2015 18:06

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	4129	S	70-130	05/20/2015 18:06

Analyst(s): SS

Analytical Comments: d1,c2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-28	1505677-016A	Soil	05/15/2015 11:45	GC19	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	5100	200	200	05/20/2015 18:37
MTBE	---	10	200	05/20/2015 18:37
Benzene	---	1.0	200	05/20/2015 18:37
Toluene	---	1.0	200	05/20/2015 18:37
Ethylbenzene	---	1.0	200	05/20/2015 18:37
Xylenes	---	1.0	200	05/20/2015 18:37

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorotoluene	961	S	70-130	05/20/2015 18:37

Analyst(s): SS

Analytical Comments: d1,c2

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-30	1505677-017A	Soil	05/15/2015 11:50	GC19	105020
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	3100		200	200	05/19/2015 22:39
MTBE	---		10	200	05/19/2015 22:39
Benzene	---		1.0	200	05/19/2015 22:39
Toluene	---		1.0	200	05/19/2015 22:39
Ethylbenzene	---		1.0	200	05/19/2015 22:39
Xylenes	---		1.0	200	05/19/2015 22:39
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	99		70-130		05/19/2015 22:39
<u>Analyst(s):</u> SS			<u>Analytical Comments:</u> d2		

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-32	1505677-018A	Soil	05/15/2015 11:55	GC19	105020
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	11		2.0	2	05/21/2015 18:23
MTBE	---		0.10	2	05/21/2015 18:23
Benzene	---		0.010	2	05/21/2015 18:23
Toluene	---		0.010	2	05/21/2015 18:23
Ethylbenzene	---		0.010	2	05/21/2015 18:23
Xylenes	---		0.010	2	05/21/2015 18:23
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	94		70-130		05/21/2015 18:23
<u>Analyst(s):</u> SS			<u>Analytical Comments:</u> d1		

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-34	1505677-019A	Soil	05/15/2015 12:00	GC19	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	29	5.0	5	05/20/2015 19:38
MTBE	---	0.25	5	05/20/2015 19:38
Benzene	---	0.025	5	05/20/2015 19:38
Toluene	---	0.025	5	05/20/2015 19:38
Ethylbenzene	---	0.025	5	05/20/2015 19:38
Xylenes	---	0.025	5	05/20/2015 19:38

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	106	70-130	05/20/2015 19:38

Analyst(s): SS Analytical Comments: d1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-36	1505677-020A	Soil	05/15/2015 12:05	GC19	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	960	200	200	05/20/2015 00:40
MTBE	---	10	200	05/20/2015 00:40
Benzene	---	1.0	200	05/20/2015 00:40
Toluene	---	1.0	200	05/20/2015 00:40
Ethylbenzene	---	1.0	200	05/20/2015 00:40
Xylenes	---	1.0	200	05/20/2015 00:40

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	101	70-130	05/20/2015 00:40

Analyst(s): SS Analytical Comments: d2

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-38	1505677-021A	Soil	05/15/2015 12:10	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	16	10	10	05/20/2015 17:25
MTBE	---	0.50	10	05/20/2015 17:25
Benzene	---	0.050	10	05/20/2015 17:25
Toluene	---	0.050	10	05/20/2015 17:25
Ethylbenzene	---	0.050	10	05/20/2015 17:25
Xylenes	---	0.050	10	05/20/2015 17:25

Surrogates	REC (%)	Limits
2-Fluorotoluene	91	70-130

Analyst(s): SS Analytical Comments: d1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-40	1505677-022A	Soil	05/15/2015 12:15	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	7.7	1.0	1	05/19/2015 18:46
MTBE	---	0.050	1	05/19/2015 18:46
Benzene	---	0.0050	1	05/19/2015 18:46
Toluene	---	0.0050	1	05/19/2015 18:46
Ethylbenzene	---	0.0050	1	05/19/2015 18:46
Xylenes	---	0.0050	1	05/19/2015 18:46

Surrogates	REC (%)	Limits
2-Fluorotoluene	94	70-130

Analyst(s): SS Analytical Comments: d1



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/21/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 03:19
MTBE	---	0.050	1	05/20/2015 03:19
Benzene	---	0.0050	1	05/20/2015 03:19
Toluene	---	0.0050	1	05/20/2015 03:19
Ethylbenzene	---	0.0050	1	05/20/2015 03:19
Xylenes	---	0.0050	1	05/20/2015 03:19

Surrogates	REC (%)	Limits
2-Fluorotoluene	86	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-3.0	1505677-032A	Soil	05/15/2015 09:11	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	700	100	100	05/19/2015 00:01
MTBE	---	5.0	100	05/19/2015 00:01
Benzene	---	0.50	100	05/19/2015 00:01
Toluene	---	0.50	100	05/19/2015 00:01
Ethylbenzene	---	0.50	100	05/19/2015 00:01
Xylenes	---	0.50	100	05/19/2015 00:01

Surrogates	REC (%)	Limits
aaa-TFT	93	70-130

Analyst(s): SS

Analytical Comments: d7





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/20/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-5-12.5	1505677-023A	Soil	05/15/2015 13:40	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2015 19:17
MTBE	---	0.050	1	05/19/2015 19:17
Benzene	ND	0.0050	1	05/19/2015 19:17
Toluene	ND	0.0050	1	05/19/2015 19:17
Ethylbenzene	ND	0.0050	1	05/19/2015 19:17
Xylenes	ND	0.0050	1	05/19/2015 19:17

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-5-17.5	1505677-024A	Soil	05/15/2015 13:45	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2015 20:17
MTBE	---	0.050	1	05/19/2015 20:17
Benzene	ND	0.0050	1	05/19/2015 20:17
Toluene	ND	0.0050	1	05/19/2015 20:17
Ethylbenzene	ND	0.0050	1	05/19/2015 20:17
Xylenes	ND	0.0050	1	05/19/2015 20:17

Surrogates	REC (%)	Limits
2-Fluorotoluene	91	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/20/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-12.5	1505677-026A	Soil	05/15/2015 14:25	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 03:50
MTBE	---	0.050	1	05/20/2015 03:50
Benzene	ND	0.0050	1	05/20/2015 03:50
Toluene	ND	0.0050	1	05/20/2015 03:50
Ethylbenzene	ND	0.0050	1	05/20/2015 03:50
Xylenes	ND	0.0050	1	05/20/2015 03:50

Surrogates	REC (%)	Limits
2-Fluorotoluene	85	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-17.5	1505677-027A	Soil	05/15/2015 14:35	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 04:20
MTBE	---	0.050	1	05/20/2015 04:20
Benzene	ND	0.0050	1	05/20/2015 04:20
Toluene	ND	0.0050	1	05/20/2015 04:20
Ethylbenzene	ND	0.0050	1	05/20/2015 04:20
Xylenes	ND	0.0050	1	05/20/2015 04:20

Surrogates	REC (%)	Limits
2-Fluorotoluene	108	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/20/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2-12.5	1505677-028A	Soil	05/15/2015 14:55	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 04:50
MTBE	---	0.050	1	05/20/2015 04:50
Benzene	ND	0.0050	1	05/20/2015 04:50
Toluene	ND	0.0050	1	05/20/2015 04:50
Ethylbenzene	ND	0.0050	1	05/20/2015 04:50
Xylenes	ND	0.0050	1	05/20/2015 04:50

Surrogates	REC (%)	Limits
2-Fluorotoluene	90	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2-17.5	1505677-029A	Soil	05/15/2015 15:05	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	<b>4000</b>	100	100	05/20/2015 05:20
MTBE	---	5.0	100	05/20/2015 05:20
Benzene	<b>1.4</b>	0.50	100	05/20/2015 05:20
Toluene	<b>6.3</b>	0.50	100	05/20/2015 05:20
Ethylbenzene	<b>7.1</b>	0.50	100	05/20/2015 05:20
Xylenes	<b>120</b>	0.50	100	05/20/2015 05:20

Surrogates	REC (%)	Limits
aaa-TFT	106	70-130

Analyst(s): SS

Analytical Comments: d2



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15-5/20/15

**WorkOrder:** 1505677  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6-12.5	1505677-030A	Soil	05/15/2015 15:35	GC19	105105

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 00:41
MTBE	---	0.050	1	05/21/2015 00:41
Benzene	ND	0.0050	1	05/21/2015 00:41
Toluene	ND	0.0050	1	05/21/2015 00:41
Ethylbenzene	ND	0.0050	1	05/21/2015 00:41
Xylenes	ND	0.0050	1	05/21/2015 00:41

Surrogates	REC (%)	Limits
2-Fluorotoluene	109	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6-17.5	1505677-031A	Soil	05/15/2015 15:43	GC7	105020

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	16	1.0	1	05/20/2015 06:20
MTBE	---	0.050	1	05/20/2015 06:20
Benzene	ND	0.0050	1	05/20/2015 06:20
Toluene	ND	0.0050	1	05/20/2015 06:20
Ethylbenzene	ND	0.0050	1	05/20/2015 06:20
Xylenes	ND	0.0050	1	05/20/2015 06:20

Surrogates	REC (%)	Limits
aaa-TFT	76	70-130

Analyst(s): SS

Analytical Comments: d7



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

## pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	WetChem	105000

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.46	0.1	1	05/18/2015 20:50

Analyst(s): RB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-22	1505677-002A	Soil	05/15/2015 10:05	GC6A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 15:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 15:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	103	70-130	05/21/2015 15:08

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-24	1505677-003A	Soil	05/15/2015 10:10	GC2A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 17:14
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 17:14

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/21/2015 17:14

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-26	1505677-004A	Soil	05/15/2015 10:15	GC31B	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	<b>500</b>	50	1	05/19/2015 22:02
TPH-Motor Oil (C18-C36)	ND	50	1	05/19/2015 22:02

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/19/2015 22:02

Analyst(s): HD

Analytical Comments: e4

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-28	1505677-005A	Soil	05/15/2015 10:20	GC11A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1200	5.0	5	05/26/2015 13:19
TPH-Motor Oil (C18-C36)	ND	25	5	05/26/2015 13:19

Surrogates	REC (%)	Limits	Date Analyzed
C26	99	70-130	05/26/2015 13:19

Analyst(s): HD Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-30	1505677-006A	Soil	05/15/2015 10:25	GC31B	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	480	10	1	05/20/2015 01:25
TPH-Motor Oil (C18-C36)	ND	50	1	05/20/2015 01:25

Surrogates	REC (%)	Limits	Date Analyzed
C26	129	70-130	05/20/2015 01:25

Analyst(s): HD Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-32	1505677-007A	Soil	05/15/2015 10:30	GC2A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 15:58
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 15:58

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/21/2015 15:58

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-34	1505677-008A	Soil	05/15/2015 10:35	GC6A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 16:20
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 16:20

Surrogates	REC (%)	Limits	Date Analyzed
C9	103	70-130	05/21/2015 16:20

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-36	1505677-009A	Soil	05/15/2015 10:40	GC6B	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.0	1.0	1	05/21/2015 09:18
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 09:18

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/21/2015 09:18

Analyst(s): HD

Analytical Comments: e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-38	1505677-010A	Soil	05/15/2015 10:45	GC6B	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 08:06
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 08:06

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/21/2015 08:06

Analyst(s): HD

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-40	1505677-011A	Soil	05/15/2015 10:50	GC6A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 19:05
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 19:05

Surrogates	REC (%)	Limits	Date Analyzed
C9	102	70-130	05/22/2015 19:05

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-22	1505677-013A	Soil	05/15/2015 11:30	GC31B	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1600	10	1	05/20/2015 08:13
TPH-Motor Oil (C18-C36)	130	50	1	05/20/2015 08:13

Surrogates	REC (%)	Limits	Date Analyzed
C26	111	70-130	05/20/2015 08:13

Analyst(s): HD

Analytical Comments: e4,e1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-24	1505677-014A	Soil	05/15/2015 11:35	GC31A	105010

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2500	10	1	05/19/2015 09:48
TPH-Motor Oil (C18-C36)	240	50	1	05/19/2015 09:48

Surrogates	REC (%)	Limits	Date Analyzed
C26	105	70-130	05/19/2015 09:48

Analyst(s): HD

Analytical Comments: e4,e1

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-26	1505677-015A	Soil	05/15/2015 11:40	GC2A	105010

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	7700	20	20	05/26/2015 12:04
TPH-Motor Oil (C18-C36)	560	100	20	05/26/2015 12:04

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C26	111	70-130	05/26/2015 12:04

Analyst(s): HD Analytical Comments: e4,e1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-28	1505677-016A	Soil	05/15/2015 11:45	GC31B	105010

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	630	10	1	05/20/2015 04:48
TPH-Motor Oil (C18-C36)	ND	50	1	05/20/2015 04:48

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C26	126	70-130	05/20/2015 04:48

Analyst(s): HD Analytical Comments: e4,e1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-30	1505677-017A	Soil	05/15/2015 11:50	GC31B	105010

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	160	10	1	05/20/2015 06:30
TPH-Motor Oil (C18-C36)	ND	50	1	05/20/2015 06:30

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	105	70-130	05/20/2015 06:30

Analyst(s): HD Analytical Comments: e4

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-32	1505677-018A	Soil	05/15/2015 11:55	GC2A	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	3.2	1.0	1	05/26/2015 13:27
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/26/2015 13:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	109	70-130	05/26/2015 13:27

Analyst(s): HD Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-34	1505677-019A	Soil	05/15/2015 12:00	GC11A	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	15	1.0	1	05/21/2015 21:14
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 21:14

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	70-130	05/21/2015 21:14

Analyst(s): HK Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-36	1505677-020A	Soil	05/15/2015 12:05	GC31B	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	52	10	1	05/22/2015 00:24
TPH-Motor Oil (C18-C36)	ND	50	1	05/22/2015 00:24

Surrogates	REC (%)	Limits	Date Analyzed
C9	106	70-130	05/22/2015 00:24

Analyst(s): HD Analytical Comments: e4

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-38	1505677-021A	Soil	05/15/2015 12:10	GC6B	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.7	1.0	1	05/21/2015 15:15
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 15:15

Surrogates	REC (%)	Limits	Date Analyzed
C9	114	70-130	05/21/2015 15:15

Analyst(s): HD Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-2-40	1505677-022A	Soil	05/15/2015 12:15	GC2A	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2.0	1.0	1	05/21/2015 18:30
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 18:30

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/21/2015 18:30

Analyst(s): HD Analytical Comments: e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-5-12.5	1505677-023A	Soil	05/15/2015 13:40	GC6B	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 06:54
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 06:54

Surrogates	REC (%)	Limits	Date Analyzed
C9	114	70-130	05/21/2015 06:54

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-5-17.5	1505677-024A	Soil	05/15/2015 13:45	GC6A	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 20:17
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 20:17

Surrogates	REC (%)	Limits	Date Analyzed
C9	101	70-130	05/22/2015 20:17

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	GC6A	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 17:53
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 17:53

Surrogates	REC (%)	Limits	Date Analyzed
C9	101	70-130	05/22/2015 17:53

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-12.5	1505677-026A	Soil	05/15/2015 14:25	GC6A	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 13:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 13:56

Surrogates	REC (%)	Limits	Date Analyzed
C9	102	70-130	05/21/2015 13:56

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-17.5	1505677-027A	Soil	05/15/2015 14:35	GC6A	105019

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 09:18
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 09:18

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	104	70-130	05/21/2015 09:18

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2-12.5	1505677-028A	Soil	05/15/2015 14:55	GC6A	105019

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	3.6	1.0	1	05/21/2015 08:06
TPH-Motor Oil (C18-C36)	6.0	5.0	1	05/21/2015 08:06

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	104	70-130	05/21/2015 08:06

Analyst(s): HD

Analytical Comments: e3,e7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-2-17.5	1505677-029A	Soil	05/15/2015 15:05	GC11B	105019

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1300	5.0	5	05/26/2015 13:19
TPH-Motor Oil (C18-C36)	43	25	5	05/26/2015 13:19

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C26	126	70-130	05/26/2015 13:19

Analyst(s): HD

Analytical Comments: e4,e2

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6-12.5	1505677-030A	Soil	05/15/2015 15:35	GC6B	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 12:52
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 12:52

Surrogates	REC (%)	Limits	Date Analyzed
C9	115	70-130	05/21/2015 12:52

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-6-17.5	1505677-031A	Soil	05/15/2015 15:43	GC6B	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	48	1.0	1	05/21/2015 14:03
TPH-Motor Oil (C18-C36)	120	5.0	1	05/21/2015 14:03

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/21/2015 14:03

Analyst(s): HD

Analytical Comments: e7,e2,e11



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 5/18/15

**WorkOrder:** 1505677  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RB-6-3.0	1505677-032A	Soil	05/15/2015 09:11	GC11B	105019

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	58	1.0	1	05/21/2015 01:41

Surrogates	REC (%)	Limits	Date Analyzed
C9	110	70-130	05/21/2015 01:41

**Analyst(s):** HD      **Analytical Comments:** e11,e7,e2





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15  
**Instrument:** GC22  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 104997  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104997  
 1505675-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0442	0.0010	0.050	-	88	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0498	0.0010	0.050	-	100	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0507	0.0010	0.050	-	101	70-130
Dieldrin	ND	0.0558	0.0010	0.050	-	112	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0484	0.0010	0.050	-	97	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0418	0.0010	0.050	-	84	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-
<b>Surrogate Recovery</b>							
Decachlorobiphenyl	0.0498	0.0458		0.050	100	92	70-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15  
**Instrument:** GC22  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 104997  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104997  
 1505675-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0426	0.0460	0.050	ND	85	92	70-130	7.68	30
g-BHC	0.0470	0.0489	0.050	ND	94	98	70-130	3.92	30
p,p-DDT	0.0524	0.0529	0.050	ND	104	105	70-130	1.08	30
Dieldrin	0.0545	0.0558	0.050	ND	109	111	70-130	2.34	30
Endrin	0.0482	0.0497	0.050	ND	96	99	70-130	2.94	30
Heptachlor	0.0428	0.0448	0.050	ND	86	90	70-130	4.50	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0433	0.0428	0.050		87	86	70-130	1.06	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105009  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105009  
 1505683-001AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0393	0.0050	0.050	-	79	53-116
Benzene	ND	0.0443	0.0050	0.050	-	89	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.154	0.050	0.20	-	77	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0452	0.0050	0.050	-	90	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0405	0.0040	0.050	-	81	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0394	0.0040	0.050	-	79	58-135
1,1-Dichloroethene	ND	0.0427	0.0050	0.050	-	85	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105009  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105009  
 1505683-001AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0432	0.0050	0.050	-	86	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0423	0.0050	0.050	-	85	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0389	0.0050	0.050	-	78	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0502	0.0050	0.050	-	93	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0453	0.0050	0.050	-	91	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.101	0.103		0.12	81	83	70-130
Toluene-d8	0.123	0.116		0.12	99	93	70-130
4-BFB	0.0112	0.0110		0.012	90	88	70-130
Benzene-d6	0.0863	0.0814		0.10	86	81	60-140
Ethylbenzene-d10	0.101	0.0980		0.10	101	98	60-140
1,2-DCB-d4	0.102	0.0802		0.10	102	80	60-140

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15  
**Instrument:** GC10, GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105009  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105009  
 1505683-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0207	0.0212	0.050	ND	41,F1	42,F1	70-130	2.72	20
Benzene	0.0272	0.0277	0.050	ND	54,F1	55,F1	70-130	1.88	20
t-Butyl alcohol (TBA)	0.0919	0.0932	0.20	ND	46,F1	47,F1	70-130	1.36	20
Chlorobenzene	0.0261	0.0270	0.050	ND	52,F1	54,F1	70-130	3.33	20
1,2-Dibromoethane (EDB)	0.0219	0.0226	0.050	ND	44,F1	45,F1	70-130	2.70	20
1,2-Dichloroethane (1,2-DCA)	0.0237	0.0240	0.050	ND	47,F1	48,F1	70-130	1.18	20
1,1-Dichloroethene	0.0250	0.0252	0.050	ND	50,F1	51,F1	70-130	1.16	20
Diisopropyl ether (DIPE)	0.0254	0.0260	0.050	ND	51,F1	52,F1	70-130	2.15	20
Ethyl tert-butyl ether (ETBE)	0.0243	0.0251	0.050	ND	49,F1	50,F1	70-130	3.26	20
Methyl-t-butyl ether (MTBE)	0.0234	0.0241	0.050	ND	47,F1	48,F1	70-130	2.93	20
Toluene	0.0268	0.0276	0.050	ND	54,F1	55,F1	70-130	2.76	20
Trichloroethene	0.0272	0.0276	0.050	ND	54,F1	55,F1	70-130	1.63	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.109	0.110	0.12		87	88	70-130	0.612	20
Toluene-d8	0.115	0.116	0.12		92	93	70-130	1.19	20
4-BFB	0.00845	0.00956	0.012		68	76	70-130	12.3	20
Benzene-d6	0.0610	0.0615	0.10		61	62	60-140	0.767	20
Ethylbenzene-d10	0.0642	0.0671	0.10		64	67	60-140	4.42	20
1,2-DCB-d4	0.0647	0.0653	0.10		65	65	60-140	0	20

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15 - 5/20/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105018  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105018  
 1505677-032AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0389	0.0050	0.050	-	78	53-116
Benzene	ND	0.0435	0.0050	0.050	-	87	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.161	0.050	0.20	-	80	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0443	0.0050	0.050	-	89	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0400	0.0040	0.050	-	80	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0395	0.0040	0.050	-	79	58-135
1,1-Dichloroethene	ND	0.0424	0.0050	0.050	-	85	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15 - 5/20/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105018  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105018  
 1505677-032AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0429	0.0050	0.050	-	86	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0416	0.0050	0.050	-	83	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0387	0.0050	0.050	-	77	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0484	0.0050	0.050	-	97	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0464	0.0050	0.050	-	93	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.101	0.104		0.12	81	83	70-130
Toluene-d8	0.111	0.113		0.12	89	91	70-130
4-BFB	0.0103	0.0116		0.012	82	93	70-130
Benzene-d6	0.0869	0.0880		0.10	87	88	60-140
Ethylbenzene-d10	0.105	0.102		0.10	105	102	60-140
1,2-DCB-d4	0.0756	0.0797		0.10	76	80	60-140

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15 - 5/20/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105018  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105018  
 1505677-032AMS/MSD

## QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	NR	NR		ND<0.25	NR	NR	-	NR	
Benzene	NR	NR		ND<0.25	NR	NR	-	NR	
t-Butyl alcohol (TBA)	NR	NR		ND<2.5	NR	NR	-	NR	
Chlorobenzene	NR	NR		ND<0.25	NR	NR	-	NR	
1,2-Dibromoethane (EDB)	NR	NR		ND<0.2	NR	NR	-	NR	
1,2-Dichloroethane (1,2-DCA)	NR	NR		ND<0.2	NR	NR	-	NR	
1,1-Dichloroethene	NR	NR		ND<0.25	NR	NR	-	NR	
Diisopropyl ether (DIPE)	NR	NR		ND<0.25	NR	NR	-	NR	
Ethyl tert-butyl ether (ETBE)	NR	NR		ND<0.25	NR	NR	-	NR	
Methyl-t-butyl ether (MTBE)	NR	NR		ND<0.25	NR	NR	-	NR	
Toluene	NR	NR		ND<0.25	NR	NR	-	NR	
Trichloroethene	NR	NR		ND<0.25	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
Dibromofluoromethane	NR	NR			NR	NR	-	NR	
Toluene-d8	NR	NR			NR	NR	-	NR	
4-BFB	NR	NR			NR	NR	-	NR	
Benzene-d6	NR	NR			NR	NR	-	NR	
Ethylbenzene-d10	NR	NR			NR	NR	-	NR	
1,2-DCB-d4	NR	NR			NR	NR	-	NR	





# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 104983  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-104983  
 1505631-037AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.192	0.010	0.20	-	96	30-130
Chrysene	ND	0.145	0.010	0.20	-	72	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.169	0.010	0.20	-	85	30-130
2-Methylnaphthalene	ND	0.168	0.010	0.20	-	84	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.162	0.010	0.20	-	81	30-130
Pyrene	ND	0.144	0.010	0.20	-	72	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.332	0.333		0.50	66	67	30-130
2-Fluorobiphenyl	0.313	0.320		0.50	63	64	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		ND<0.26	NR	NR	-	NR	
Chrysene	NR	NR		ND<0.26	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.26	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.26	NR	NR	-	NR	
Phenanthrene	NR	NR		ND<0.26	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.26	NR	NR	-	NR	

### Surrogate Recovery

1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15 - 5/19/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105030  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105030  
 1505684-003AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	5.63	0.25	5	-	113	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	6.47	0.25	5	-	129	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.94	0.25	5	-	119	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	5.10	0.25	5	-	102	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	6.60	0.25	5	-	132, F2	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15 - 5/19/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105030  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105030  
 1505684-003AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	5.17	1.3	5	-	103	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	5.78	0.25	5	-	116	30-130
Pentachlorophenol	ND	4.92	1.3	5	-	98	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	5.97	0.25	5	-	119	30-130
Pyrene	ND	6.14	0.25	5	-	123	30-130
1,2,4-Trichlorobenzene	ND	5.44	0.25	5	-	109	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

### Surrogate Recovery

2-Fluorophenol	5.76	5.60		5	115	112	30-130
Phenol-d5	5.42	5.31		5	108	106	30-130
Nitrobenzene-d5	4.63	4.79		5	93	96	30-130
2-Fluorobiphenyl	4.49	4.65		5	90	93	30-130
2,4,6-Tribromophenol	2.63	3.48		5	53	70	16-130
4-Terphenyl-d14	5.20	5.13		5	104	103	30-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15 - 5/19/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105030  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105030  
 1505684-003AMS/MSD

### QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<0.5	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<0.5	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<0.5	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<0.5	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<0.5	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<2.6	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<0.5	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<2.6	NR	NR	-	NR	
Phenol	NR	NR		ND<0.5	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.5	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<0.5	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 104986  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104986  
 1505683-001AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	49.8	0.50	50	-	100	75-125
Arsenic	ND	51.4	0.50	50	-	103	75-125
Barium	ND	490	5.0	500	-	98	75-125
Beryllium	ND	53.5	0.50	50	-	107	75-125
Cadmium	ND	50.4	0.25	50	-	101	75-125
Chromium	ND	52.8	0.50	50	-	106	75-125
Cobalt	ND	52.4	0.50	50	-	105	75-125
Copper	ND	54.4	0.50	50	-	108	75-125
Lead	ND	54.4	0.50	50	-	109	75-125
Mercury	ND	1.18	0.050	1.25	-	94	75-125
Molybdenum	ND	50.0	0.50	50	-	100	75-125
Nickel	ND	53.9	0.50	50	-	108	75-125
Selenium	ND	51.6	0.50	50	-	103	75-125
Silver	ND	51.4	0.50	50	-	103	75-125
Thallium	ND	52.4	0.50	50	-	105	75-125
Vanadium	ND	52.8	0.50	50	-	106	75-125
Zinc	ND	527	5.0	500	-	105	75-125
<b>Surrogate Recovery</b>							
Terbium	508	508		500	102	102	70-130

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/19/15  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 104986  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104986  
 1505683-001AMS/MSD

## QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	50.9	51.1	50	ND	101	102	75-125	0.353	20
Arsenic	53.0	54.4	50	2.523	101	104	75-125	2.55	20
Barium	600	621	500	64.83	107	111	75-125	3.54	20
Beryllium	51.3	51.5	50	ND	102	102	75-125	0	20
Cadmium	49.8	50.0	50	ND	100	100	75-125	0	20
Chromium	77.0	78.9	50	23.53	107	111	75-125	2.41	20
Cobalt	56.2	56.5	50	6.330	100	100	75-125	0	20
Copper	79.8	80.6	50	23.56	112	114	75-125	0.973	20
Lead	58.7	61.8	50	4.054	109	116	75-125	5.13	20
Mercury	1.34	1.36	1.25	0.1245	97	99	75-125	1.11	20
Molybdenum	51.1	51.1	50	ND	101	102	75-125	0.0979	20
Nickel	81.0	81.6	50	25.50	111	112	75-125	0.812	20
Selenium	50.8	52.0	50	ND	102	104	75-125	2.39	20
Silver	49.9	50.5	50	ND	100	101	75-125	1.19	20
Thallium	52.3	52.9	50	ND	104	106	75-125	1.03	20
Vanadium	93.3	93.9	50	35.43	116	117	75-125	0.652	20
Zinc	562	565	500	41.73	104	105	75-125	0.444	20
<b>Surrogate Recovery</b>									
Terbium	508	512	500		102	102	70-130	0	20



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 104989  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-104989  
 1505677-005AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.542	0.40	0.60	-	90	70-130
MTBE	ND	0.0934	0.050	0.10	-	93	70-130
Benzene	ND	0.108	0.0050	0.10	-	108	70-130
Toluene	ND	0.105	0.0050	0.10	-	105	70-130
Ethylbenzene	ND	0.111	0.0050	0.10	-	111	70-130
Xylenes	ND	0.341	0.0050	0.30	-	114	70-130

### Surrogate Recovery

2-Fluorotoluene	0.0904	0.115		0.10	90	115	70-130
-----------------	--------	-------	--	------	----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		1400	NR	NR	-	NR	
MTBE	NR	NR		ND<10	NR	NR	-	NR	
Benzene	NR	NR		37	NR	NR	-	NR	
Toluene	NR	NR		260	NR	NR	-	NR	
Ethylbenzene	NR	NR		94	NR	NR	-	NR	
Xylenes	NR	NR		440	NR	NR	-	NR	

### Surrogate Recovery

2-Fluorotoluene	NR	NR			NR	NR	-	NR	
-----------------	----	----	--	--	----	----	---	----	--

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105020  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105020  
 1505677-032AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.553	0.40	0.60	-	92	70-130
MTBE	ND	0.0802	0.050	0.10	-	80	70-130
Benzene	ND	0.0975	0.0050	0.10	-	97	70-130
Toluene	ND	0.0964	0.0050	0.10	-	96	70-130
Ethylbenzene	ND	0.103	0.0050	0.10	-	103	70-130
Xylenes	ND	0.319	0.0050	0.30	-	106	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.104	0.106		0.10	104	106	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		ND<40	NR	NR	-	NR	
MTBE	NR	NR		ND<5	NR	NR	-	NR	
Benzene	NR	NR		ND<0.5	NR	NR	-	NR	
Toluene	NR	NR		1.3	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND<0.5	NR	NR	-	NR	
Xylenes	NR	NR		0.76	NR	NR	-	NR	

**Surrogate Recovery**

2-Fluorotoluene	NR	NR			NR	NR	-	NR	
-----------------	----	----	--	--	----	----	---	----	--

(Cont.)





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/20/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105105  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105105  
 1505760-046AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.551	0.40	0.60	-	92	70-130
MTBE	ND	0.0972	0.050	0.10	-	97	70-130
Benzene	ND	0.101	0.0050	0.10	-	101	70-130
Toluene	ND	0.0992	0.0050	0.10	-	99	70-130
Ethylbenzene	ND	0.105	0.0050	0.10	-	105	70-130
Xylenes	ND	0.328	0.0050	0.30	-	109	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.110	0.108		0.10	110	108	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.544	0.509	0.60	ND	91	85	70-130	6.54	20
MTBE	0.0889	0.0736	0.10	ND	89	74	70-130	18.8	20
Benzene	0.0915	0.0781	0.10	ND	92	78	70-130	15.8	20
Toluene	0.0905	0.0761	0.10	ND	91	76	70-130	17.3	20
Ethylbenzene	0.0968	0.0815	0.10	ND	97	82	70-130	17.1	20
Xylenes	0.302	0.258	0.30	ND	101	86	70-130	15.8	20

**Surrogate Recovery**

2-Fluorotoluene	0.100	0.0834	0.10		100	83	70-130	18.4	20
-----------------	-------	--------	------	--	-----	----	--------	------	----

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC19, GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105223  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105223  
 1505867-019AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.569	0.40	0.60	-	95	70-130
MTBE	ND	0.0947	0.050	0.10	-	95	70-130
Benzene	ND	0.0975	0.0050	0.10	-	97	70-130
Toluene	ND	0.0955	0.0050	0.10	-	96	70-130
Ethylbenzene	ND	0.102	0.0050	0.10	-	102	70-130
Xylenes	ND	0.317	0.0050	0.30	-	105	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.107	0.105		0.10	107	105	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.521	0.520	0.60	ND	87	87	70-130	0	20
MTBE	0.0792	0.0841	0.10	ND	79	84	70-130	5.90	20
Benzene	0.0780	0.0862	0.10	ND	78	86	70-130	10.0	20
Toluene	0.0776	0.0856	0.10	ND	78	86	70-130	9.88	20
Ethylbenzene	0.0841	0.0925	0.10	ND	84	93	70-130	9.51	20
Xylenes	0.266	0.286	0.30	ND	89	95	70-130	7.06	20

**Surrogate Recovery**

2-Fluorotoluene	0.0856	0.0948	0.10		86	95	70-130	10.2	20
-----------------	--------	--------	------	--	----	----	--------	------	----



# Quality Control Report

**Client:** Treadwell & Rollo

**WorkOrder:** 1505677

**Date Prepared:** 5/18/15

**BatchID:** 105000

**Date Analyzed:** 5/18/15

**Extraction Method:** SW9045D

**Instrument:** WetChem

**Analytical Method:** SW9045D

**Matrix:** Soil

**Unit:** ±, pH units @ 25°C

**Project:** #731637001; 3093 Broadway

## QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505631-004A	6.58	1	6.58	1	0	0.1



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/18/15  
**Instrument:** GC9a  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105010  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105010  
 1505683-001AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	45.5	1.0	40	-	114	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	27.7	27.7		25	111	111	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	100	106	80	11.14	111	118	70-130	5.62	30

**Surrogate Recovery**

C9	55.3	55.5	50		111	111	70-130	0	30
----	------	------	----	--	-----	-----	--------	---	----



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/18/15  
**Date Analyzed:** 5/20/15 - 5/21/15  
**Instrument:** GC11A, GC2A  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105019  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105019  
 1505677-032AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	37.6	1.0	40	-	94	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	27.9	24.3		25	112	97	70-130
----	------	------	--	----	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	111	116	40	57.80	132,F1	146,F1	70-130	5.00	30

**Surrogate Recovery**

C9	27.6	27.3	25		111	109	70-130	1.07	30
----	------	------	----	--	-----	-----	--------	------	----



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505677

ClientCode: TWRK

WaterTrax     WriteOn     EDF     Excel     EQulS     Email     HardCopy     ThirdParty     J-flag

**Report to:**  
Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500    FAX: (510) 874-4507

**Email:**    crain@langan.com  
**cc/3rd Party:**    alee@langan.com; ekimbrel@langan.com;  
**PO:**  
**ProjectNo:** #731637001; 3093 Broadway

**Bill to:**  
Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concur.solutio

**Requested TAT:**    5 days  
  
**Date Received:**    05/18/2015  
**Date Printed:**    05/27/2015

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	
1505677-002	RB-6-22	Soil	5/15/2015 10:05	<input type="checkbox"/>		A						A			A		
1505677-003	RB-6-24	Soil	5/15/2015 10:10	<input type="checkbox"/>		A						A			A		
1505677-004	RB-6-26	Soil	5/15/2015 10:15	<input type="checkbox"/>		A						A			A		
1505677-005	RB-6-28	Soil	5/15/2015 10:20	<input type="checkbox"/>		A						A			A		
1505677-006	RB-6-30	Soil	5/15/2015 10:25	<input type="checkbox"/>		A						A			A		
1505677-007	RB-6-32	Soil	5/15/2015 10:30	<input type="checkbox"/>		A						A			A		
1505677-008	RB-6-34	Soil	5/15/2015 10:35	<input type="checkbox"/>		A						A			A		
1505677-009	RB-6-36	Soil	5/15/2015 10:40	<input type="checkbox"/>		A						A			A		
1505677-010	RB-6-38	Soil	5/15/2015 10:45	<input type="checkbox"/>		A						A			A		
1505677-011	RB-6-40	Soil	5/15/2015 10:50	<input type="checkbox"/>		A						A			A		
1505677-013	RB-2-22	Soil	5/15/2015 11:30	<input type="checkbox"/>		A						A			A		
1505677-014	RB-2-24	Soil	5/15/2015 11:35	<input type="checkbox"/>		A						A			A		
1505677-015	RB-2-26	Soil	5/15/2015 11:40	<input type="checkbox"/>		A						A			A		
1505677-016	RB-2-28	Soil	5/15/2015 11:45	<input type="checkbox"/>		A						A			A		
1505677-017	RB-2-30	Soil	5/15/2015 11:50	<input type="checkbox"/>		A						A			A		

**Test Legend:**

1	8081PCB_S	2	8260B_S	3	8260VOC_S	4	8270_PNA_S	5	8270_S
6	CAM17MS_S	7	G-MBTEX_S	8	PH_S	9	TPH(D)_S	10	TPH(DMO)_S
11		12							

The following SamplIDs: 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 013A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 021A, 022A, 025A, 032A contain testgroup.

**Prepared by: Maria Venegas**

**Comments:**

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



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505677

ClientCode: TWRK

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: alee@langan.com; ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concur.solutio

**Requested TAT:**

**5 days**

**Date Received: 05/18/2015**

**Date Printed: 05/27/2015**

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	
1505677-018	RB-2-32	Soil	5/15/2015 11:55	<input type="checkbox"/>		A						A			A		
1505677-019	RB-2-34	Soil	5/15/2015 12:00	<input type="checkbox"/>		A						A			A		
1505677-020	RB-2-36	Soil	5/15/2015 12:05	<input type="checkbox"/>		A						A			A		
1505677-021	RB-2-38	Soil	5/15/2015 12:10	<input type="checkbox"/>		A						A			A		
1505677-022	RB-2-40	Soil	5/15/2015 12:15	<input type="checkbox"/>		A						A			A		
1505677-023	B-5-12.5	Soil	5/15/2015 13:40	<input type="checkbox"/>				A				A			A		
1505677-024	B-5-17.5	Soil	5/15/2015 13:45	<input type="checkbox"/>				A				A			A		
1505677-025	B-1-7.5	Soil	5/15/2015 14:15	<input type="checkbox"/>	A	A		A	A	A	A	A	A		A		
1505677-026	B-1-12.5	Soil	5/15/2015 14:25	<input type="checkbox"/>				A				A			A		
1505677-027	B-1-17.5	Soil	5/15/2015 14:35	<input type="checkbox"/>				A				A			A		
1505677-028	B-2-12.5	Soil	5/15/2015 14:55	<input type="checkbox"/>				A				A			A		
1505677-029	B-2-17.5	Soil	5/15/2015 15:05	<input type="checkbox"/>				A				A			A		
1505677-030	B-6-12.5	Soil	5/15/2015 15:35	<input type="checkbox"/>				A				A			A		
1505677-031	B-6-17.5	Soil	5/15/2015 15:43	<input type="checkbox"/>				A				A			A		
1505677-032	RB-6-3.0	Soil	5/15/2015 9:11	<input type="checkbox"/>			A					A		A			

**Test Legend:**

1	8081PCB_S	2	8260B_S	3	8260VOC_S	4	8270_PNA_S	5	8270_S
6	CAM17MS_S	7	G-MBTEX_S	8	PH_S	9	TPH(D)_S	10	TPH(DMO)_S
11		12							

The following SamplIDs: 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 013A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 021A, 022A, 025A, 032A contain testgroup.

**Prepared by: Maria Venegas**

**Comments:**

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-001A	RB-6-20	Soil		1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:00			<input checked="" type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input checked="" type="checkbox"/>	
1505677-002A	RB-6-22	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:05	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>				5 days	<input type="checkbox"/>
				1	Encore Sampler	<input type="checkbox"/>					<input type="checkbox"/>
1505677-003A	RB-6-24	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:10	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>				5 days	<input type="checkbox"/>
				1	Encore Sampler	<input type="checkbox"/>					<input type="checkbox"/>
1505677-004A	RB-6-26	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:15	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>				5 days	<input type="checkbox"/>
				1	Encore Sampler	<input type="checkbox"/>					<input type="checkbox"/>
1505677-005A	RB-6-28	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/15/2015 10:20	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>				5 days	<input type="checkbox"/>
				1	Encore Sampler	<input type="checkbox"/>					<input type="checkbox"/>
1505677-006A	RB-6-30	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:25	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>				5 days	<input type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-006A	RB-6-30	Soil		1	Encore Sampler	<input type="checkbox"/>	5/15/2015 10:25			<input type="checkbox"/>	
1505677-007A	RB-6-32	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:30	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)	1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-008A	RB-6-34	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:35	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)	1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-009A	RB-6-36	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:40	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)	1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-010A	RB-6-38	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:45	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)	1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-011A	RB-6-40	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 10:50	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)	1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-012A	RB-2-20	Soil		1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:25			<input checked="" type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input checked="" type="checkbox"/>	
1505677-013A	RB-2-22	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:30	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input type="checkbox"/>	
1505677-014A	RB-2-24	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:35	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input type="checkbox"/>	
1505677-015A	RB-2-26	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:40	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input type="checkbox"/>	
1505677-016A	RB-2-28	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:45	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>				<input type="checkbox"/>	
1505677-017A	RB-2-30	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:50	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-017A	RB-2-30	Soil		1	Encore Sampler	<input type="checkbox"/>	5/15/2015 11:50			<input type="checkbox"/>	
1505677-018A	RB-2-32	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 11:55	5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-019A	RB-2-34	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 12:00	5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-020A	RB-2-36	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 12:05	5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-021A	RB-2-38	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 12:10	5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505677-022A	RB-2-40	Soil	Multi-Range TPH(g,d,mo) SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 12:15	5 days		<input type="checkbox"/>	
				1	Encore Sampler	<input type="checkbox"/>		5 days		<input type="checkbox"/>	

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-023A	B-5-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 13:40	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505677-024A	B-5-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 13:45	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505677-025A	B-1-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 14:15	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8260B (VOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505677-026A	B-1-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 14:25	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-027A	B-1-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 14:35	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505677-028A	B-2-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 14:55	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505677-029A	B-2-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 15:05	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505677-030A	B-6-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 15:35	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505677-031A	B-6-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/15/2015 15:43	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505677-032A	RB-6-3.0	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/15/2015 9:11	5 days		<input type="checkbox"/>	

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-032A	RB-6-3.0	Soil	SW8260B (VOCs) <1,2-Dichloroethane (1,2-DCA), Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/15/2015 9:11	5 days		<input type="checkbox"/>	

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

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

1505677

Please send work order summaries to:  
1) Annic Lee → alee@langan.com 08371  
2) Liz Kimbrel → ekimbrel@langan.com

# Treadwell & Rollo

Environmental and Geotechnical Consultant

## CHAIN OF CUSTODY RECORD

Page 1 of 3

- 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Christina Rain 415-955-5247  
 Samplers: Liz Kimbrel and Zubair Trabzada  
 Recorder (Signature Required): [Signature]

**Turnaround Time**  
5d

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH/d.g./mo	BTEX by G21	PNAs by B21C	VOCs by B200B	SVOCs by B27C	PC Bss. Pesticides by G21	CAM 17	PH by G015D									
<del>RB-20</del> RB-20	5/15/2015	1000		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-22		1005		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-24		1010		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-26		1015		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-28		1020		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-30		1025		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-32		1030		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-34		1035		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-36		1040		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-38		1045		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-40		1050		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-2-20		1125		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-2-22		1130		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		
RB-2-24		1135		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X		

Relinquished by: (Signature) <u>[Signature]</u>	Date 5/15/2015	Time 1715	Received by: (Signature) <u>[Signature]</u>	Date 5-18-15	Time 1130
Relinquished by: (Signature) <u>[Signature]</u>	Date 5-18-15	Time 1350	Received by: (Signature) <u>[Signature]</u>	Date	Time
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature) <u>[Signature]</u>	Date 5/18/15	Time 1350

Sent to Laboratory (Name): McCampbell Analytical  
 Laboratory Comments/Notes: 4.0  
 Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)

ICE/° 4.0 GOOD CONDITION HEAD SPACE ABSENT DECHLORINATED IN LAB PRESERVATION  
 APPROPRIATE CONTAINERS PRESERVED IN LAB  
 Yellow Copy - Laboratory Pink Copy - Field COC Number:  
 VOAS O&G METALS OTHER

Please send work order summaries to:

- 1) Liz Kimbrel → ekimbrel@langan.com 008372
- 2) Annie Lee → alee@langan.com



### 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway

Job Number: 7311637001

Project Manager/Contact: Christina Rain 415-955-5247

Samplers: Liz Kimbrel & Zubair Trabzada

Recorder (Signature Required): Elyse Kim

**Turnaround Time**  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested											Silica gel clean-up	Hold	Remarks		
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPHA, 4, 170	BTEX by 8021	PAHs by 8270C	VOCs by 82100B	SVMs by 8270C	PCBs & Pesticides	CAM 17	pH by 9045D								
RB-2-26	5/15/15	1140		X									X	X	X	X	X	X									
RB-2-28		1145		X									X	X	X	X	X	X									
RB-2-30		1150		X									X	X	X	X	X	X									
RB-2-32		1155		X									X	X	X	X	X	X									
RB-2-34		1200		X									X	X	X	X	X	X									
RB-2-36		1205		X									X	X	X	X	X	X									
RB-2-38		1210		X									X	X	X	X	X	X									
RB-2-40		1215		X									X	X	X	X	X	X									
B-5-12.5		1340		X									X	X	X												
B-5-17.5		1345		X									X	X	X												
B-1-7.5		1415		X									X	X	X	X	X	X									
B-1-12.5		1425		X									X	X	X	X	X	X									
B-1-17.5		1435		X									X	X	X	X	X	X									
B-2-12.5		1455		X									X	X	X												

Relinquished by: (Signature) <u>Elyse Kim</u>	Date <u>5/15/2015</u>	Time <u>1715</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-15-15</u>	Time <u>1130</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-18-15</u>	Time <u>1250</u>	Received by: (Signature) <u>[Signature]</u>	Date	Time
Relinquished by: (Signature) <u>[Signature]</u>	Date	Time	Received by Lab: (Signature) <u>[Signature]</u>	Date <u>5/18/15</u>	Time <u>1350</u>

Sent to Laboratory (Name): McCampbell

Laboratory Comments/Notes:

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS

Hand Carried  Private Courier (Co. Name)



please send work order summaries to:

1) Liz Kimbrel ~~@langan~~ → ekimbrel@08373  
 2) Christina Rain → crain@langan.com

**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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway

Job Number: 7311037001 415-955-5247

Project Manager/Contact: Christina Rain crain@langan.com

Samplers: Liz Kimbrel & Zubair Trabzada

Recorder (Signature Required): Ely

Turnaround Time  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Remarks									
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPHA, q.m.o	BTEX, q.m.o	PAHs by 8270C	VOCs by 8210B	SVOCs by 8270C	PCBs: Pretrides by 8210A	CAM17	pH by 9145D	TPH, g	BTEX MTBE / NAPh by 8210B		Silica gel clean-up	Hold							
B-2-17-5	5/15/15	1505		X																											
B-12-5		1535		X																											
B-17-5		1543		X																											
RB-12-3.0		0911		X																											
Relinquished by: (Signature) <u>Ely</u>				Date	5/15/2015	Time	1715	Received by: (Signature) <u>[Signature]</u>				Date	5-18-15	Time	1130	Relinquished by: (Signature) <u>[Signature]</u>				Date	5-18-15	Time	1350	Relinquished by: (Signature) <u>[Signature]</u>				Date	5/18/15	Time	1350
Sent to Laboratory (Name): <u>McCampbell Analytical</u>				Method of Shipment				<input checked="" type="checkbox"/> Lab courier <input type="checkbox"/> Fed Ex <input type="checkbox"/> Airborne <input type="checkbox"/> UPS <input type="checkbox"/> Hand Carried <input type="checkbox"/> Private Courier (Co. Name) _____				Laboratory Comments/Notes:																			



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/18/2015 3:46:32 PM**  
 Project Name: **#731637001; 3093 Broadway** LogIn Reviewed by: **Maria Venegas**  
 WorkOrder No: **1505677** Matrix: Soil Carrier: Bernie Cummins (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   
 Sample/Temp Blank temperature Temp: 4°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505677 A

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/18/2015

Analytical Report reviewed & approved for release on 06/12/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505677

### Glossary Abbreviation

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



## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505677

### Analytical Qualifiers

S spike recovery outside accepted recovery limits  
a2 sample diluted due to cluttered chromatogram  
c1 surrogate recovery outside of the control limits due to the dilution of the sample.  
c2 surrogate recovery outside of the control limits due to matrix interference.  
d1 weakly modified or unmodified gasoline is significant  
d2 heavier gasoline range compounds are significant (aged gasoline?)  
d7 strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram  
e1 unmodified or weakly modified diesel is significant  
e2 diesel range compounds are significant; no recognizable pattern  
e3 aged diesel is significant  
e4 gasoline range compounds are significant.  
e7 oil range compounds are significant  
e11 stoddard solvent/mineral spirit (?)

### Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.  
F2 LCS recovery for this compound is outside of acceptance limits.



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 6/6/15

**WorkOrder:** 1505677  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### STLC Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/08/2015 23:59

Analyst(s): DB



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/18/15 15:46  
**Date Prepared:** 6/10/15

**WorkOrder:** 1505677  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L

## TCLP Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-1-7.5	1505677-025A	Soil	05/15/2015 14:15	ICP-JY	106138

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/12/2015 10:10

Analyst(s): BBO



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/6/15  
**Date Analyzed:** 6/8/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 105958  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-105958  
 1506155-001AMS/MSD

### QC Summary Report for Metals (STLC)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.908	0.050	1	-	91	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.10	1.10	1	0.1510	95	95	70-130	0	30





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/10/15  
**Date Analyzed:** 6/12/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505677  
**BatchID:** 106138  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-106138  
 1506298-004AMS/MSD

### QC Summary Report for Metals (TCLP)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.981	0.050	1	-	98	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.01	0.935	1	ND	101	94	70-130	7.97	30



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505677 **A** ClientCode: TWRK

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  Fax  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Christina Rain  
 Treadwell & Rollo  
 501 14th Street, 3rd Floor  
 Oakland, CA 94612  
 (510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
 cc/3rd Party: alee@langan.com; ekimbrel@langan.com;  
 PO:  
 ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

**Date Received: 05/18/2015**

**Date Add-On: 06/04/2015**

**Date Printed: 06/04/2015**

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	
1505677-025	B-1-7.5	Soil	5/15/2015 14:15	<input type="checkbox"/>	A	A											

**Test Legend:**

1	STLC_METALS_S	2	TCLP_METALS_S	3		4		5	
6		7		8		9		10	
11		12							

**Prepared by: Maria Venegas**

**Add-On Prepared By: Maria Venegas**

**Comments:**    STLC's & TCLP's added 6/4/15 STAT.

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:** STLC's & TCLP's added 6/4/15 STAT.

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505677  
**Date Received:** 5/18/2015  
**Date Add-On:** 6/4/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505677-025A	B-1-7.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Acetate Liner	5/15/2015 14:15	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1505677

Please send work order summaries to:

- 1) Liz Kimbrel → ekimbrel@langan.com 008372
- 2) Annie Lee → alee@langan.com

**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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway

Job Number: 7311637001

Project Manager/Contact: Christina Rain 415-955-5247

Samplers: Liz Kimbrel & Zubair Trabzada

Recorder (Signature Required): Elynn Kim

<b>Turnaround Time</b>
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Remarks						
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPHA, q, mo	BTEX by 8021	PNAs by 8270C	VOCs by 82100B	SVMs by 8270C	PCBs & Pesticides by 8082	CAM F	pH by 9045D	STAT CR	TRIP CR		Silica gel clean-up	Hold				
RB-2-26	5/15/15	1140		X								X	X	X	X	X	X											
RB-2-28		1145		X								X	X	X	X	X	X											
RB-2-30		1150		X								X	X	X	X	X	X											
RB-2-32		1155		X								X	X	X	X	X	X											
RB-2-34		1200		X								X	X	X	X	X	X											
RB-2-36		1205		X								X	X	X	X	X	X											
RB-2-38		1210		X								X	X	X	X	X	X											
RB-2-40		1215		X								X	X	X	X	X	X											
B-5-12.5		1340		X								X	X	X	X	X	X											
B-5-17.5		1345		X								X	X	X	X	X	X											
B-1-7.5		1415		X								X	X	X	X	X	X	X										
B-1-12.5		1425		X								X	X	X	X	X	X	X										
B-1-17.5		1435		X								X	X	X	X	X	X	X										
B-2-12.5		1455		X								X	X	X	X	X	X											

Relinquished by: (Signature) <u>Elynn Kim</u>	Date <u>5/15/2015</u>	Time <u>1715</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-15-15</u>	Time <u>1130</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-18-15</u>	Time <u>1250</u>	Received by: (Signature) <u>[Signature]</u>	Date	Time
Relinquished by: (Signature) <u>[Signature]</u>	Date	Time	Received by Lab: (Signature) <u>[Signature]</u>	Date <u>5/18/15</u>	Time <u>1350</u>

Sent to Laboratory (Name): McCampbell  
 Laboratory Comments/Notes: added 6/4/15 STAT

Method of Shipment  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505759

**Report Created for:** Treadwell & Rollo

555 Montgomery St., Suite 1300  
San Francisco, CA 94111

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/19/2015

Analytical Report reviewed & approved for release on 05/27/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505759

### Glossary Abbreviation

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

### Analytical Qualifiers

a3	sample diluted due to high organic content.
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant
e11	stoddard solvent/mineral spirit (?)



## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505759

### Quality Control Qualifiers

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



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC22	105087

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/21/2015 02:03
a-BHC	ND	0.0010	1	05/21/2015 02:03
b-BHC	ND	0.0010	1	05/21/2015 02:03
d-BHC	ND	0.0010	1	05/21/2015 02:03
g-BHC	ND	0.0010	1	05/21/2015 02:03
Chlordane (Technical)	ND	0.025	1	05/21/2015 02:03
a-Chlordane	ND	0.0010	1	05/21/2015 02:03
g-Chlordane	ND	0.0010	1	05/21/2015 02:03
p,p-DDD	ND	0.0010	1	05/21/2015 02:03
p,p-DDE	ND	0.0010	1	05/21/2015 02:03
p,p-DDT	ND	0.0010	1	05/21/2015 02:03
Dieldrin	ND	0.0010	1	05/21/2015 02:03
Endosulfan I	ND	0.0010	1	05/21/2015 02:03
Endosulfan II	ND	0.0010	1	05/21/2015 02:03
Endosulfan sulfate	ND	0.0010	1	05/21/2015 02:03
Endrin	ND	0.0010	1	05/21/2015 02:03
Endrin aldehyde	ND	0.0010	1	05/21/2015 02:03
Endrin ketone	ND	0.0010	1	05/21/2015 02:03
Heptachlor	ND	0.0010	1	05/21/2015 02:03
Heptachlor epoxide	ND	0.0010	1	05/21/2015 02:03
Hexachlorobenzene	ND	0.010	1	05/21/2015 02:03
Hexachlorocyclopentadiene	ND	0.020	1	05/21/2015 02:03
Methoxychlor	ND	0.0010	1	05/21/2015 02:03
Toxaphene	ND	0.050	1	05/21/2015 02:03
Aroclor1016	ND	0.050	1	05/21/2015 02:03
Aroclor1221	ND	0.050	1	05/21/2015 02:03
Aroclor1232	ND	0.050	1	05/21/2015 02:03
Aroclor1242	ND	0.050	1	05/21/2015 02:03
Aroclor1248	ND	0.050	1	05/21/2015 02:03
Aroclor1254	ND	0.050	1	05/21/2015 02:03
Aroclor1260	ND	0.050	1	05/21/2015 02:03
PCBs, total	ND	0.050	1	05/21/2015 02:03

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	100	70-130	05/21/2015 02:03

Analyst(s): CK

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC22	105087

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/21/2015 04:52
a-BHC	ND	0.0010	1	05/21/2015 04:52
b-BHC	ND	0.0010	1	05/21/2015 04:52
d-BHC	ND	0.0010	1	05/21/2015 04:52
g-BHC	ND	0.0010	1	05/21/2015 04:52
Chlordane (Technical)	ND	0.025	1	05/21/2015 04:52
a-Chlordane	ND	0.0010	1	05/21/2015 04:52
g-Chlordane	ND	0.0010	1	05/21/2015 04:52
p,p-DDD	ND	0.0010	1	05/21/2015 04:52
p,p-DDE	ND	0.0010	1	05/21/2015 04:52
p,p-DDT	ND	0.0010	1	05/21/2015 04:52
Dieldrin	ND	0.0010	1	05/21/2015 04:52
Endosulfan I	ND	0.0010	1	05/21/2015 04:52
Endosulfan II	ND	0.0010	1	05/21/2015 04:52
Endosulfan sulfate	ND	0.0010	1	05/21/2015 04:52
Endrin	ND	0.0010	1	05/21/2015 04:52
Endrin aldehyde	ND	0.0010	1	05/21/2015 04:52
Endrin ketone	ND	0.0010	1	05/21/2015 04:52
Heptachlor	ND	0.0010	1	05/21/2015 04:52
Heptachlor epoxide	ND	0.0010	1	05/21/2015 04:52
Hexachlorobenzene	ND	0.010	1	05/21/2015 04:52
Hexachlorocyclopentadiene	ND	0.020	1	05/21/2015 04:52
Methoxychlor	ND	0.0010	1	05/21/2015 04:52
Toxaphene	ND	0.050	1	05/21/2015 04:52
Aroclor1016	ND	0.050	1	05/21/2015 04:52
Aroclor1221	ND	0.050	1	05/21/2015 04:52
Aroclor1232	ND	0.050	1	05/21/2015 04:52
Aroclor1242	ND	0.050	1	05/21/2015 04:52
Aroclor1248	ND	0.050	1	05/21/2015 04:52
Aroclor1254	ND	0.050	1	05/21/2015 04:52
Aroclor1260	ND	0.050	1	05/21/2015 04:52
PCBs, total	ND	0.050	1	05/21/2015 04:52

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	96	70-130	05/21/2015 04:52

Analyst(s): CK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001B	Soil	05/18/2015 08:45	GC16	105096

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 11:57
tert-Amyl methyl ether (TAME)	ND	0.0083	1	05/23/2015 11:57
Benzene	ND	0.0083	1	05/23/2015 11:57
Bromobenzene	ND	0.0083	1	05/23/2015 11:57
Bromochloromethane	ND	0.0083	1	05/23/2015 11:57
Bromodichloromethane	ND	0.0083	1	05/23/2015 11:57
Bromoform	ND	0.0083	1	05/23/2015 11:57
Bromomethane	ND	0.0083	1	05/23/2015 11:57
2-Butanone (MEK)	ND	0.033	1	05/23/2015 11:57
t-Butyl alcohol (TBA)	ND	0.083	1	05/23/2015 11:57
n-Butyl benzene	ND	0.0083	1	05/23/2015 11:57
sec-Butyl benzene	ND	0.0083	1	05/23/2015 11:57
tert-Butyl benzene	ND	0.0083	1	05/23/2015 11:57
Carbon Disulfide	ND	0.0083	1	05/23/2015 11:57
Carbon Tetrachloride	ND	0.0083	1	05/23/2015 11:57
Chlorobenzene	ND	0.0083	1	05/23/2015 11:57
Chloroethane	ND	0.0083	1	05/23/2015 11:57
Chloroform	ND	0.0083	1	05/23/2015 11:57
Chloromethane	ND	0.0083	1	05/23/2015 11:57
2-Chlorotoluene	ND	0.0083	1	05/23/2015 11:57
4-Chlorotoluene	ND	0.0083	1	05/23/2015 11:57
Dibromochloromethane	ND	0.0083	1	05/23/2015 11:57
1,2-Dibromo-3-chloropropane	ND	0.0067	1	05/23/2015 11:57
1,2-Dibromoethane (EDB)	ND	0.0067	1	05/23/2015 11:57
Dibromomethane	ND	0.0083	1	05/23/2015 11:57
1,2-Dichlorobenzene	ND	0.0083	1	05/23/2015 11:57
1,3-Dichlorobenzene	ND	0.0083	1	05/23/2015 11:57
1,4-Dichlorobenzene	ND	0.0083	1	05/23/2015 11:57
Dichlorodifluoromethane	ND	0.0083	1	05/23/2015 11:57
1,1-Dichloroethane	ND	0.0083	1	05/23/2015 11:57
1,2-Dichloroethane (1,2-DCA)	ND	0.0083	1	05/23/2015 11:57
1,1-Dichloroethene	ND	0.0083	1	05/23/2015 11:57
cis-1,2-Dichloroethene	ND	0.0083	1	05/23/2015 11:57
trans-1,2-Dichloroethene	ND	0.0083	1	05/23/2015 11:57
1,2-Dichloropropane	ND	0.0083	1	05/23/2015 11:57
1,3-Dichloropropane	ND	0.0083	1	05/23/2015 11:57
2,2-Dichloropropane	ND	0.0083	1	05/23/2015 11:57
1,1-Dichloropropene	ND	0.0083	1	05/23/2015 11:57

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001B	Soil	05/18/2015 08:45	GC16	105096

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0083	1	05/23/2015 11:57
trans-1,3-Dichloropropene	ND	0.0083	1	05/23/2015 11:57
Diisopropyl ether (DIPE)	ND	0.0083	1	05/23/2015 11:57
Ethylbenzene	ND	0.0083	1	05/23/2015 11:57
Ethyl tert-butyl ether (ETBE)	ND	0.0083	1	05/23/2015 11:57
Freon 113	ND	0.0083	1	05/23/2015 11:57
Hexachlorobutadiene	ND	0.0083	1	05/23/2015 11:57
Hexachloroethane	ND	0.0083	1	05/23/2015 11:57
2-Hexanone	ND	0.0083	1	05/23/2015 11:57
Isopropylbenzene	ND	0.0083	1	05/23/2015 11:57
4-Isopropyl toluene	ND	0.0083	1	05/23/2015 11:57
Methyl-t-butyl ether (MTBE)	ND	0.0083	1	05/23/2015 11:57
Methylene chloride	ND	0.0083	1	05/23/2015 11:57
4-Methyl-2-pentanone (MIBK)	ND	0.0083	1	05/23/2015 11:57
Naphthalene	ND	0.0083	1	05/23/2015 11:57
n-Propyl benzene	ND	0.0083	1	05/23/2015 11:57
Styrene	ND	0.0083	1	05/23/2015 11:57
1,1,1,2-Tetrachloroethane	ND	0.0083	1	05/23/2015 11:57
1,1,2,2-Tetrachloroethane	ND	0.0083	1	05/23/2015 11:57
Tetrachloroethene	ND	0.0083	1	05/23/2015 11:57
Toluene	ND	0.0083	1	05/23/2015 11:57
1,2,3-Trichlorobenzene	ND	0.0083	1	05/23/2015 11:57
1,2,4-Trichlorobenzene	ND	0.0083	1	05/23/2015 11:57
1,1,1-Trichloroethane	ND	0.0083	1	05/23/2015 11:57
1,1,2-Trichloroethane	ND	0.0083	1	05/23/2015 11:57
Trichloroethene	ND	0.0083	1	05/23/2015 11:57
Trichlorofluoromethane	ND	0.0083	1	05/23/2015 11:57
1,2,3-Trichloropropane	ND	0.0083	1	05/23/2015 11:57
1,2,4-Trimethylbenzene	ND	0.0083	1	05/23/2015 11:57
1,3,5-Trimethylbenzene	ND	0.0083	1	05/23/2015 11:57
Vinyl Chloride	ND	0.0083	1	05/23/2015 11:57
Xylenes, Total	ND	0.0083	1	05/23/2015 11:57

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001B	Soil	05/18/2015 08:45	GC16	105096

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	81	70-130		05/23/2015 11:57
Toluene-d8	93	70-130		05/23/2015 11:57
4-BFB	96	70-130		05/23/2015 11:57
Benzene-d6	82	60-140		05/23/2015 11:57
Ethylbenzene-d10	97	60-140		05/23/2015 11:57
1,2-DCB-d4	79	60-140		05/23/2015 11:57

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002B	Soil	05/18/2015 09:30	GC16	105096

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 12:39
tert-Amyl methyl ether (TAME)	ND	0.0083	1	05/23/2015 12:39
Benzene	ND	0.0083	1	05/23/2015 12:39
Bromobenzene	ND	0.0083	1	05/23/2015 12:39
Bromochloromethane	ND	0.0083	1	05/23/2015 12:39
Bromodichloromethane	ND	0.0083	1	05/23/2015 12:39
Bromoform	ND	0.0083	1	05/23/2015 12:39
Bromomethane	ND	0.0083	1	05/23/2015 12:39
2-Butanone (MEK)	ND	0.033	1	05/23/2015 12:39
t-Butyl alcohol (TBA)	ND	0.083	1	05/23/2015 12:39
n-Butyl benzene	ND	0.0083	1	05/23/2015 12:39
sec-Butyl benzene	ND	0.0083	1	05/23/2015 12:39
tert-Butyl benzene	ND	0.0083	1	05/23/2015 12:39
Carbon Disulfide	ND	0.0083	1	05/23/2015 12:39
Carbon Tetrachloride	ND	0.0083	1	05/23/2015 12:39
Chlorobenzene	ND	0.0083	1	05/23/2015 12:39
Chloroethane	ND	0.0083	1	05/23/2015 12:39
Chloroform	ND	0.0083	1	05/23/2015 12:39
Chloromethane	ND	0.0083	1	05/23/2015 12:39
2-Chlorotoluene	ND	0.0083	1	05/23/2015 12:39
4-Chlorotoluene	ND	0.0083	1	05/23/2015 12:39
Dibromochloromethane	ND	0.0083	1	05/23/2015 12:39
1,2-Dibromo-3-chloropropane	ND	0.0067	1	05/23/2015 12:39
1,2-Dibromoethane (EDB)	ND	0.0067	1	05/23/2015 12:39
Dibromomethane	ND	0.0083	1	05/23/2015 12:39
1,2-Dichlorobenzene	ND	0.0083	1	05/23/2015 12:39
1,3-Dichlorobenzene	ND	0.0083	1	05/23/2015 12:39
1,4-Dichlorobenzene	ND	0.0083	1	05/23/2015 12:39
Dichlorodifluoromethane	ND	0.0083	1	05/23/2015 12:39
1,1-Dichloroethane	ND	0.0083	1	05/23/2015 12:39
1,2-Dichloroethane (1,2-DCA)	ND	0.0083	1	05/23/2015 12:39
1,1-Dichloroethene	ND	0.0083	1	05/23/2015 12:39
cis-1,2-Dichloroethene	ND	0.0083	1	05/23/2015 12:39
trans-1,2-Dichloroethene	ND	0.0083	1	05/23/2015 12:39
1,2-Dichloropropane	ND	0.0083	1	05/23/2015 12:39
1,3-Dichloropropane	ND	0.0083	1	05/23/2015 12:39
2,2-Dichloropropane	ND	0.0083	1	05/23/2015 12:39
1,1-Dichloropropene	ND	0.0083	1	05/23/2015 12:39

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002B	Soil	05/18/2015 09:30	GC16	105096

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0083	1	05/23/2015 12:39
trans-1,3-Dichloropropene	ND	0.0083	1	05/23/2015 12:39
Diisopropyl ether (DIPE)	ND	0.0083	1	05/23/2015 12:39
Ethylbenzene	ND	0.0083	1	05/23/2015 12:39
Ethyl tert-butyl ether (ETBE)	ND	0.0083	1	05/23/2015 12:39
Freon 113	ND	0.0083	1	05/23/2015 12:39
Hexachlorobutadiene	ND	0.0083	1	05/23/2015 12:39
Hexachloroethane	ND	0.0083	1	05/23/2015 12:39
2-Hexanone	ND	0.0083	1	05/23/2015 12:39
Isopropylbenzene	ND	0.0083	1	05/23/2015 12:39
4-Isopropyl toluene	ND	0.0083	1	05/23/2015 12:39
Methyl-t-butyl ether (MTBE)	ND	0.0083	1	05/23/2015 12:39
Methylene chloride	ND	0.0083	1	05/23/2015 12:39
4-Methyl-2-pentanone (MIBK)	ND	0.0083	1	05/23/2015 12:39
Naphthalene	ND	0.0083	1	05/23/2015 12:39
n-Propyl benzene	ND	0.0083	1	05/23/2015 12:39
Styrene	ND	0.0083	1	05/23/2015 12:39
1,1,1,2-Tetrachloroethane	ND	0.0083	1	05/23/2015 12:39
1,1,2,2-Tetrachloroethane	ND	0.0083	1	05/23/2015 12:39
Tetrachloroethene	ND	0.0083	1	05/23/2015 12:39
Toluene	ND	0.0083	1	05/23/2015 12:39
1,2,3-Trichlorobenzene	ND	0.0083	1	05/23/2015 12:39
1,2,4-Trichlorobenzene	ND	0.0083	1	05/23/2015 12:39
1,1,1-Trichloroethane	ND	0.0083	1	05/23/2015 12:39
1,1,2-Trichloroethane	ND	0.0083	1	05/23/2015 12:39
Trichloroethene	ND	0.0083	1	05/23/2015 12:39
Trichlorofluoromethane	ND	0.0083	1	05/23/2015 12:39
1,2,3-Trichloropropane	ND	0.0083	1	05/23/2015 12:39
1,2,4-Trimethylbenzene	ND	0.0083	1	05/23/2015 12:39
1,3,5-Trimethylbenzene	ND	0.0083	1	05/23/2015 12:39
Vinyl Chloride	ND	0.0083	1	05/23/2015 12:39
Xylenes, Total	ND	0.0083	1	05/23/2015 12:39

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002B	Soil	05/18/2015 09:30	GC16	105096

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/23/2015 12:39
Toluene-d8	91	70-130		05/23/2015 12:39
4-BFB	93	70-130		05/23/2015 12:39
Benzene-d6	83	60-140		05/23/2015 12:39
Ethylbenzene-d10	98	60-140		05/23/2015 12:39
1,2-DCB-d4	76	60-140		05/23/2015 12:39

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC35	105138

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 18:52
Acenaphthylene	ND	0.010	1	05/21/2015 18:52
Anthracene	ND	0.010	1	05/21/2015 18:52
Benzo (a) anthracene	<b>0.014</b>	0.010	1	05/21/2015 18:52
Benzo (b) fluoranthene	<b>0.019</b>	0.010	1	05/21/2015 18:52
Benzo (k) fluoranthene	<b>0.012</b>	0.010	1	05/21/2015 18:52
Benzo (g,h,i) perylene	<b>0.018</b>	0.010	1	05/21/2015 18:52
Benzo (a) pyrene	<b>0.022</b>	0.010	1	05/21/2015 18:52
Chrysene	ND	0.010	1	05/21/2015 18:52
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 18:52
Fluoranthene	<b>0.018</b>	0.010	1	05/21/2015 18:52
Fluorene	ND	0.010	1	05/21/2015 18:52
Indeno (1,2,3-cd) pyrene	<b>0.012</b>	0.010	1	05/21/2015 18:52
1-Methylnaphthalene	ND	0.010	1	05/21/2015 18:52
2-Methylnaphthalene	ND	0.010	1	05/21/2015 18:52
Naphthalene	ND	0.010	1	05/21/2015 18:52
Phenanthrene	ND	0.010	1	05/21/2015 18:52
Pyrene	<b>0.013</b>	0.010	1	05/21/2015 18:52
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	94	30-130		05/21/2015 18:52
2-Fluorobiphenyl	97	30-130		05/21/2015 18:52

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC35	105138

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/26/2015 14:41
Acenaphthylene	ND	0.010	1	05/26/2015 14:41
Anthracene	ND	0.010	1	05/26/2015 14:41
Benzo (a) anthracene	ND	0.010	1	05/26/2015 14:41
Benzo (b) fluoranthene	ND	0.010	1	05/26/2015 14:41
Benzo (k) fluoranthene	ND	0.010	1	05/26/2015 14:41
Benzo (g,h,i) perylene	ND	0.010	1	05/26/2015 14:41
Benzo (a) pyrene	ND	0.010	1	05/26/2015 14:41
Chrysene	ND	0.010	1	05/26/2015 14:41
Dibenzo (a,h) anthracene	ND	0.010	1	05/26/2015 14:41
Fluoranthene	ND	0.010	1	05/26/2015 14:41
Fluorene	ND	0.010	1	05/26/2015 14:41
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/26/2015 14:41
1-Methylnaphthalene	ND	0.010	1	05/26/2015 14:41
2-Methylnaphthalene	ND	0.010	1	05/26/2015 14:41
Naphthalene	ND	0.010	1	05/26/2015 14:41
Phenanthrene	ND	0.010	1	05/26/2015 14:41
Pyrene	ND	0.010	1	05/26/2015 14:41

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	77	30-130	05/26/2015 14:41
2-Fluorobiphenyl	70	30-130	05/26/2015 14:41

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-12.5	1505759-003A	Soil	05/18/2015 09:35	GC35	105138

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 19:43
Acenaphthylene	ND	0.010	1	05/21/2015 19:43
Anthracene	ND	0.010	1	05/21/2015 19:43
Benzo (a) anthracene	ND	0.010	1	05/21/2015 19:43
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 19:43
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 19:43
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 19:43
Benzo (a) pyrene	ND	0.010	1	05/21/2015 19:43
Chrysene	ND	0.010	1	05/21/2015 19:43
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 19:43
Fluoranthene	ND	0.010	1	05/21/2015 19:43
Fluorene	ND	0.010	1	05/21/2015 19:43
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 19:43
1-Methylnaphthalene	ND	0.010	1	05/21/2015 19:43
2-Methylnaphthalene	ND	0.010	1	05/21/2015 19:43
Naphthalene	ND	0.010	1	05/21/2015 19:43
Phenanthrene	ND	0.010	1	05/21/2015 19:43
Pyrene	ND	0.010	1	05/21/2015 19:43

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	95	30-130	05/21/2015 19:43
2-Fluorobiphenyl	93	30-130	05/21/2015 19:43

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-17.5	1505759-004A	Soil	05/18/2015 09:40	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 16:47
Acenaphthylene	ND	0.010	1	05/21/2015 16:47
Anthracene	ND	0.010	1	05/21/2015 16:47
Benzo (a) anthracene	ND	0.010	1	05/21/2015 16:47
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 16:47
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 16:47
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 16:47
Benzo (a) pyrene	ND	0.010	1	05/21/2015 16:47
Chrysene	ND	0.010	1	05/21/2015 16:47
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 16:47
Fluoranthene	ND	0.010	1	05/21/2015 16:47
Fluorene	ND	0.010	1	05/21/2015 16:47
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 16:47
1-Methylnaphthalene	ND	0.010	1	05/21/2015 16:47
2-Methylnaphthalene	ND	0.010	1	05/21/2015 16:47
Naphthalene	ND	0.010	1	05/21/2015 16:47
Phenanthrene	ND	0.010	1	05/21/2015 16:47
Pyrene	ND	0.010	1	05/21/2015 16:47

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	97	30-130	05/21/2015 16:47
2-Fluorobiphenyl	95	30-130	05/21/2015 16:47

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-14-12.5	1505759-005A	Soil	05/18/2015 10:25	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 20:08
Acenaphthylene	ND	0.010	1	05/21/2015 20:08
Anthracene	ND	0.010	1	05/21/2015 20:08
Benzo (a) anthracene	ND	0.010	1	05/21/2015 20:08
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 20:08
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 20:08
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 20:08
Benzo (a) pyrene	ND	0.010	1	05/21/2015 20:08
Chrysene	ND	0.010	1	05/21/2015 20:08
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 20:08
Fluoranthene	ND	0.010	1	05/21/2015 20:08
Fluorene	ND	0.010	1	05/21/2015 20:08
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 20:08
1-Methylnaphthalene	ND	0.010	1	05/21/2015 20:08
2-Methylnaphthalene	ND	0.010	1	05/21/2015 20:08
Naphthalene	ND	0.010	1	05/21/2015 20:08
Phenanthrene	ND	0.010	1	05/21/2015 20:08
Pyrene	ND	0.010	1	05/21/2015 20:08

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	94	30-130	05/21/2015 20:08
2-Fluorobiphenyl	89	30-130	05/21/2015 20:08

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-14-17.5	1505759-006A	Soil	05/18/2015 10:30	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/26/2015 15:56
Acenaphthylene	ND	0.010	1	05/26/2015 15:56
Anthracene	ND	0.010	1	05/26/2015 15:56
Benzo (a) anthracene	ND	0.010	1	05/26/2015 15:56
Benzo (b) fluoranthene	ND	0.010	1	05/26/2015 15:56
Benzo (k) fluoranthene	ND	0.010	1	05/26/2015 15:56
Benzo (g,h,i) perylene	ND	0.010	1	05/26/2015 15:56
Benzo (a) pyrene	ND	0.010	1	05/26/2015 15:56
Chrysene	ND	0.010	1	05/26/2015 15:56
Dibenzo (a,h) anthracene	ND	0.010	1	05/26/2015 15:56
Fluoranthene	ND	0.010	1	05/26/2015 15:56
Fluorene	ND	0.010	1	05/26/2015 15:56
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/26/2015 15:56
1-Methylnaphthalene	ND	0.010	1	05/26/2015 15:56
2-Methylnaphthalene	ND	0.010	1	05/26/2015 15:56
Naphthalene	ND	0.010	1	05/26/2015 15:56
Phenanthrene	ND	0.010	1	05/26/2015 15:56
Pyrene	ND	0.010	1	05/26/2015 15:56
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	78	30-130		05/26/2015 15:56
2-Fluorobiphenyl	73	30-130		05/26/2015 15:56

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-18-12.5	1505759-007A	Soil	05/18/2015 11:10	GC17	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 16:10
Acenaphthylene	ND	0.010	1	05/21/2015 16:10
Anthracene	ND	0.010	1	05/21/2015 16:10
Benzo (a) anthracene	ND	0.010	1	05/21/2015 16:10
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 16:10
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 16:10
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 16:10
Benzo (a) pyrene	ND	0.010	1	05/21/2015 16:10
Chrysene	ND	0.010	1	05/21/2015 16:10
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 16:10
Fluoranthene	ND	0.010	1	05/21/2015 16:10
Fluorene	ND	0.010	1	05/21/2015 16:10
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 16:10
1-Methylnaphthalene	ND	0.010	1	05/21/2015 16:10
2-Methylnaphthalene	ND	0.010	1	05/21/2015 16:10
Naphthalene	ND	0.010	1	05/21/2015 16:10
Phenanthrene	ND	0.010	1	05/21/2015 16:10
Pyrene	ND	0.010	1	05/21/2015 16:10

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	88	30-130	05/21/2015 16:10
2-Fluorobiphenyl	87	30-130	05/21/2015 16:10

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-18-17.5	1505759-008A	Soil	05/18/2015 11:15	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 10:26
Acenaphthylene	ND	0.010	1	05/27/2015 10:26
Anthracene	ND	0.010	1	05/27/2015 10:26
Benzo (a) anthracene	ND	0.010	1	05/27/2015 10:26
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 10:26
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 10:26
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 10:26
Benzo (a) pyrene	ND	0.010	1	05/27/2015 10:26
Chrysene	ND	0.010	1	05/27/2015 10:26
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 10:26
Fluoranthene	ND	0.010	1	05/27/2015 10:26
Fluorene	ND	0.010	1	05/27/2015 10:26
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 10:26
1-Methylnaphthalene	ND	0.010	1	05/27/2015 10:26
2-Methylnaphthalene	ND	0.010	1	05/27/2015 10:26
Naphthalene	ND	0.010	1	05/27/2015 10:26
Phenanthrene	ND	0.010	1	05/27/2015 10:26
Pyrene	ND	0.010	1	05/27/2015 10:26

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	76	30-130	05/27/2015 10:26
2-Fluorobiphenyl	69	30-130	05/27/2015 10:26

**Analyst(s):** HK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-22-12.5	1505759-009A	Soil	05/18/2015 11:45	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 20:58
Acenaphthylene	ND	0.010	1	05/21/2015 20:58
Anthracene	ND	0.010	1	05/21/2015 20:58
Benzo (a) anthracene	ND	0.010	1	05/21/2015 20:58
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 20:58
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 20:58
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 20:58
Benzo (a) pyrene	ND	0.010	1	05/21/2015 20:58
Chrysene	ND	0.010	1	05/21/2015 20:58
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 20:58
Fluoranthene	ND	0.010	1	05/21/2015 20:58
Fluorene	ND	0.010	1	05/21/2015 20:58
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 20:58
1-Methylnaphthalene	ND	0.010	1	05/21/2015 20:58
2-Methylnaphthalene	ND	0.010	1	05/21/2015 20:58
Naphthalene	ND	0.010	1	05/21/2015 20:58
Phenanthrene	ND	0.010	1	05/21/2015 20:58
Pyrene	ND	0.010	1	05/21/2015 20:58

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	92	30-130	05/21/2015 20:58
2-Fluorobiphenyl	88	30-130	05/21/2015 20:58

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-22-17.5	1505759-010A	Soil	05/18/2015 11:50	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 21:23
Acenaphthylene	ND	0.010	1	05/21/2015 21:23
Anthracene	ND	0.010	1	05/21/2015 21:23
Benzo (a) anthracene	ND	0.010	1	05/21/2015 21:23
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 21:23
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 21:23
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 21:23
Benzo (a) pyrene	ND	0.010	1	05/21/2015 21:23
Chrysene	ND	0.010	1	05/21/2015 21:23
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 21:23
Fluoranthene	ND	0.010	1	05/21/2015 21:23
Fluorene	ND	0.010	1	05/21/2015 21:23
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 21:23
1-Methylnaphthalene	ND	0.010	1	05/21/2015 21:23
2-Methylnaphthalene	ND	0.010	1	05/21/2015 21:23
Naphthalene	ND	0.010	1	05/21/2015 21:23
Phenanthrene	ND	0.010	1	05/21/2015 21:23
Pyrene	ND	0.010	1	05/21/2015 21:23

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	96	30-130	05/21/2015 21:23
2-Fluorobiphenyl	93	30-130	05/21/2015 21:23

**Analyst(s):** HK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-33-12.5	1505759-011A	Soil	05/18/2015 13:45	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 21:48
Acenaphthylene	ND	0.010	1	05/21/2015 21:48
Anthracene	ND	0.010	1	05/21/2015 21:48
Benzo (a) anthracene	ND	0.010	1	05/21/2015 21:48
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 21:48
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 21:48
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 21:48
Benzo (a) pyrene	ND	0.010	1	05/21/2015 21:48
Chrysene	ND	0.010	1	05/21/2015 21:48
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 21:48
Fluoranthene	ND	0.010	1	05/21/2015 21:48
Fluorene	ND	0.010	1	05/21/2015 21:48
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 21:48
1-Methylnaphthalene	ND	0.010	1	05/21/2015 21:48
2-Methylnaphthalene	ND	0.010	1	05/21/2015 21:48
Naphthalene	ND	0.010	1	05/21/2015 21:48
Phenanthrene	ND	0.010	1	05/21/2015 21:48
Pyrene	ND	0.010	1	05/21/2015 21:48

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	94	30-130	05/21/2015 21:48
2-Fluorobiphenyl	95	30-130	05/21/2015 21:48

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-33-17.5	1505759-012A	Soil	05/18/2015 13:50	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/26/2015 17:12
Acenaphthylene	ND	0.10	10	05/26/2015 17:12
Anthracene	ND	0.10	10	05/26/2015 17:12
Benzo (a) anthracene	ND	0.10	10	05/26/2015 17:12
Benzo (b) fluoranthene	ND	0.10	10	05/26/2015 17:12
Benzo (k) fluoranthene	ND	0.10	10	05/26/2015 17:12
Benzo (g,h,i) perylene	ND	0.10	10	05/26/2015 17:12
Benzo (a) pyrene	ND	0.10	10	05/26/2015 17:12
Chrysene	ND	0.10	10	05/26/2015 17:12
Dibenzo (a,h) anthracene	ND	0.10	10	05/26/2015 17:12
Fluoranthene	ND	0.10	10	05/26/2015 17:12
Fluorene	ND	0.10	10	05/26/2015 17:12
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/26/2015 17:12
1-Methylnaphthalene	ND	0.10	10	05/26/2015 17:12
2-Methylnaphthalene	ND	0.10	10	05/26/2015 17:12
Naphthalene	ND	0.10	10	05/26/2015 17:12
Phenanthrene	ND	0.10	10	05/26/2015 17:12
Pyrene	ND	0.10	10	05/26/2015 17:12

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	78	30-130	05/26/2015 17:12
2-Fluorobiphenyl	72	30-130	05/26/2015 17:12

**Analyst(s):** HK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-34-12.5	1505759-013A	Soil	05/18/2015 14:25	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/27/2015 10:51
Acenaphthylene	ND	0.10	10	05/27/2015 10:51
Anthracene	ND	0.10	10	05/27/2015 10:51
Benzo (a) anthracene	ND	0.10	10	05/27/2015 10:51
Benzo (b) fluoranthene	ND	0.10	10	05/27/2015 10:51
Benzo (k) fluoranthene	ND	0.10	10	05/27/2015 10:51
Benzo (g,h,i) perylene	ND	0.10	10	05/27/2015 10:51
Benzo (a) pyrene	ND	0.10	10	05/27/2015 10:51
Chrysene	ND	0.10	10	05/27/2015 10:51
Dibenzo (a,h) anthracene	ND	0.10	10	05/27/2015 10:51
Fluoranthene	ND	0.10	10	05/27/2015 10:51
Fluorene	ND	0.10	10	05/27/2015 10:51
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/27/2015 10:51
1-Methylnaphthalene	<b>0.42</b>	0.10	10	05/27/2015 10:51
2-Methylnaphthalene	<b>0.27</b>	0.10	10	05/27/2015 10:51
Naphthalene	ND	0.10	10	05/27/2015 10:51
Phenanthrene	<b>0.31</b>	0.10	10	05/27/2015 10:51
Pyrene	ND	0.10	10	05/27/2015 10:51

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	92	30-130	05/27/2015 10:51
2-Fluorobiphenyl	79	30-130	05/27/2015 10:51

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B34-17.5	1505759-014A	Soil	05/18/2015 14:30	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 23:03
Acenaphthylene	ND	0.010	1	05/21/2015 23:03
Anthracene	ND	0.010	1	05/21/2015 23:03
Benzo (a) anthracene	ND	0.010	1	05/21/2015 23:03
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 23:03
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 23:03
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 23:03
Benzo (a) pyrene	ND	0.010	1	05/21/2015 23:03
Chrysene	ND	0.010	1	05/21/2015 23:03
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 23:03
Fluoranthene	ND	0.010	1	05/21/2015 23:03
Fluorene	ND	0.010	1	05/21/2015 23:03
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 23:03
1-Methylnaphthalene	ND	0.010	1	05/21/2015 23:03
2-Methylnaphthalene	ND	0.010	1	05/21/2015 23:03
Naphthalene	ND	0.010	1	05/21/2015 23:03
Phenanthrene	ND	0.010	1	05/21/2015 23:03
Pyrene	ND	0.010	1	05/21/2015 23:03

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	96	30-130	05/21/2015 23:03
2-Fluorobiphenyl	89	30-130	05/21/2015 23:03

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-23-12.5	1505759-015A	Soil	05/18/2015 14:50	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 23:28
Acenaphthylene	ND	0.010	1	05/21/2015 23:28
Anthracene	ND	0.010	1	05/21/2015 23:28
Benzo (a) anthracene	ND	0.010	1	05/21/2015 23:28
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 23:28
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 23:28
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 23:28
Benzo (a) pyrene	ND	0.010	1	05/21/2015 23:28
Chrysene	ND	0.010	1	05/21/2015 23:28
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 23:28
Fluoranthene	ND	0.010	1	05/21/2015 23:28
Fluorene	ND	0.010	1	05/21/2015 23:28
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 23:28
1-Methylnaphthalene	ND	0.010	1	05/21/2015 23:28
2-Methylnaphthalene	ND	0.010	1	05/21/2015 23:28
Naphthalene	ND	0.010	1	05/21/2015 23:28
Phenanthrene	ND	0.010	1	05/21/2015 23:28
Pyrene	ND	0.010	1	05/21/2015 23:28

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	94	30-130	05/21/2015 23:28
2-Fluorobiphenyl	89	30-130	05/21/2015 23:28

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-23-17.5	1505759-016A	Soil	05/18/2015 14:55	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/21/2015 23:53
Acenaphthylene	ND	0.010	1	05/21/2015 23:53
Anthracene	ND	0.010	1	05/21/2015 23:53
Benzo (a) anthracene	ND	0.010	1	05/21/2015 23:53
Benzo (b) fluoranthene	ND	0.010	1	05/21/2015 23:53
Benzo (k) fluoranthene	ND	0.010	1	05/21/2015 23:53
Benzo (g,h,i) perylene	ND	0.010	1	05/21/2015 23:53
Benzo (a) pyrene	ND	0.010	1	05/21/2015 23:53
Chrysene	ND	0.010	1	05/21/2015 23:53
Dibenzo (a,h) anthracene	ND	0.010	1	05/21/2015 23:53
Fluoranthene	ND	0.010	1	05/21/2015 23:53
Fluorene	ND	0.010	1	05/21/2015 23:53
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/21/2015 23:53
1-Methylnaphthalene	ND	0.010	1	05/21/2015 23:53
2-Methylnaphthalene	ND	0.010	1	05/21/2015 23:53
Naphthalene	ND	0.010	1	05/21/2015 23:53
Phenanthrene	ND	0.010	1	05/21/2015 23:53
Pyrene	ND	0.010	1	05/21/2015 23:53

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	98	30-130	05/21/2015 23:53
2-Fluorobiphenyl	91	30-130	05/21/2015 23:53

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-19-12.5	1505759-017A	Soil	05/18/2015 15:30	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 00:18
Acenaphthylene	ND	0.010	1	05/22/2015 00:18
Anthracene	ND	0.010	1	05/22/2015 00:18
Benzo (a) anthracene	ND	0.010	1	05/22/2015 00:18
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 00:18
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 00:18
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 00:18
Benzo (a) pyrene	ND	0.010	1	05/22/2015 00:18
Chrysene	ND	0.010	1	05/22/2015 00:18
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 00:18
Fluoranthene	ND	0.010	1	05/22/2015 00:18
Fluorene	ND	0.010	1	05/22/2015 00:18
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 00:18
1-Methylnaphthalene	ND	0.010	1	05/22/2015 00:18
2-Methylnaphthalene	ND	0.010	1	05/22/2015 00:18
Naphthalene	ND	0.010	1	05/22/2015 00:18
Phenanthrene	ND	0.010	1	05/22/2015 00:18
Pyrene	ND	0.010	1	05/22/2015 00:18

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	93	30-130	05/22/2015 00:18
2-Fluorobiphenyl	90	30-130	05/22/2015 00:18

**Analyst(s):** HK

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-19-17.5	1505759-018A	Soil	05/18/2015 15:35	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/26/2015 16:22
Acenaphthylene	ND	0.010	1	05/26/2015 16:22
Anthracene	ND	0.010	1	05/26/2015 16:22
Benzo (a) anthracene	ND	0.010	1	05/26/2015 16:22
Benzo (b) fluoranthene	ND	0.010	1	05/26/2015 16:22
Benzo (k) fluoranthene	ND	0.010	1	05/26/2015 16:22
Benzo (g,h,i) perylene	ND	0.010	1	05/26/2015 16:22
Benzo (a) pyrene	ND	0.010	1	05/26/2015 16:22
Chrysene	ND	0.010	1	05/26/2015 16:22
Dibenzo (a,h) anthracene	ND	0.010	1	05/26/2015 16:22
Fluoranthene	ND	0.010	1	05/26/2015 16:22
Fluorene	ND	0.010	1	05/26/2015 16:22
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/26/2015 16:22
1-Methylnaphthalene	ND	0.010	1	05/26/2015 16:22
2-Methylnaphthalene	ND	0.010	1	05/26/2015 16:22
Naphthalene	ND	0.010	1	05/26/2015 16:22
Phenanthrene	ND	0.010	1	05/26/2015 16:22
Pyrene	ND	0.010	1	05/26/2015 16:22

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	76	30-130	05/26/2015 16:22
2-Fluorobiphenyl	68	30-130	05/26/2015 16:22

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC21	105207
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	0.25	1	05/21/2015 18:52	
Acenaphthylene	ND	0.25	1	05/21/2015 18:52	
Acetochlor	ND	0.25	1	05/21/2015 18:52	
Anthracene	ND	0.25	1	05/21/2015 18:52	
Benzidine	ND	1.3	1	05/21/2015 18:52	
Benzo (a) anthracene	ND	0.25	1	05/21/2015 18:52	
Benzo (b) fluoranthene	ND	0.25	1	05/21/2015 18:52	
Benzo (k) fluoranthene	ND	0.25	1	05/21/2015 18:52	
Benzo (g,h,i) perylene	ND	0.25	1	05/21/2015 18:52	
Benzo (a) pyrene	ND	0.25	1	05/21/2015 18:52	
Benzyl Alcohol	ND	1.3	1	05/21/2015 18:52	
1,1-Biphenyl	ND	0.25	1	05/21/2015 18:52	
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/21/2015 18:52	
Bis (2-chloroethyl) Ether	ND	0.25	1	05/21/2015 18:52	
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/21/2015 18:52	
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/21/2015 18:52	
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/21/2015 18:52	
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/21/2015 18:52	
Butylbenzyl Phthalate	ND	0.25	1	05/21/2015 18:52	
4-Chloroaniline	ND	0.50	1	05/21/2015 18:52	
4-Chloro-3-methylphenol	ND	0.25	1	05/21/2015 18:52	
2-Chloronaphthalene	ND	0.25	1	05/21/2015 18:52	
2-Chlorophenol	ND	0.25	1	05/21/2015 18:52	
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/21/2015 18:52	
Chrysene	ND	0.25	1	05/21/2015 18:52	
Dibenzo (a,h) anthracene	ND	0.25	1	05/21/2015 18:52	
Dibenzofuran	ND	0.25	1	05/21/2015 18:52	
Di-n-butyl Phthalate	ND	0.25	1	05/21/2015 18:52	
1,2-Dichlorobenzene	ND	0.25	1	05/21/2015 18:52	
1,3-Dichlorobenzene	ND	0.25	1	05/21/2015 18:52	
1,4-Dichlorobenzene	ND	0.25	1	05/21/2015 18:52	
3,3-Dichlorobenzidine	ND	0.50	1	05/21/2015 18:52	
2,4-Dichlorophenol	ND	0.25	1	05/21/2015 18:52	
Diethyl Phthalate	ND	0.25	1	05/21/2015 18:52	
2,4-Dimethylphenol	ND	0.25	1	05/21/2015 18:52	
Dimethyl Phthalate	ND	0.25	1	05/21/2015 18:52	
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/21/2015 18:52	
2,4-Dinitrophenol	ND	6.3	1	05/21/2015 18:52	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC21	105207

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/21/2015 18:52
2,6-Dinitrotoluene	ND	0.25	1	05/21/2015 18:52
Di-n-octyl Phthalate	ND	0.50	1	05/21/2015 18:52
1,2-Diphenylhydrazine	ND	0.25	1	05/21/2015 18:52
Fluoranthene	ND	0.25	1	05/21/2015 18:52
Fluorene	ND	0.25	1	05/21/2015 18:52
Hexachlorobenzene	ND	0.25	1	05/21/2015 18:52
Hexachlorobutadiene	ND	0.25	1	05/21/2015 18:52
Hexachlorocyclopentadiene	ND	1.3	1	05/21/2015 18:52
Hexachloroethane	ND	0.25	1	05/21/2015 18:52
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/21/2015 18:52
Isophorone	ND	0.25	1	05/21/2015 18:52
2-Methylnaphthalene	ND	0.25	1	05/21/2015 18:52
2-Methylphenol (o-Cresol)	ND	0.25	1	05/21/2015 18:52
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/21/2015 18:52
Naphthalene	ND	0.25	1	05/21/2015 18:52
2-Nitroaniline	ND	1.3	1	05/21/2015 18:52
3-Nitroaniline	ND	1.3	1	05/21/2015 18:52
4-Nitroaniline	ND	1.3	1	05/21/2015 18:52
Nitrobenzene	ND	0.25	1	05/21/2015 18:52
2-Nitrophenol	ND	1.3	1	05/21/2015 18:52
4-Nitrophenol	ND	1.3	1	05/21/2015 18:52
N-Nitrosodiphenylamine	ND	0.25	1	05/21/2015 18:52
N-Nitrosodi-n-propylamine	ND	0.25	1	05/21/2015 18:52
Pentachlorophenol	ND	1.3	1	05/21/2015 18:52
Phenanthrene	ND	0.25	1	05/21/2015 18:52
Phenol	ND	0.25	1	05/21/2015 18:52
Pyrene	ND	0.25	1	05/21/2015 18:52
1,2,4-Trichlorobenzene	ND	0.25	1	05/21/2015 18:52
2,4,5-Trichlorophenol	ND	0.25	1	05/21/2015 18:52
2,4,6-Trichlorophenol	ND	0.25	1	05/21/2015 18:52

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC21	105207

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	100	30-130		05/21/2015 18:52
Phenol-d5	102	30-130		05/21/2015 18:52
Nitrobenzene-d5	91	30-130		05/21/2015 18:52
2-Fluorobiphenyl	92	30-130		05/21/2015 18:52
2,4,6-Tribromophenol	70	16-130		05/21/2015 18:52
4-Terphenyl-d14	100	30-130		05/21/2015 18:52

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC21	105207
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	0.25	1	05/21/2015 17:56	
Acenaphthylene	ND	0.25	1	05/21/2015 17:56	
Acetochlor	ND	0.25	1	05/21/2015 17:56	
Anthracene	ND	0.25	1	05/21/2015 17:56	
Benzidine	ND	1.3	1	05/21/2015 17:56	
Benzo (a) anthracene	ND	0.25	1	05/21/2015 17:56	
Benzo (b) fluoranthene	ND	0.25	1	05/21/2015 17:56	
Benzo (k) fluoranthene	ND	0.25	1	05/21/2015 17:56	
Benzo (g,h,i) perylene	ND	0.25	1	05/21/2015 17:56	
Benzo (a) pyrene	ND	0.25	1	05/21/2015 17:56	
Benzyl Alcohol	ND	1.3	1	05/21/2015 17:56	
1,1-Biphenyl	ND	0.25	1	05/21/2015 17:56	
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/21/2015 17:56	
Bis (2-chloroethyl) Ether	ND	0.25	1	05/21/2015 17:56	
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/21/2015 17:56	
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/21/2015 17:56	
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/21/2015 17:56	
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/21/2015 17:56	
Butylbenzyl Phthalate	ND	0.25	1	05/21/2015 17:56	
4-Chloroaniline	ND	0.50	1	05/21/2015 17:56	
4-Chloro-3-methylphenol	ND	0.25	1	05/21/2015 17:56	
2-Chloronaphthalene	ND	0.25	1	05/21/2015 17:56	
2-Chlorophenol	ND	0.25	1	05/21/2015 17:56	
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/21/2015 17:56	
Chrysene	ND	0.25	1	05/21/2015 17:56	
Dibenzo (a,h) anthracene	ND	0.25	1	05/21/2015 17:56	
Dibenzofuran	ND	0.25	1	05/21/2015 17:56	
Di-n-butyl Phthalate	ND	0.25	1	05/21/2015 17:56	
1,2-Dichlorobenzene	ND	0.25	1	05/21/2015 17:56	
1,3-Dichlorobenzene	ND	0.25	1	05/21/2015 17:56	
1,4-Dichlorobenzene	ND	0.25	1	05/21/2015 17:56	
3,3-Dichlorobenzidine	ND	0.50	1	05/21/2015 17:56	
2,4-Dichlorophenol	ND	0.25	1	05/21/2015 17:56	
Diethyl Phthalate	ND	0.25	1	05/21/2015 17:56	
2,4-Dimethylphenol	ND	0.25	1	05/21/2015 17:56	
Dimethyl Phthalate	ND	0.25	1	05/21/2015 17:56	
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/21/2015 17:56	
2,4-Dinitrophenol	ND	6.3	1	05/21/2015 17:56	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC21	105207

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/21/2015 17:56
2,6-Dinitrotoluene	ND	0.25	1	05/21/2015 17:56
Di-n-octyl Phthalate	ND	0.50	1	05/21/2015 17:56
1,2-Diphenylhydrazine	ND	0.25	1	05/21/2015 17:56
Fluoranthene	ND	0.25	1	05/21/2015 17:56
Fluorene	ND	0.25	1	05/21/2015 17:56
Hexachlorobenzene	ND	0.25	1	05/21/2015 17:56
Hexachlorobutadiene	ND	0.25	1	05/21/2015 17:56
Hexachlorocyclopentadiene	ND	1.3	1	05/21/2015 17:56
Hexachloroethane	ND	0.25	1	05/21/2015 17:56
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/21/2015 17:56
Isophorone	ND	0.25	1	05/21/2015 17:56
2-Methylnaphthalene	ND	0.25	1	05/21/2015 17:56
2-Methylphenol (o-Cresol)	ND	0.25	1	05/21/2015 17:56
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/21/2015 17:56
Naphthalene	ND	0.25	1	05/21/2015 17:56
2-Nitroaniline	ND	1.3	1	05/21/2015 17:56
3-Nitroaniline	ND	1.3	1	05/21/2015 17:56
4-Nitroaniline	ND	1.3	1	05/21/2015 17:56
Nitrobenzene	ND	0.25	1	05/21/2015 17:56
2-Nitrophenol	ND	1.3	1	05/21/2015 17:56
4-Nitrophenol	ND	1.3	1	05/21/2015 17:56
N-Nitrosodiphenylamine	ND	0.25	1	05/21/2015 17:56
N-Nitrosodi-n-propylamine	ND	0.25	1	05/21/2015 17:56
Pentachlorophenol	ND	1.3	1	05/21/2015 17:56
Phenanthrene	ND	0.25	1	05/21/2015 17:56
Phenol	ND	0.25	1	05/21/2015 17:56
Pyrene	ND	0.25	1	05/21/2015 17:56
1,2,4-Trichlorobenzene	ND	0.25	1	05/21/2015 17:56
2,4,5-Trichlorophenol	ND	0.25	1	05/21/2015 17:56
2,4,6-Trichlorophenol	ND	0.25	1	05/21/2015 17:56

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC21	105207

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	105	30-130		05/21/2015 17:56
Phenol-d5	108	30-130		05/21/2015 17:56
Nitrobenzene-d5	92	30-130		05/21/2015 17:56
2-Fluorobiphenyl	94	30-130		05/21/2015 17:56
2,4,6-Tribromophenol	77	16-130		05/21/2015 17:56
4-Terphenyl-d14	98	30-130		05/21/2015 17:56

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	ICP-MS2	105086

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/21/2015 21:44
Arsenic	<b>4.3</b>	0.50	1	05/21/2015 21:44
Barium	<b>130</b>	5.0	1	05/21/2015 21:44
Beryllium	ND	0.50	1	05/21/2015 21:44
Cadmium	ND	0.25	1	05/21/2015 21:44
Chromium	<b>37</b>	0.50	1	05/21/2015 21:44
Cobalt	<b>12</b>	0.50	1	05/21/2015 21:44
Copper	<b>11</b>	0.50	1	05/21/2015 21:44
Lead	<b>9.0</b>	0.50	1	05/21/2015 21:44
Mercury	ND	0.050	1	05/21/2015 21:44
Molybdenum	<b>0.61</b>	0.50	1	05/21/2015 21:44
Nickel	<b>26</b>	0.50	1	05/21/2015 21:44
Selenium	ND	0.50	1	05/21/2015 21:44
Silver	ND	0.50	1	05/21/2015 21:44
Thallium	ND	0.50	1	05/21/2015 21:44
Vanadium	<b>40</b>	0.50	1	05/21/2015 21:44
Zinc	<b>21</b>	5.0	1	05/21/2015 21:44
Surrogates	REC (%)	Limits		
Terbium	96	70-130		05/21/2015 21:44

**Analyst(s):** DVH





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	ICP-MS1	105086

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/21/2015 09:16
Arsenic	3.4	0.50	1	05/21/2015 09:16
Barium	150	5.0	1	05/21/2015 09:16
Beryllium	0.57	0.50	1	05/21/2015 09:16
Cadmium	ND	0.25	1	05/21/2015 09:16
Chromium	32	0.50	1	05/21/2015 09:16
Cobalt	6.6	0.50	1	05/21/2015 09:16
Copper	9.8	0.50	1	05/21/2015 09:16
Lead	4.5	0.50	1	05/21/2015 09:16
Mercury	ND	0.050	1	05/21/2015 09:16
Molybdenum	ND	0.50	1	05/21/2015 09:16
Nickel	51	0.50	1	05/21/2015 09:16
Selenium	ND	0.50	1	05/21/2015 09:16
Silver	ND	0.50	1	05/21/2015 09:16
Thallium	ND	0.50	1	05/21/2015 09:16
Vanadium	30	0.50	1	05/21/2015 09:16
Zinc	22	5.0	1	05/21/2015 09:16
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	93	70-130		05/21/2015 09:16

**Analyst(s):** DB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC7	105045

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 18:26
MTBE	---	0.050	1	05/20/2015 18:26
Benzene	---	0.0050	1	05/20/2015 18:26
Toluene	---	0.0050	1	05/20/2015 18:26
Ethylbenzene	---	0.0050	1	05/20/2015 18:26
Xylenes	---	0.0050	1	05/20/2015 18:26

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	101	70-130	05/20/2015 18:26

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC7	105045

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 18:57
MTBE	---	0.050	1	05/20/2015 18:57
Benzene	---	0.0050	1	05/20/2015 18:57
Toluene	---	0.0050	1	05/20/2015 18:57
Ethylbenzene	---	0.0050	1	05/20/2015 18:57
Xylenes	---	0.0050	1	05/20/2015 18:57

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	93	70-130	05/20/2015 18:57

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-12.5	1505759-003A	Soil	05/18/2015 09:35	GC7	105045

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 19:57
MTBE	---	0.050	1	05/20/2015 19:57
Benzene	ND	0.0050	1	05/20/2015 19:57
Toluene	ND	0.0050	1	05/20/2015 19:57
Ethylbenzene	ND	0.0050	1	05/20/2015 19:57
Xylenes	ND	0.0050	1	05/20/2015 19:57

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	90	70-130	05/20/2015 19:57

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-17.5	1505759-004A	Soil	05/18/2015 09:40	GC7	105045

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 20:28
MTBE	---	0.050	1	05/20/2015 20:28
Benzene	ND	0.0050	1	05/20/2015 20:28
Toluene	ND	0.0050	1	05/20/2015 20:28
Ethylbenzene	ND	0.0050	1	05/20/2015 20:28
Xylenes	ND	0.0050	1	05/20/2015 20:28

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	105	70-130	05/20/2015 20:28

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-14-12.5	1505759-005A	Soil	05/18/2015 10:25	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 17:55
MTBE	---	0.050	1	05/20/2015 17:55
Benzene	ND	0.0050	1	05/20/2015 17:55
Toluene	ND	0.0050	1	05/20/2015 17:55
Ethylbenzene	ND	0.0050	1	05/20/2015 17:55
Xylenes	ND	0.0050	1	05/20/2015 17:55

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	05/20/2015 17:55

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-14-17.5	1505759-006A	Soil	05/18/2015 10:30	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 20:58
MTBE	---	0.050	1	05/20/2015 20:58
Benzene	ND	0.0050	1	05/20/2015 20:58
Toluene	ND	0.0050	1	05/20/2015 20:58
Ethylbenzene	ND	0.0050	1	05/20/2015 20:58
Xylenes	ND	0.0050	1	05/20/2015 20:58

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	96	70-130	05/20/2015 20:58

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-18-12.5	1505759-007A	Soil	05/18/2015 11:10	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/20/2015 22:29
MTBE	---	0.050	1	05/20/2015 22:29
Benzene	ND	0.0050	1	05/20/2015 22:29
Toluene	ND	0.0050	1	05/20/2015 22:29
Ethylbenzene	ND	0.0050	1	05/20/2015 22:29
Xylenes	ND	0.0050	1	05/20/2015 22:29

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	95	70-130	05/20/2015 22:29

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-18-17.5	1505759-008A	Soil	05/18/2015 11:15	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 00:00
MTBE	---	0.050	1	05/21/2015 00:00
Benzene	ND	0.0050	1	05/21/2015 00:00
Toluene	ND	0.0050	1	05/21/2015 00:00
Ethylbenzene	ND	0.0050	1	05/21/2015 00:00
Xylenes	ND	0.0050	1	05/21/2015 00:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	94	70-130	05/21/2015 00:00

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-22-12.5	1505759-009A	Soil	05/18/2015 11:45	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 00:30
MTBE	---	0.050	1	05/21/2015 00:30
Benzene	ND	0.0050	1	05/21/2015 00:30
Toluene	ND	0.0050	1	05/21/2015 00:30
Ethylbenzene	ND	0.0050	1	05/21/2015 00:30
Xylenes	ND	0.0050	1	05/21/2015 00:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	70-130	05/21/2015 00:30

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-22-17.5	1505759-010A	Soil	05/18/2015 11:50	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 03:30
MTBE	---	0.050	1	05/21/2015 03:30
Benzene	ND	0.0050	1	05/21/2015 03:30
Toluene	ND	0.0050	1	05/21/2015 03:30
Ethylbenzene	ND	0.0050	1	05/21/2015 03:30
Xylenes	ND	0.0050	1	05/21/2015 03:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	85	70-130	05/21/2015 03:30

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-33-12.5	1505759-011A	Soil	05/18/2015 13:45	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 04:01
MTBE	---	0.050	1	05/21/2015 04:01
Benzene	ND	0.0050	1	05/21/2015 04:01
Toluene	ND	0.0050	1	05/21/2015 04:01
Ethylbenzene	ND	0.0050	1	05/21/2015 04:01
Xylenes	ND	0.0050	1	05/21/2015 04:01

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	78	70-130	05/21/2015 04:01

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-33-17.5	1505759-012A	Soil	05/18/2015 13:50	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	15	1.0	1	05/21/2015 05:01
MTBE	---	0.050	1	05/21/2015 05:01
Benzene	ND	0.0050	1	05/21/2015 05:01
Toluene	ND	0.0050	1	05/21/2015 05:01
Ethylbenzene	0.0062	0.0050	1	05/21/2015 05:01
Xylenes	0.0094	0.0050	1	05/21/2015 05:01

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	78	70-130	05/21/2015 05:01

Analyst(s): SS

Analytical Comments: d7



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-34-12.5	1505759-013A	Soil	05/18/2015 14:25	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	43	1.0	1	05/21/2015 05:31
MTBE	---	0.050	1	05/21/2015 05:31
Benzene	ND	0.0050	1	05/21/2015 05:31
Toluene	0.019	0.0050	1	05/21/2015 05:31
Ethylbenzene	0.013	0.0050	1	05/21/2015 05:31
Xylenes	0.048	0.0050	1	05/21/2015 05:31

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	70-130	05/21/2015 05:31

Analyst(s): SS

Analytical Comments: d7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B34-17.5	1505759-014A	Soil	05/18/2015 14:30	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 06:31
MTBE	---	0.050	1	05/21/2015 06:31
Benzene	ND	0.0050	1	05/21/2015 06:31
Toluene	ND	0.0050	1	05/21/2015 06:31
Ethylbenzene	ND	0.0050	1	05/21/2015 06:31
Xylenes	ND	0.0050	1	05/21/2015 06:31

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	70-130	05/21/2015 06:31

Analyst(s): SS





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-23-12.5	1505759-015A	Soil	05/18/2015 14:50	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 07:31
MTBE	---	0.050	1	05/21/2015 07:31
Benzene	ND	0.0050	1	05/21/2015 07:31
Toluene	ND	0.0050	1	05/21/2015 07:31
Ethylbenzene	ND	0.0050	1	05/21/2015 07:31
Xylenes	ND	0.0050	1	05/21/2015 07:31

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	97	70-130	05/21/2015 07:31

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-23-17.5	1505759-016A	Soil	05/18/2015 14:55	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 08:01
MTBE	---	0.050	1	05/21/2015 08:01
Benzene	ND	0.0050	1	05/21/2015 08:01
Toluene	ND	0.0050	1	05/21/2015 08:01
Ethylbenzene	ND	0.0050	1	05/21/2015 08:01
Xylenes	ND	0.0050	1	05/21/2015 08:01

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	93	70-130	05/21/2015 08:01

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15

**WorkOrder:** 1505759  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-19-12.5	1505759-017A	Soil	05/18/2015 15:30	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 08:32
MTBE	---	0.050	1	05/21/2015 08:32
Benzene	ND	0.0050	1	05/21/2015 08:32
Toluene	ND	0.0050	1	05/21/2015 08:32
Ethylbenzene	ND	0.0050	1	05/21/2015 08:32
Xylenes	ND	0.0050	1	05/21/2015 08:32

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	103	70-130	05/21/2015 08:32

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-19-17.5	1505759-018A	Soil	05/18/2015 15:35	GC7	105095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/21/2015 09:02
MTBE	---	0.050	1	05/21/2015 09:02
Benzene	ND	0.0050	1	05/21/2015 09:02
Toluene	ND	0.0050	1	05/21/2015 09:02
Ethylbenzene	ND	0.0050	1	05/21/2015 09:02
Xylenes	ND	0.0050	1	05/21/2015 09:02

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	97	70-130	05/21/2015 09:02

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505759  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	WetChem	105182

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.34	0.1	1	05/20/2015 21:44

Analyst(s): AL

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	WetChem	105182

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.12	0.1	1	05/20/2015 21:47

Analyst(s): AL



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15-5/26/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-2.5	1505759-001A	Soil	05/18/2015 08:45	GC9a	105083

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	21	1.0	1	05/22/2015 02:31
TPH-Motor Oil (C18-C36)	95	5.0	1	05/22/2015 02:31

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/22/2015 02:31

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-7.5	1505759-002A	Soil	05/18/2015 09:30	GC6A	105083

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/27/2015 13:16
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/27/2015 13:16

Surrogates	REC (%)	Limits	Date Analyzed
C9	108	70-130	05/27/2015 13:16

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-12.5	1505759-003A	Soil	05/18/2015 09:35	GC2A	105083

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 10:46
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 10:46

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/22/2015 10:46

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15-5/26/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-10-17.5	1505759-004A	Soil	05/18/2015 09:40	GC2A	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 14:46
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 14:46

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-14-12.5	1505759-005A	Soil	05/18/2015 10:25	GC6B	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 10:39
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 10:39

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	114	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-14-17.5	1505759-006A	Soil	05/18/2015 10:30	GC2A	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 09:30
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 09:30

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15-5/26/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-18-12.5	1505759-007A	Soil	05/18/2015 11:10	GC6A	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/27/2015 11:52
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/27/2015 11:52

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	102	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-18-17.5	1505759-008A	Soil	05/18/2015 11:15	GC6A	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/26/2015 15:05
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/26/2015 15:05

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	108	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-22-12.5	1505759-009A	Soil	05/18/2015 11:45	GC6B	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 03:31
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 03:31

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	113	70-130

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15-5/26/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-22-17.5	1505759-010A	Soil	05/18/2015 11:50	GC2A	105391

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/27/2015 05:06
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/27/2015 05:06

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-33-12.5	1505759-011A	Soil	05/18/2015 13:45	GC2A	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	28	1.0	1	05/21/2015 22:15
TPH-Motor Oil (C18-C36)	81	5.0	1	05/21/2015 22:15

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-33-17.5	1505759-012A	Soil	05/18/2015 13:50	GC6B	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	730	20	20	05/27/2015 14:28
TPH-Motor Oil (C18-C36)	1600	100	20	05/27/2015 14:28

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	84	70-130

Analyst(s): HD

Analytical Comments: e7,e2,e11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15-5/26/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-34-12.5	1505759-013A	Soil	05/18/2015 14:25	GC11B	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1400	100	100	05/26/2015 18:01
TPH-Motor Oil (C18-C36)	3900	500	100	05/26/2015 18:01

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	111	70-130	05/26/2015 18:01

**Analyst(s):** HD **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B34-17.5	1505759-014A	Soil	05/18/2015 14:30	GC6B	105083

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.9	1.0	1	05/23/2015 23:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 23:56

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	112	70-130	05/23/2015 23:56

**Analyst(s):** HD **Analytical Comments:** e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-23-12.5	1505759-015A	Soil	05/18/2015 14:50	GC2A	105094

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 00:45
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 00:45

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	112	70-130	05/22/2015 00:45

**Analyst(s):** HD

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/19/15 17:51  
**Date Prepared:** 5/19/15-5/26/15

**WorkOrder:** 1505759  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-23-17.5	1505759-016A	Soil	05/18/2015 14:55	GC2A	105094

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 12:02
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 12:02

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/22/2015 12:02

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-19-12.5	1505759-017A	Soil	05/18/2015 15:30	GC2A	105094

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/21/2015 23:30
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/21/2015 23:30

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/21/2015 23:30

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-19-17.5	1505759-018A	Soil	05/18/2015 15:35	GC11B	105094

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 02:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 02:56

Surrogates	REC (%)	Limits	Date Analyzed
C9	107	70-130	05/22/2015 02:56

Analyst(s): HD



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/26/15  
**Instrument:** GC22, GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105087  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105087  
 1505759-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0437	0.0010	0.050	-	87	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0509	0.0010	0.050	-	102	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0483	0.0010	0.050	-	97	70-130
Dieldrin	ND	0.0551	0.0010	0.050	-	110	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0464	0.0010	0.050	-	93	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0462	0.0010	0.050	-	92	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-

**Surrogate Recovery**

Decachlorobiphenyl	0.0627	0.0467		0.050	125	93	70-130
--------------------	--------	--------	--	-------	-----	----	--------

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/26/15  
**Instrument:** GC22, GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105087  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105087  
 1505759-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0432	0.0500	0.050	ND	86	100	70-130	14.6	30
g-BHC	0.0487	0.0561	0.050	ND	97	112	70-130	14.2	30
p,p-DDT	0.0494	0.0561	0.050	ND	99	112	70-130	12.6	30
Dieldrin	0.0520	0.0592	0.050	ND	104	118	70-130	13.0	30
Endrin	0.0468	0.0534	0.050	ND	94	107	70-130	13.2	30
Heptachlor	0.0461	0.0536	0.050	ND	92	107	70-130	15.0	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0456	0.0460	0.050		91	92	70-130	0.931	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/23/15  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105096  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105096

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0790	0.010	0.10	-	79	53-116
Benzene	ND	0.0946	0.010	0.10	-	95	63-137
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.348	0.10	0.40	-	87	41-135
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0877	0.010	0.10	-	88	77-121
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.010	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0796	0.0080	0.10	-	80	67-119
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0962	0.0080	0.10	-	96	58-135
1,1-Dichloroethene	ND	0.0922	0.010	0.10	-	92	42-145
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/23/15  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105096  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105096

### QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0922	0.010	0.10	-	92	52-129
Ethanol	ND	-	1.0	-	-	-	-
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0908	0.010	0.10	-	91	53-125
Freon 113	ND	-	0.20	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methanol	ND	-	10	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0901	0.010	0.10	-	90	58-122
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.0961	0.010	0.10	-	96	76-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0922	0.010	0.10	-	92	72-132
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/23/15  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105096  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105096

### QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	0.265	0.268		0.25	106	107	70-130
Toluene-d8	0.243	0.242		0.25	97	97	70-130
4-BFB	0.0311	0.0202		0.025	125	81	70-130
Benzene-d6	0.171	0.174		0.20	85	87	60-140
Ethylbenzene-d10	0.203	0.210		0.20	101	105	60-140
1,2-DCB-d4	0.177	0.165		0.20	88	83	60-140



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/20/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105138  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105138  
 1505744-033AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.259	0.010	0.20	-	130	30-130
Chrysene	ND	0.203	0.010	0.20	-	102	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.226	0.010	0.20	-	113	30-130
2-Methylnaphthalene	ND	0.227	0.010	0.20	-	113	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.215	0.010	0.20	-	107	30-130
Pyrene	ND	0.203	0.010	0.20	-	101	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.464	0.462		0.50	93	92	30-130
2-Fluorobiphenyl	0.463	0.445		0.50	93	89	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		ND<0.23	NR	NR	-	NR	
Chrysene	NR	NR		ND<0.23	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.23	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.23	NR	NR	-	NR	
Phenanthrene	NR	NR		ND<0.23	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.23	NR	NR	-	NR	

### Surrogate Recovery

1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105199  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105199  
 1505759-004AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.226	0.010	0.20	-	113	30-130
Chrysene	ND	0.181	0.010	0.20	-	90	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.198	0.010	0.20	-	99	30-130
2-Methylnaphthalene	ND	0.200	0.010	0.20	-	100	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.193	0.010	0.20	-	96	30-130
Pyrene	ND	0.179	0.010	0.20	-	90	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.412	0.419		0.50	82	84	30-130
2-Fluorobiphenyl	0.409	0.409		0.50	82	82	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	0.259	0.258	0.20	ND	130	129	30-130	0.378	30
Chrysene	0.195	0.202	0.20	ND	98	101	30-130	3.36	30
1-Methylnaphthalene	0.205	0.210	0.20	ND	103	105	30-130	2.22	30
2-Methylnaphthalene	0.207	0.211	0.20	ND	104	105	30-130	1.69	30
Phenanthrene	0.204	0.210	0.20	ND	102	105	30-130	2.85	30
Pyrene	0.187	0.194	0.20	ND	94	97	30-130	3.21	30

### Surrogate Recovery

1-Fluoronaphthalene	0.449	0.467	0.50		90	93	30-130	4.00	30
2-Fluorobiphenyl	0.442	0.461	0.50		88	92	30-130	4.07	30





# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105207  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105207  
 1505803-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.94	0.25	5	-	99	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	4.73	0.25	5	-	95	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.12	0.25	5	-	102	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.51	0.25	5	-	90	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	5.10	0.25	5	-	102	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105207  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105207  
 1505803-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	4.20	1.3	5	-	84	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.28	0.25	5	-	86	30-130
Pentachlorophenol	ND	4.05	1.3	5	-	81	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.48	0.25	5	-	90	30-130
Pyrene	ND	5.38	0.25	5	-	108	30-130
1,2,4-Trichlorobenzene	ND	5.02	0.25	5	-	100	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

#### Surrogate Recovery

2-Fluorophenol	5.06	4.43		5	101	89	30-130
Phenol-d5	5.41	4.59		5	108	92	30-130
Nitrobenzene-d5	4.49	4.57		5	90	91	30-130
2-Fluorobiphenyl	4.45	4.36		5	89	87	30-130
2,4,6-Tribromophenol	3.12	3.45		5	62	69	16-130
4-Terphenyl-d14	5.46	4.66		5	109	93	30-130

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105207  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105207  
 1505803-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<20	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<20	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<20	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<20	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<20	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<100	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<20	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<100	NR	NR	-	NR	
Phenol	NR	NR		ND<20	NR	NR	-	NR	
Pyrene	NR	NR		ND<20	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<20	NR	NR	-	NR	

### Surrogate Recovery

2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/21/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105086  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105086  
 1505759-002AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	50.2	0.50	50	-	100	75-125
Arsenic	ND	49.4	0.50	50	-	99	75-125
Barium	ND	465	5.0	500	-	93	75-125
Beryllium	ND	49.2	0.50	50	-	98	75-125
Cadmium	ND	48.6	0.25	50	-	97	75-125
Chromium	ND	49.5	0.50	50	-	99	75-125
Cobalt	ND	46.6	0.50	50	-	93	75-125
Copper	ND	52.2	0.50	50	-	104	75-125
Lead	ND	49.3	0.50	50	-	98	75-125
Mercury	ND	1.20	0.050	1.25	-	96	75-125
Molybdenum	ND	49.6	0.50	50	-	99	75-125
Nickel	ND	51.6	0.50	50	-	103	75-125
Selenium	ND	48.2	0.50	50	-	96	75-125
Silver	ND	49.8	0.50	50	-	100	75-125
Thallium	ND	47.4	0.50	50	-	95	75-125
Vanadium	ND	49.1	0.50	50	-	98	75-125
Zinc	ND	504	5.0	500	-	101	75-125
<b>Surrogate Recovery</b>							
Terbium	489	477		500	98	95	70-130

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/21/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105086  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105086  
 1505759-002AMS/MSD

## QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	49.2	48.4	50	ND	98	96	75-125	1.66	20
Arsenic	51.1	49.5	50	3.400	95	92	75-125	3.08	20
Barium	655	680	500	151.8	101	106	75-125	3.78	20
Beryllium	48.8	48.3	50	0.5737	97	95	75-125	1.13	20
Cadmium	47.7	47.7	50	ND	95	95	75-125	0	20
Chromium	92.4	98.4	50	31.63	121	134,F1	75-125	6.35	20
Cobalt	50.6	52.7	50	6.600	88	92	75-125	3.97	20
Copper	61.6	61.4	50	9.752	104	103	75-125	0.228	20
Lead	54.6	54.8	50	4.547	100	100	75-125	0	20
Mercury	1.25	1.21	1.25	ND	97	94	75-125	3.74	20
Molybdenum	48.6	48.2	50	ND	96	96	75-125	0	20
Nickel	NR	NR	50	51.39	NR	NR	75-125	NR	20
Selenium	47.2	46.6	50	ND	94	93	75-125	1.19	20
Silver	48.5	48.9	50	ND	97	98	75-125	0.780	20
Thallium	47.1	47.0	50	ND	94	94	75-125	0	20
Vanadium	90.8	94.8	50	30.23	121	129,F1	75-125	4.40	20
Zinc	519	513	500	22.44	99	98	75-125	1.18	20
<b>Surrogate Recovery</b>									
Terbium	476	475	500		95	95	70-130	0	20



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/19/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105045  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105045  
 1505715-004AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.573	0.40	0.60	-	95	70-130
MTBE	ND	0.0982	0.050	0.10	-	98	70-130
Benzene	ND	0.106	0.0050	0.10	-	105	70-130
Toluene	ND	0.103	0.0050	0.10	-	103	70-130
Ethylbenzene	ND	0.110	0.0050	0.10	-	109	70-130
Xylenes	ND	0.337	0.0050	0.30	-	112	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.113	0.111		0.10	113	111	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.527	0.560	0.60	ND	88	93	70-130	6.11	20
MTBE	0.0738	0.0757	0.10	ND	74	76	70-130	2.60	20
Benzene	0.0760	0.0856	0.10	ND	76	86	70-130	11.9	20
Toluene	0.0801	0.0904	0.10	ND	80	90	70-130	12.0	20
Ethylbenzene	0.0799	0.0912	0.10	ND	80	91	70-130	13.1	20
Xylenes	0.244	0.276	0.30	ND	81	92	70-130	12.3	20

**Surrogate Recovery**

2-Fluorotoluene	0.0727	0.0816	0.10		73	82	70-130	11.6	20
-----------------	--------	--------	------	--	----	----	--------	------	----

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105095  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105095  
 1505759-005AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.557	0.40	0.60	-	93	70-130
MTBE	ND	0.101	0.050	0.10	-	101	70-130
Benzene	ND	0.0930	0.0050	0.10	-	93	70-130
Toluene	ND	0.0888	0.0050	0.10	-	89	70-130
Ethylbenzene	ND	0.0956	0.0050	0.10	-	96	70-130
Xylenes	ND	0.301	0.0050	0.30	-	100	70-130

### Surrogate Recovery

2-Fluorotoluene	0.102	0.0977		0.10	102	98	70-130
-----------------	-------	--------	--	------	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.527	0.536	0.60	ND	88	89	70-130	1.82	20
MTBE	0.0822	0.0891	0.10	ND	82	89	70-130	8.04	20
Benzene	0.0899	0.0910	0.10	ND	90	91	70-130	1.19	20
Toluene	0.0888	0.0886	0.10	ND	89	89	70-130	0	20
Ethylbenzene	0.0959	0.0959	0.10	ND	96	96	70-130	0	20
Xylenes	0.297	0.298	0.30	ND	99	99	70-130	0	20

### Surrogate Recovery

2-Fluorotoluene	0.0980	0.0980	0.10		98	98	70-130	0	20
-----------------	--------	--------	------	--	----	----	--------	---	----



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/20/15  
**Instrument:** WetChem  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105182  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505744-002A	9.11	1	9.10	1	0.01	0.1
1505760-043A	7.98	1	7.98	1	0	0.1





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/20/15  
**Instrument:** GC6A, GC6B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105083  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105083  
 1505751-001AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	46.7	1.0	40	-	117	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	28.1	25.9		25	113	104	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		21	NR	NR	-	NR	

**Surrogate Recovery**

C9	NR	NR			NR	NR	-	NR	
----	----	----	--	--	----	----	---	----	--



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC11A, GC2A  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105094  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105094  
 1505759-015AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	38.7	1.0	40	-	97	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	27.8	24.2		25	111	97	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	42.2	42.1	40	ND	105	105	70-130	0	30
<b>Surrogate Recovery</b>									
C9	28.0	28.2	25		112	113	70-130	0.493	30

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/26/15  
**Date Analyzed:** 5/26/15  
**Instrument:** GC2A  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505759  
**BatchID:** 105391  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105391  
 1505980-001AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	41.1	1.0	40	-	103	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	27.6	27.5		25	110	110	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		8.7	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
C9	NR	NR			NR	NR	-	NR	



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505759

ClientCode: TWRF

WaterTrax    WriteOn    EDF    Excel    EQulS    Email    HardCopy    ThirdParty    J-flag

**Report to:**  
Christina Rain  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
(415) 955-5200   FAX: (415) 955-9041

Email: crain@Langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**  
Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concur.solutio

**Requested TAT: 5 days**  
  
**Date Received: 05/19/2015**  
**Date Printed: 05/27/2015**

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	
1505759-001	B-10-2.5	Soil	5/18/2015 8:45	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505759-002	B-10-7.5	Soil	5/18/2015 9:30	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505759-003	B-10-12.5	Soil	5/18/2015 9:35	<input type="checkbox"/>			A			A		A					
1505759-004	B-10-17.5	Soil	5/18/2015 9:40	<input type="checkbox"/>			A			A		A					
1505759-005	B-14-12.5	Soil	5/18/2015 10:25	<input type="checkbox"/>			A			A		A					
1505759-006	B-14-17.5	Soil	5/18/2015 10:30	<input type="checkbox"/>			A			A		A					
1505759-007	B-18-12.5	Soil	5/18/2015 11:10	<input type="checkbox"/>			A			A		A					
1505759-008	B-18-17.5	Soil	5/18/2015 11:15	<input type="checkbox"/>			A			A		A					
1505759-009	B-22-12.5	Soil	5/18/2015 11:45	<input type="checkbox"/>			A			A		A					
1505759-010	B-22-17.5	Soil	5/18/2015 11:50	<input type="checkbox"/>			A			A		A					
1505759-011	B-33-12.5	Soil	5/18/2015 13:45	<input type="checkbox"/>			A			A		A					
1505759-012	B-33-17.5	Soil	5/18/2015 13:50	<input type="checkbox"/>			A			A		A					
1505759-013	B-34-12.5	Soil	5/18/2015 14:25	<input type="checkbox"/>			A			A		A					
1505759-014	B34-17.5	Soil	5/18/2015 14:30	<input type="checkbox"/>			A			A		A					
1505759-015	B-23-12.5	Soil	5/18/2015 14:50	<input type="checkbox"/>			A			A		A					

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

The following SamplIDs: 001A, 002A contain testgroup.

**Prepared by: Jena Alfaro**

**Comments:**    SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

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.

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505759

ClientCode: TWRF

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQuIS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**  
 Christina Rain  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 (415) 955-5200    FAX: (415) 955-9041

Email: crain@Langan.com  
 cc/3rd Party: ekimbrel@langan.com;  
 PO:  
 ProjectNo: #731637001; 3093 Broadway

**Bill to:**  
 Accounts Payable  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 Langan\_InvoiceCapture@concur.solutio

**Requested TAT: 5 days**  
  
**Date Received: 05/19/2015**  
**Date Printed: 05/27/2015**

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
1505759-016	B-23-17.5	Soil	5/18/2015 14:55	<input type="checkbox"/>			A			A		A				
1505759-017	B-19-12.5	Soil	5/18/2015 15:30	<input type="checkbox"/>			A			A		A				
1505759-018	B-19-17.5	Soil	5/18/2015 15:35	<input type="checkbox"/>			A			A		A				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

The following SamplIDs: 001A, 002A contain testgroup.

**Prepared by: Jena Alfaro**

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505759

**Project:** #731637001; 3093 Broadway

**Client Contact:** Christina Rain

**Date Received:** 5/19/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** crain@Langan.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505759-001A	B-10-2.5	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 8:45	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-001B	B-10-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/18/2015 8:45	5 days		<input type="checkbox"/>	
1505759-002A	B-10-7.5	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 9:30	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-002B	B-10-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/18/2015 9:30	5 days		<input type="checkbox"/>	
1505759-003A	B-10-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 9:35	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505759

**Project:** #731637001; 3093 Broadway

**Client Contact:** Christina Rain

**Date Received:** 5/19/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** crain@Langan.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505759-003A	B-10-12.5	Soil	SW8270C (PAHs/PNAs)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 9:35	5 days		<input type="checkbox"/>	
1505759-004A	B-10-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 9:40	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505759-005A	B-14-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 10:25	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505759-006A	B-14-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 10:30	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505759-007A	B-18-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 11:10	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505759-008A	B-18-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 11:15	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505759

**Project:** #731637001; 3093 Broadway

**Client Contact:** Christina Rain

**Date Received:** 5/19/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** crain@Langan.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505759-009A	B-22-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 11:45	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-010A	B-22-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 11:50	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-011A	B-33-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 13:45	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-012A	B-33-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 13:50	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-013A	B-34-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 14:25	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505759-014A	B34-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 14:30	5 days		<input type="checkbox"/>	

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

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





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO

**QC Level:** LEVEL 2

**Work Order:** 1505759

**Project:** #731637001; 3093 Broadway

**Client Contact:** Christina Rain

**Date Received:** 5/19/2015

**Comments:** SEND HARD COPY/ Always notify the PM when TAT is not going to be met! JEL 9-9-14

**Contact's Email:** crain@Langan.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505759-014A	B34-17.5	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 14:30	5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505759-015A	B-23-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 14:50	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505759-016A	B-23-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 14:55	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505759-017A	B-19-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 15:30	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505759-018A	B-19-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/18/2015 15:35	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			

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

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

1505789

Please send copies of work order summaries to:  
1) Liz Kimbrel: ekimbrel@langan.com  
2) Christina Rain: crain@langan.com

008374

# Treadwell & Rollo

Environmental and Geotechnical Consultant

## CHAIN OF CUSTODY RECORD

Page 1 of 2

- 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway

Job Number: 731037001

Project Manager/Contact: Christina Rain #415-955-5247

Samplers: Liz Kimbrel 503-890-8398

Recorder (Signature Required): Elin

Turnaround Time Std
---------------------------

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks					
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH	PAHs	PCBs	pesticides	PH	SVOCs	SVOCs	PCBs	pesticides	PAHs				PAHs	PAHs	PAHs		
B-10-2.5	5/18/15	0845		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			hold for further metals analyses
B-10-7.5		0930		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			" "
B-10-12.5		0935		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-10-17.5		0940		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-14-12.5		1025		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-14-17.5		1030		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-18-12.5		1110		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-18-17.5		1115		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-22-12.5		1145		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-22-17.5		1150		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-33-12.5		1345		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-33-17.5		1350		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-34-12.5		1425		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			
B-34-17.5		1430		X									X	X	X	X	X	X	X	X	X	X	X	X	X	X			

Relinquished by: (Signature) <u>Elin</u>	Date <u>5/18/2015</u>	Time <u>1733</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-19-15</u>	Time <u>1315</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-19-15</u>	Time <u>1600</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/19/15</u>	Time <u>1600</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): Mccampbell Analytical

Laboratory Comments/Notes:

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS

Hand Carried  Private Courier (Co. Name)

White Copy - Original      Yellow Copy - Laboratory

ICE 11-15-15

GOOD CONDITION      APPROPRIATE

HEAD SPACE ABSENT      CONTAINERS

DECONTAMINATED IN LAB      PRESERVED IN LAB

PRESERVATION      VOAS   O & G   METALS   OTHER

Number: \_\_\_\_\_

Please send Work Order Summaries to:  
 1) Liz Kimbrel: ekimbrel@langan.com  
 2) Christina Rain: craih@craih.com 008375



# 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Christina Rain @ 415-955-5247  
 Samplers: Liz Kimbrel 503-880-8398  
 Recorder (Signature Required): *[Signature]*

<b>Turnaround Time</b>
<u>Std</u>

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix			No. Containers & Preservative				Analysis Requested							Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH/d, mo	BTEX	PAHs by 8270C	VOCs 8260B	SVOCs 8270C	PCBs & Pesticides				CM 17	pH	
B-23-12.5	5/18/15	1450		X								X	X	X									
B-23-17.5	↓	1455		X								X	X	X									
B-19-12.5	↓	1530		X								X	X	X									
B-19-17.5	↓	1535		X								X	X	X									
Relinquished by: (Signature) <i>[Signature]</i>				Date	Time	Received by: (Signature) <i>[Signature]</i>				Date	Time												
Relinquished by: (Signature) <i>[Signature]</i>				5/18/2015	1733	Received by: (Signature) <i>[Signature]</i>				5-19-15	1315												
Relinquished by: (Signature) <i>[Signature]</i>				5-19-15	1600	Received by: (Signature) <i>[Signature]</i>				5/19/15	1600												
Relinquished by: (Signature) _____				Date	Time	Received by Lab: (Signature) _____				Date	Time												
Sent to Laboratory (Name): <u>Mccampbell Analytical</u>						Method of Shipment																	
Laboratory Comments/Notes:						<input checked="" type="checkbox"/> Lab courier	<input type="checkbox"/> Fed Ex	<input type="checkbox"/> Airborne	<input type="checkbox"/> UPS	COC Number: _____													
						<input type="checkbox"/> Hand Carried	<input type="checkbox"/> Private Courier (Co. Name) _____																



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/19/2015 5:51:53 PM**  
 Project Name: **#731637001; 3093 Broadway** LogIn Reviewed by: **Jena Alfaro**  
 WorkOrder No: **1505759** Matrix: Soil Carrier: Bernie Cummins (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   
 Sample/Temp Blank temperature Temp: 4.3°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No   
 (Ice Type: WET ICE )

#### UCMR3 Samples:

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

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

Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505818

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/20/2015

Analytical Report reviewed & approved for release on 05/29/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505818

### Glossary Abbreviation

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



## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505818

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a3	sample diluted due to high organic content.
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
d2	heavier gasoline range compounds are significant (aged gasoline?)
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e4	gasoline range compounds are significant.
e7	oil range compounds are significant



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC22	105157

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/21/2015 23:09
a-BHC	ND	0.0010	1	05/21/2015 23:09
b-BHC	ND	0.0010	1	05/21/2015 23:09
d-BHC	ND	0.0010	1	05/21/2015 23:09
g-BHC	ND	0.0010	1	05/21/2015 23:09
Chlordane (Technical)	ND	0.025	1	05/21/2015 23:09
a-Chlordane	ND	0.0010	1	05/21/2015 23:09
g-Chlordane	ND	0.0010	1	05/21/2015 23:09
p,p-DDD	ND	0.0010	1	05/21/2015 23:09
p,p-DDE	ND	0.0010	1	05/21/2015 23:09
p,p-DDT	ND	0.0010	1	05/21/2015 23:09
Dieldrin	ND	0.0010	1	05/21/2015 23:09
Endosulfan I	ND	0.0010	1	05/21/2015 23:09
Endosulfan II	ND	0.0010	1	05/21/2015 23:09
Endosulfan sulfate	ND	0.0010	1	05/21/2015 23:09
Endrin	ND	0.0010	1	05/21/2015 23:09
Endrin aldehyde	ND	0.0010	1	05/21/2015 23:09
Endrin ketone	ND	0.0010	1	05/21/2015 23:09
Heptachlor	ND	0.0010	1	05/21/2015 23:09
Heptachlor epoxide	ND	0.0010	1	05/21/2015 23:09
Hexachlorobenzene	ND	0.010	1	05/21/2015 23:09
Hexachlorocyclopentadiene	ND	0.020	1	05/21/2015 23:09
Methoxychlor	ND	0.0010	1	05/21/2015 23:09
Toxaphene	ND	0.050	1	05/21/2015 23:09
Aroclor1016	ND	0.050	1	05/21/2015 23:09
Aroclor1221	ND	0.050	1	05/21/2015 23:09
Aroclor1232	ND	0.050	1	05/21/2015 23:09
Aroclor1242	ND	0.050	1	05/21/2015 23:09
Aroclor1248	ND	0.050	1	05/21/2015 23:09
Aroclor1254	ND	0.050	1	05/21/2015 23:09
Aroclor1260	ND	0.050	1	05/21/2015 23:09
PCBs, total	ND	0.050	1	05/21/2015 23:09

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	93	70-130	05/21/2015 23:09

Analyst(s): CK

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC22	105157

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/21/2015 22:36
a-BHC	ND	0.0010	1	05/21/2015 22:36
b-BHC	ND	0.0010	1	05/21/2015 22:36
d-BHC	ND	0.0010	1	05/21/2015 22:36
g-BHC	ND	0.0010	1	05/21/2015 22:36
Chlordane (Technical)	ND	0.025	1	05/21/2015 22:36
a-Chlordane	ND	0.0010	1	05/21/2015 22:36
g-Chlordane	ND	0.0010	1	05/21/2015 22:36
p,p-DDD	ND	0.0010	1	05/21/2015 22:36
p,p-DDE	ND	0.0010	1	05/21/2015 22:36
p,p-DDT	ND	0.0010	1	05/21/2015 22:36
Dieldrin	ND	0.0010	1	05/21/2015 22:36
Endosulfan I	ND	0.0010	1	05/21/2015 22:36
Endosulfan II	ND	0.0010	1	05/21/2015 22:36
Endosulfan sulfate	ND	0.0010	1	05/21/2015 22:36
Endrin	ND	0.0010	1	05/21/2015 22:36
Endrin aldehyde	ND	0.0010	1	05/21/2015 22:36
Endrin ketone	ND	0.0010	1	05/21/2015 22:36
Heptachlor	ND	0.0010	1	05/21/2015 22:36
Heptachlor epoxide	ND	0.0010	1	05/21/2015 22:36
Hexachlorobenzene	ND	0.010	1	05/21/2015 22:36
Hexachlorocyclopentadiene	ND	0.020	1	05/21/2015 22:36
Methoxychlor	ND	0.0010	1	05/21/2015 22:36
Toxaphene	ND	0.050	1	05/21/2015 22:36
Aroclor1016	ND	0.050	1	05/21/2015 22:36
Aroclor1221	ND	0.050	1	05/21/2015 22:36
Aroclor1232	ND	0.050	1	05/21/2015 22:36
Aroclor1242	ND	0.050	1	05/21/2015 22:36
Aroclor1248	ND	0.050	1	05/21/2015 22:36
Aroclor1254	ND	0.050	1	05/21/2015 22:36
Aroclor1260	ND	0.050	1	05/21/2015 22:36
PCBs, total	ND	0.050	1	05/21/2015 22:36

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	94	70-130	05/21/2015 22:36

**Analyst(s):** CK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016B	Soil	05/19/2015 13:05	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 13:21
tert-Amyl methyl ether (TAME)	ND	0.0086	1	05/23/2015 13:21
Benzene	ND	0.0086	1	05/23/2015 13:21
Bromobenzene	ND	0.0086	1	05/23/2015 13:21
Bromochloromethane	ND	0.0086	1	05/23/2015 13:21
Bromodichloromethane	ND	0.0086	1	05/23/2015 13:21
Bromoform	ND	0.0086	1	05/23/2015 13:21
Bromomethane	ND	0.0086	1	05/23/2015 13:21
2-Butanone (MEK)	ND	0.034	1	05/23/2015 13:21
t-Butyl alcohol (TBA)	ND	0.086	1	05/23/2015 13:21
n-Butyl benzene	ND	0.0086	1	05/23/2015 13:21
sec-Butyl benzene	ND	0.0086	1	05/23/2015 13:21
tert-Butyl benzene	ND	0.0086	1	05/23/2015 13:21
Carbon Disulfide	ND	0.0086	1	05/23/2015 13:21
Carbon Tetrachloride	ND	0.0086	1	05/23/2015 13:21
Chlorobenzene	ND	0.0086	1	05/23/2015 13:21
Chloroethane	ND	0.0086	1	05/23/2015 13:21
Chloroform	ND	0.0086	1	05/23/2015 13:21
Chloromethane	ND	0.0086	1	05/23/2015 13:21
2-Chlorotoluene	ND	0.0086	1	05/23/2015 13:21
4-Chlorotoluene	ND	0.0086	1	05/23/2015 13:21
Dibromochloromethane	ND	0.0086	1	05/23/2015 13:21
1,2-Dibromo-3-chloropropane	ND	0.0069	1	05/23/2015 13:21
1,2-Dibromoethane (EDB)	ND	0.0069	1	05/23/2015 13:21
Dibromomethane	ND	0.0086	1	05/23/2015 13:21
1,2-Dichlorobenzene	ND	0.0086	1	05/23/2015 13:21
1,3-Dichlorobenzene	ND	0.0086	1	05/23/2015 13:21
1,4-Dichlorobenzene	ND	0.0086	1	05/23/2015 13:21
Dichlorodifluoromethane	ND	0.0086	1	05/23/2015 13:21
1,1-Dichloroethane	ND	0.0086	1	05/23/2015 13:21
1,2-Dichloroethane (1,2-DCA)	ND	0.0086	1	05/23/2015 13:21
1,1-Dichloroethene	ND	0.0086	1	05/23/2015 13:21
cis-1,2-Dichloroethene	ND	0.0086	1	05/23/2015 13:21
trans-1,2-Dichloroethene	ND	0.0086	1	05/23/2015 13:21
1,2-Dichloropropane	ND	0.0086	1	05/23/2015 13:21
1,3-Dichloropropane	ND	0.0086	1	05/23/2015 13:21
2,2-Dichloropropane	ND	0.0086	1	05/23/2015 13:21
1,1-Dichloropropene	ND	0.0086	1	05/23/2015 13:21

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016B	Soil	05/19/2015 13:05	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0086	1	05/23/2015 13:21
trans-1,3-Dichloropropene	ND	0.0086	1	05/23/2015 13:21
Diisopropyl ether (DIPE)	ND	0.0086	1	05/23/2015 13:21
Ethylbenzene	ND	0.0086	1	05/23/2015 13:21
Ethyl tert-butyl ether (ETBE)	ND	0.0086	1	05/23/2015 13:21
Freon 113	ND	0.0086	1	05/23/2015 13:21
Hexachlorobutadiene	ND	0.0086	1	05/23/2015 13:21
Hexachloroethane	ND	0.0086	1	05/23/2015 13:21
2-Hexanone	ND	0.0086	1	05/23/2015 13:21
Isopropylbenzene	ND	0.0086	1	05/23/2015 13:21
4-Isopropyl toluene	ND	0.0086	1	05/23/2015 13:21
Methyl-t-butyl ether (MTBE)	ND	0.0086	1	05/23/2015 13:21
Methylene chloride	ND	0.0086	1	05/23/2015 13:21
4-Methyl-2-pentanone (MIBK)	ND	0.0086	1	05/23/2015 13:21
Naphthalene	ND	0.0086	1	05/23/2015 13:21
n-Propyl benzene	ND	0.0086	1	05/23/2015 13:21
Styrene	ND	0.0086	1	05/23/2015 13:21
1,1,1,2-Tetrachloroethane	ND	0.0086	1	05/23/2015 13:21
1,1,2,2-Tetrachloroethane	ND	0.0086	1	05/23/2015 13:21
Tetrachloroethene	ND	0.0086	1	05/23/2015 13:21
Toluene	ND	0.0086	1	05/23/2015 13:21
1,2,3-Trichlorobenzene	ND	0.0086	1	05/23/2015 13:21
1,2,4-Trichlorobenzene	ND	0.0086	1	05/23/2015 13:21
1,1,1-Trichloroethane	ND	0.0086	1	05/23/2015 13:21
1,1,2-Trichloroethane	ND	0.0086	1	05/23/2015 13:21
Trichloroethene	ND	0.0086	1	05/23/2015 13:21
Trichlorofluoromethane	ND	0.0086	1	05/23/2015 13:21
1,2,3-Trichloropropane	ND	0.0086	1	05/23/2015 13:21
1,2,4-Trimethylbenzene	ND	0.0086	1	05/23/2015 13:21
1,3,5-Trimethylbenzene	ND	0.0086	1	05/23/2015 13:21
Vinyl Chloride	ND	0.0086	1	05/23/2015 13:21
Xylenes, Total	ND	0.0086	1	05/23/2015 13:21

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016B	Soil	05/19/2015 13:05	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	82	70-130		05/23/2015 13:21
Toluene-d8	91	70-130		05/23/2015 13:21
4-BFB	95	70-130		05/23/2015 13:21
Benzene-d6	80	60-140		05/23/2015 13:21
Ethylbenzene-d10	98	60-140		05/23/2015 13:21
1,2-DCB-d4	77	60-140		05/23/2015 13:21

Analyst(s): AK

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017B	Soil	05/19/2015 14:15	GC16	105172
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.18	1	05/23/2015 14:04	
tert-Amyl methyl ether (TAME)	ND	0.0088	1	05/23/2015 14:04	
Benzene	ND	0.0088	1	05/23/2015 14:04	
Bromobenzene	ND	0.0088	1	05/23/2015 14:04	
Bromochloromethane	ND	0.0088	1	05/23/2015 14:04	
Bromodichloromethane	ND	0.0088	1	05/23/2015 14:04	
Bromoform	ND	0.0088	1	05/23/2015 14:04	
Bromomethane	ND	0.0088	1	05/23/2015 14:04	
2-Butanone (MEK)	ND	0.035	1	05/23/2015 14:04	
t-Butyl alcohol (TBA)	ND	0.088	1	05/23/2015 14:04	
n-Butyl benzene	ND	0.0088	1	05/23/2015 14:04	
sec-Butyl benzene	ND	0.0088	1	05/23/2015 14:04	
tert-Butyl benzene	ND	0.0088	1	05/23/2015 14:04	
Carbon Disulfide	ND	0.0088	1	05/23/2015 14:04	
Carbon Tetrachloride	ND	0.0088	1	05/23/2015 14:04	
Chlorobenzene	ND	0.0088	1	05/23/2015 14:04	
Chloroethane	ND	0.0088	1	05/23/2015 14:04	
Chloroform	ND	0.0088	1	05/23/2015 14:04	
Chloromethane	ND	0.0088	1	05/23/2015 14:04	
2-Chlorotoluene	ND	0.0088	1	05/23/2015 14:04	
4-Chlorotoluene	ND	0.0088	1	05/23/2015 14:04	
Dibromochloromethane	ND	0.0088	1	05/23/2015 14:04	
1,2-Dibromo-3-chloropropane	ND	0.0070	1	05/23/2015 14:04	
1,2-Dibromoethane (EDB)	ND	0.0070	1	05/23/2015 14:04	
Dibromomethane	ND	0.0088	1	05/23/2015 14:04	
1,2-Dichlorobenzene	ND	0.0088	1	05/23/2015 14:04	
1,3-Dichlorobenzene	ND	0.0088	1	05/23/2015 14:04	
1,4-Dichlorobenzene	ND	0.0088	1	05/23/2015 14:04	
Dichlorodifluoromethane	ND	0.0088	1	05/23/2015 14:04	
1,1-Dichloroethane	ND	0.0088	1	05/23/2015 14:04	
1,2-Dichloroethane (1,2-DCA)	ND	0.0088	1	05/23/2015 14:04	
1,1-Dichloroethene	ND	0.0088	1	05/23/2015 14:04	
cis-1,2-Dichloroethene	ND	0.0088	1	05/23/2015 14:04	
trans-1,2-Dichloroethene	ND	0.0088	1	05/23/2015 14:04	
1,2-Dichloropropane	ND	0.0088	1	05/23/2015 14:04	
1,3-Dichloropropane	ND	0.0088	1	05/23/2015 14:04	
2,2-Dichloropropane	ND	0.0088	1	05/23/2015 14:04	
1,1-Dichloropropene	ND	0.0088	1	05/23/2015 14:04	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017B	Soil	05/19/2015 14:15	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0088	1	05/23/2015 14:04
trans-1,3-Dichloropropene	ND	0.0088	1	05/23/2015 14:04
Diisopropyl ether (DIPE)	ND	0.0088	1	05/23/2015 14:04
Ethylbenzene	ND	0.0088	1	05/23/2015 14:04
Ethyl tert-butyl ether (ETBE)	ND	0.0088	1	05/23/2015 14:04
Freon 113	ND	0.0088	1	05/23/2015 14:04
Hexachlorobutadiene	ND	0.0088	1	05/23/2015 14:04
Hexachloroethane	ND	0.0088	1	05/23/2015 14:04
2-Hexanone	ND	0.0088	1	05/23/2015 14:04
Isopropylbenzene	ND	0.0088	1	05/23/2015 14:04
4-Isopropyl toluene	ND	0.0088	1	05/23/2015 14:04
Methyl-t-butyl ether (MTBE)	ND	0.0088	1	05/23/2015 14:04
Methylene chloride	ND	0.0088	1	05/23/2015 14:04
4-Methyl-2-pentanone (MIBK)	ND	0.0088	1	05/23/2015 14:04
Naphthalene	ND	0.0088	1	05/23/2015 14:04
n-Propyl benzene	ND	0.0088	1	05/23/2015 14:04
Styrene	ND	0.0088	1	05/23/2015 14:04
1,1,1,2-Tetrachloroethane	ND	0.0088	1	05/23/2015 14:04
1,1,2,2-Tetrachloroethane	ND	0.0088	1	05/23/2015 14:04
Tetrachloroethene	ND	0.0088	1	05/23/2015 14:04
Toluene	ND	0.0088	1	05/23/2015 14:04
1,2,3-Trichlorobenzene	ND	0.0088	1	05/23/2015 14:04
1,2,4-Trichlorobenzene	ND	0.0088	1	05/23/2015 14:04
1,1,1-Trichloroethane	ND	0.0088	1	05/23/2015 14:04
1,1,2-Trichloroethane	ND	0.0088	1	05/23/2015 14:04
Trichloroethene	ND	0.0088	1	05/23/2015 14:04
Trichlorofluoromethane	ND	0.0088	1	05/23/2015 14:04
1,2,3-Trichloropropane	ND	0.0088	1	05/23/2015 14:04
1,2,4-Trimethylbenzene	ND	0.0088	1	05/23/2015 14:04
1,3,5-Trimethylbenzene	ND	0.0088	1	05/23/2015 14:04
Vinyl Chloride	ND	0.0088	1	05/23/2015 14:04
Xylenes, Total	ND	0.0088	1	05/23/2015 14:04

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017B	Soil	05/19/2015 14:15	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	83	70-130		05/23/2015 14:04
Toluene-d8	92	70-130		05/23/2015 14:04
4-BFB	94	70-130		05/23/2015 14:04
Benzene-d6	79	60-140		05/23/2015 14:04
Ethylbenzene-d10	94	60-140		05/23/2015 14:04
1,2-DCB-d4	78	60-140		05/23/2015 14:04

Analyst(s): AK

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-15-12.5	1505818-001A	Soil	05/19/2015 08:45	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 11:16
Acenaphthylene	ND	0.010	1	05/27/2015 11:16
Anthracene	ND	0.010	1	05/27/2015 11:16
Benzo (a) anthracene	ND	0.010	1	05/27/2015 11:16
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 11:16
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 11:16
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 11:16
Benzo (a) pyrene	ND	0.010	1	05/27/2015 11:16
Chrysene	ND	0.010	1	05/27/2015 11:16
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 11:16
Fluoranthene	ND	0.010	1	05/27/2015 11:16
Fluorene	ND	0.010	1	05/27/2015 11:16
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 11:16
1-Methylnaphthalene	ND	0.010	1	05/27/2015 11:16
2-Methylnaphthalene	ND	0.010	1	05/27/2015 11:16
Naphthalene	ND	0.010	1	05/27/2015 11:16
Phenanthrene	ND	0.010	1	05/27/2015 11:16
Pyrene	ND	0.010	1	05/27/2015 11:16

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	74	30-130	05/27/2015 11:16
2-Fluorobiphenyl	71	30-130	05/27/2015 11:16

**Analyst(s):** HK

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-15-7.5	1505818-002A	Soil	05/19/2015 08:50	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 09:49
Acenaphthylene	ND	0.010	1	05/22/2015 09:49
Anthracene	ND	0.010	1	05/22/2015 09:49
Benzo (a) anthracene	ND	0.010	1	05/22/2015 09:49
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 09:49
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 09:49
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 09:49
Benzo (a) pyrene	ND	0.010	1	05/22/2015 09:49
Chrysene	ND	0.010	1	05/22/2015 09:49
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 09:49
Fluoranthene	ND	0.010	1	05/22/2015 09:49
Fluorene	ND	0.010	1	05/22/2015 09:49
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 09:49
1-Methylnaphthalene	ND	0.010	1	05/22/2015 09:49
2-Methylnaphthalene	<b>0.014</b>	0.010	1	05/22/2015 09:49
Naphthalene	<b>0.023</b>	0.010	1	05/22/2015 09:49
Phenanthrene	ND	0.010	1	05/22/2015 09:49
Pyrene	ND	0.010	1	05/22/2015 09:49
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	90	30-130		05/22/2015 09:49
2-Fluorobiphenyl	81	30-130		05/22/2015 09:49

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-11-12.5	1505818-003A	Soil	05/19/2015 09:15	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 10:14
Acenaphthylene	ND	0.010	1	05/22/2015 10:14
Anthracene	ND	0.010	1	05/22/2015 10:14
Benzo (a) anthracene	ND	0.010	1	05/22/2015 10:14
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 10:14
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 10:14
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 10:14
Benzo (a) pyrene	ND	0.010	1	05/22/2015 10:14
Chrysene	ND	0.010	1	05/22/2015 10:14
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 10:14
Fluoranthene	ND	0.010	1	05/22/2015 10:14
Fluorene	ND	0.010	1	05/22/2015 10:14
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 10:14
1-Methylnaphthalene	ND	0.010	1	05/22/2015 10:14
2-Methylnaphthalene	ND	0.010	1	05/22/2015 10:14
Naphthalene	ND	0.010	1	05/22/2015 10:14
Phenanthrene	ND	0.010	1	05/22/2015 10:14
Pyrene	ND	0.010	1	05/22/2015 10:14
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	88	30-130		05/22/2015 10:14
2-Fluorobiphenyl	84	30-130		05/22/2015 10:14

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-11-17.5	1505818-004A	Soil	05/19/2015 09:20	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/27/2015 11:41
Acenaphthylene	ND	0.10	10	05/27/2015 11:41
Anthracene	ND	0.10	10	05/27/2015 11:41
Benzo (a) anthracene	ND	0.10	10	05/27/2015 11:41
Benzo (b) fluoranthene	ND	0.10	10	05/27/2015 11:41
Benzo (k) fluoranthene	ND	0.10	10	05/27/2015 11:41
Benzo (g,h,i) perylene	ND	0.10	10	05/27/2015 11:41
Benzo (a) pyrene	ND	0.10	10	05/27/2015 11:41
Chrysene	ND	0.10	10	05/27/2015 11:41
Dibenzo (a,h) anthracene	ND	0.10	10	05/27/2015 11:41
Fluoranthene	ND	0.10	10	05/27/2015 11:41
Fluorene	ND	0.10	10	05/27/2015 11:41
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/27/2015 11:41
1-Methylnaphthalene	<b>0.12</b>	0.10	10	05/27/2015 11:41
2-Methylnaphthalene	<b>0.26</b>	0.10	10	05/27/2015 11:41
Naphthalene	<b>0.69</b>	0.10	10	05/27/2015 11:41
Phenanthrene	ND	0.10	10	05/27/2015 11:41
Pyrene	ND	0.10	10	05/27/2015 11:41
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	83	30-130		05/27/2015 11:41
2-Fluorobiphenyl	81	30-130		05/27/2015 11:41

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7-12.5	1505818-005A	Soil	05/19/2015 09:46	GC35	105199

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/27/2015 12:56
Acenaphthylene	ND	0.10	10	05/27/2015 12:56
Anthracene	ND	0.10	10	05/27/2015 12:56
Benzo (a) anthracene	ND	0.10	10	05/27/2015 12:56
Benzo (b) fluoranthene	ND	0.10	10	05/27/2015 12:56
Benzo (k) fluoranthene	ND	0.10	10	05/27/2015 12:56
Benzo (g,h,i) perylene	ND	0.10	10	05/27/2015 12:56
Benzo (a) pyrene	ND	0.10	10	05/27/2015 12:56
Chrysene	ND	0.10	10	05/27/2015 12:56
Dibenzo (a,h) anthracene	ND	0.10	10	05/27/2015 12:56
Fluoranthene	ND	0.10	10	05/27/2015 12:56
Fluorene	ND	0.10	10	05/27/2015 12:56
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/27/2015 12:56
1-Methylnaphthalene	ND	0.10	10	05/27/2015 12:56
2-Methylnaphthalene	ND	0.10	10	05/27/2015 12:56
Naphthalene	ND	0.10	10	05/27/2015 12:56
Phenanthrene	ND	0.10	10	05/27/2015 12:56
Pyrene	ND	0.10	10	05/27/2015 12:56

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	77	30-130	05/27/2015 12:56
2-Fluorobiphenyl	74	30-130	05/27/2015 12:56

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7-17.5	1505818-006A	Soil	05/19/2015 09:54	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/27/2015 13:22
Acenaphthylene	ND	0.10	10	05/27/2015 13:22
Anthracene	ND	0.10	10	05/27/2015 13:22
Benzo (a) anthracene	ND	0.10	10	05/27/2015 13:22
Benzo (b) fluoranthene	ND	0.10	10	05/27/2015 13:22
Benzo (k) fluoranthene	ND	0.10	10	05/27/2015 13:22
Benzo (g,h,i) perylene	ND	0.10	10	05/27/2015 13:22
Benzo (a) pyrene	ND	0.10	10	05/27/2015 13:22
Chrysene	ND	0.10	10	05/27/2015 13:22
Dibenzo (a,h) anthracene	ND	0.10	10	05/27/2015 13:22
Fluoranthene	ND	0.10	10	05/27/2015 13:22
Fluorene	ND	0.10	10	05/27/2015 13:22
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/27/2015 13:22
1-Methylnaphthalene	ND	0.10	10	05/27/2015 13:22
2-Methylnaphthalene	ND	0.10	10	05/27/2015 13:22
Naphthalene	ND	0.10	10	05/27/2015 13:22
Phenanthrene	ND	0.10	10	05/27/2015 13:22
Pyrene	ND	0.10	10	05/27/2015 13:22

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	80	30-130	05/27/2015 13:22
2-Fluorobiphenyl	75	30-130	05/27/2015 13:22

**Analyst(s):** HK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3-12.5	1505818-007A	Soil	05/19/2015 10:20	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/27/2015 13:47
Acenaphthylene	ND	0.10	10	05/27/2015 13:47
Anthracene	ND	0.10	10	05/27/2015 13:47
Benzo (a) anthracene	ND	0.10	10	05/27/2015 13:47
Benzo (b) fluoranthene	ND	0.10	10	05/27/2015 13:47
Benzo (k) fluoranthene	ND	0.10	10	05/27/2015 13:47
Benzo (g,h,i) perylene	ND	0.10	10	05/27/2015 13:47
Benzo (a) pyrene	ND	0.10	10	05/27/2015 13:47
Chrysene	ND	0.10	10	05/27/2015 13:47
Dibenzo (a,h) anthracene	ND	0.10	10	05/27/2015 13:47
Fluoranthene	ND	0.10	10	05/27/2015 13:47
Fluorene	ND	0.10	10	05/27/2015 13:47
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/27/2015 13:47
1-Methylnaphthalene	ND	0.10	10	05/27/2015 13:47
2-Methylnaphthalene	ND	0.10	10	05/27/2015 13:47
Naphthalene	ND	0.10	10	05/27/2015 13:47
Phenanthrene	ND	0.10	10	05/27/2015 13:47
Pyrene	ND	0.10	10	05/27/2015 13:47

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	77	30-130	05/27/2015 13:47
2-Fluorobiphenyl	76	30-130	05/27/2015 13:47

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3-17.5	1505818-008A	Soil	05/19/2015 10:25	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/27/2015 15:30
Acenaphthylene	ND	0.10	10	05/27/2015 15:30
Anthracene	ND	0.10	10	05/27/2015 15:30
Benzo (a) anthracene	ND	0.10	10	05/27/2015 15:30
Benzo (b) fluoranthene	ND	0.10	10	05/27/2015 15:30
Benzo (k) fluoranthene	ND	0.10	10	05/27/2015 15:30
Benzo (g,h,i) perylene	ND	0.10	10	05/27/2015 15:30
Benzo (a) pyrene	ND	0.10	10	05/27/2015 15:30
Chrysene	ND	0.10	10	05/27/2015 15:30
Dibenzo (a,h) anthracene	ND	0.10	10	05/27/2015 15:30
Fluoranthene	ND	0.10	10	05/27/2015 15:30
Fluorene	ND	0.10	10	05/27/2015 15:30
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/27/2015 15:30
1-Methylnaphthalene	ND	0.10	10	05/27/2015 15:30
2-Methylnaphthalene	ND	0.10	10	05/27/2015 15:30
Naphthalene	ND	0.10	10	05/27/2015 15:30
Phenanthrene	ND	0.10	10	05/27/2015 15:30
Pyrene	ND	0.10	10	05/27/2015 15:30

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	83	30-130	05/27/2015 15:30
2-Fluorobiphenyl	82	30-130	05/27/2015 15:30

**Analyst(s):** HK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4-12.5	1505818-009A	Soil	05/19/2015 10:45	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 19:10
Acenaphthylene	ND	0.010	1	05/22/2015 19:10
Anthracene	ND	0.010	1	05/22/2015 19:10
Benzo (a) anthracene	ND	0.010	1	05/22/2015 19:10
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 19:10
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 19:10
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 19:10
Benzo (a) pyrene	ND	0.010	1	05/22/2015 19:10
Chrysene	ND	0.010	1	05/22/2015 19:10
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 19:10
Fluoranthene	ND	0.010	1	05/22/2015 19:10
Fluorene	ND	0.010	1	05/22/2015 19:10
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 19:10
1-Methylnaphthalene	ND	0.010	1	05/22/2015 19:10
2-Methylnaphthalene	ND	0.010	1	05/22/2015 19:10
Naphthalene	ND	0.010	1	05/22/2015 19:10
Phenanthrene	ND	0.010	1	05/22/2015 19:10
Pyrene	ND	0.010	1	05/22/2015 19:10

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	92	30-130	05/22/2015 19:10
2-Fluorobiphenyl	86	30-130	05/22/2015 19:10

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4-17.5	1505818-010A	Soil	05/19/2015 10:55	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 19:35
Acenaphthylene	ND	0.010	1	05/22/2015 19:35
Anthracene	ND	0.010	1	05/22/2015 19:35
Benzo (a) anthracene	ND	0.010	1	05/22/2015 19:35
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 19:35
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 19:35
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 19:35
Benzo (a) pyrene	ND	0.010	1	05/22/2015 19:35
Chrysene	ND	0.010	1	05/22/2015 19:35
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 19:35
Fluoranthene	ND	0.010	1	05/22/2015 19:35
Fluorene	ND	0.010	1	05/22/2015 19:35
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 19:35
1-Methylnaphthalene	ND	0.010	1	05/22/2015 19:35
2-Methylnaphthalene	ND	0.010	1	05/22/2015 19:35
Naphthalene	ND	0.010	1	05/22/2015 19:35
Phenanthrene	ND	0.010	1	05/22/2015 19:35
Pyrene	ND	0.010	1	05/22/2015 19:35
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	82	30-130		05/22/2015 19:35
2-Fluorobiphenyl	78	30-130		05/22/2015 19:35

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8-12.5	1505818-011A	Soil	05/19/2015 11:20	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 20:00
Acenaphthylene	ND	0.010	1	05/22/2015 20:00
Anthracene	ND	0.010	1	05/22/2015 20:00
Benzo (a) anthracene	ND	0.010	1	05/22/2015 20:00
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 20:00
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 20:00
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 20:00
Benzo (a) pyrene	ND	0.010	1	05/22/2015 20:00
Chrysene	ND	0.010	1	05/22/2015 20:00
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 20:00
Fluoranthene	ND	0.010	1	05/22/2015 20:00
Fluorene	ND	0.010	1	05/22/2015 20:00
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 20:00
1-Methylnaphthalene	ND	0.010	1	05/22/2015 20:00
2-Methylnaphthalene	ND	0.010	1	05/22/2015 20:00
Naphthalene	ND	0.010	1	05/22/2015 20:00
Phenanthrene	ND	0.010	1	05/22/2015 20:00
Pyrene	ND	0.010	1	05/22/2015 20:00

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	82	30-130	05/22/2015 20:00
2-Fluorobiphenyl	79	30-130	05/22/2015 20:00

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8-17.5	1505818-012A	Soil	05/19/2015 11:28	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 20:25
Acenaphthylene	ND	0.010	1	05/22/2015 20:25
Anthracene	ND	0.010	1	05/22/2015 20:25
Benzo (a) anthracene	ND	0.010	1	05/22/2015 20:25
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 20:25
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 20:25
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 20:25
Benzo (a) pyrene	ND	0.010	1	05/22/2015 20:25
Chrysene	ND	0.010	1	05/22/2015 20:25
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 20:25
Fluoranthene	ND	0.010	1	05/22/2015 20:25
Fluorene	ND	0.010	1	05/22/2015 20:25
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 20:25
1-Methylnaphthalene	ND	0.010	1	05/22/2015 20:25
2-Methylnaphthalene	ND	0.010	1	05/22/2015 20:25
Naphthalene	ND	0.010	1	05/22/2015 20:25
Phenanthrene	ND	0.010	1	05/22/2015 20:25
Pyrene	ND	0.010	1	05/22/2015 20:25
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	87	30-130		05/22/2015 20:25
2-Fluorobiphenyl	84	30-130		05/22/2015 20:25

**Analyst(s):** HK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-12-12.5	1505818-013A	Soil	05/19/2015 13:15	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 20:50
Acenaphthylene	ND	0.010	1	05/22/2015 20:50
Anthracene	ND	0.010	1	05/22/2015 20:50
Benzo (a) anthracene	ND	0.010	1	05/22/2015 20:50
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 20:50
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 20:50
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 20:50
Benzo (a) pyrene	ND	0.010	1	05/22/2015 20:50
Chrysene	ND	0.010	1	05/22/2015 20:50
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 20:50
Fluoranthene	ND	0.010	1	05/22/2015 20:50
Fluorene	ND	0.010	1	05/22/2015 20:50
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 20:50
1-Methylnaphthalene	ND	0.010	1	05/22/2015 20:50
2-Methylnaphthalene	ND	0.010	1	05/22/2015 20:50
Naphthalene	ND	0.010	1	05/22/2015 20:50
Phenanthrene	ND	0.010	1	05/22/2015 20:50
Pyrene	ND	0.010	1	05/22/2015 20:50
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	81	30-130		05/22/2015 20:50
2-Fluorobiphenyl	81	30-130		05/22/2015 20:50

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-12-17.5	1505818-014A	Soil	05/19/2015 13:18	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 21:15
Acenaphthylene	ND	0.010	1	05/22/2015 21:15
Anthracene	ND	0.010	1	05/22/2015 21:15
Benzo (a) anthracene	ND	0.010	1	05/22/2015 21:15
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 21:15
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 21:15
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 21:15
Benzo (a) pyrene	ND	0.010	1	05/22/2015 21:15
Chrysene	ND	0.010	1	05/22/2015 21:15
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 21:15
Fluoranthene	ND	0.010	1	05/22/2015 21:15
Fluorene	ND	0.010	1	05/22/2015 21:15
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 21:15
1-Methylnaphthalene	ND	0.010	1	05/22/2015 21:15
2-Methylnaphthalene	ND	0.010	1	05/22/2015 21:15
Naphthalene	ND	0.010	1	05/22/2015 21:15
Phenanthrene	ND	0.010	1	05/22/2015 21:15
Pyrene	ND	0.010	1	05/22/2015 21:15
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	81	30-130		05/22/2015 21:15
2-Fluorobiphenyl	77	30-130		05/22/2015 21:15

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-12.5	1505818-015A	Soil	05/19/2015 14:20	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 23:44
Acenaphthylene	ND	0.010	1	05/22/2015 23:44
Anthracene	ND	0.010	1	05/22/2015 23:44
Benzo (a) anthracene	ND	0.010	1	05/22/2015 23:44
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 23:44
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 23:44
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 23:44
Benzo (a) pyrene	ND	0.010	1	05/22/2015 23:44
Chrysene	ND	0.010	1	05/22/2015 23:44
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 23:44
Fluoranthene	ND	0.010	1	05/22/2015 23:44
Fluorene	ND	0.010	1	05/22/2015 23:44
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 23:44
1-Methylnaphthalene	ND	0.010	1	05/22/2015 23:44
2-Methylnaphthalene	ND	0.010	1	05/22/2015 23:44
Naphthalene	ND	0.010	1	05/22/2015 23:44
Phenanthrene	ND	0.010	1	05/22/2015 23:44
Pyrene	ND	0.010	1	05/22/2015 23:44
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	83	30-130		05/22/2015 23:44
2-Fluorobiphenyl	84	30-130		05/22/2015 23:44

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/26/2015 18:53
Acenaphthylene	ND	0.010	1	05/26/2015 18:53
Anthracene	ND	0.010	1	05/26/2015 18:53
Benzo (a) anthracene	ND	0.010	1	05/26/2015 18:53
Benzo (b) fluoranthene	ND	0.010	1	05/26/2015 18:53
Benzo (k) fluoranthene	ND	0.010	1	05/26/2015 18:53
Benzo (g,h,i) perylene	ND	0.010	1	05/26/2015 18:53
Benzo (a) pyrene	ND	0.010	1	05/26/2015 18:53
Chrysene	ND	0.010	1	05/26/2015 18:53
Dibenzo (a,h) anthracene	ND	0.010	1	05/26/2015 18:53
Fluoranthene	ND	0.010	1	05/26/2015 18:53
Fluorene	ND	0.010	1	05/26/2015 18:53
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/26/2015 18:53
1-Methylnaphthalene	ND	0.010	1	05/26/2015 18:53
2-Methylnaphthalene	ND	0.010	1	05/26/2015 18:53
Naphthalene	ND	0.010	1	05/26/2015 18:53
Phenanthrene	ND	0.010	1	05/26/2015 18:53
Pyrene	ND	0.010	1	05/26/2015 18:53
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	73	30-130		05/26/2015 18:53
2-Fluorobiphenyl	67	30-130		05/26/2015 18:53

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/23/2015 00:09
Acenaphthylene	ND	0.010	1	05/23/2015 00:09
Anthracene	ND	0.010	1	05/23/2015 00:09
Benzo (a) anthracene	ND	0.010	1	05/23/2015 00:09
Benzo (b) fluoranthene	ND	0.010	1	05/23/2015 00:09
Benzo (k) fluoranthene	ND	0.010	1	05/23/2015 00:09
Benzo (g,h,i) perylene	ND	0.010	1	05/23/2015 00:09
Benzo (a) pyrene	ND	0.010	1	05/23/2015 00:09
Chrysene	ND	0.010	1	05/23/2015 00:09
Dibenzo (a,h) anthracene	ND	0.010	1	05/23/2015 00:09
Fluoranthene	ND	0.010	1	05/23/2015 00:09
Fluorene	ND	0.010	1	05/23/2015 00:09
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/23/2015 00:09
1-Methylnaphthalene	ND	0.010	1	05/23/2015 00:09
2-Methylnaphthalene	ND	0.010	1	05/23/2015 00:09
Naphthalene	ND	0.010	1	05/23/2015 00:09
Phenanthrene	ND	0.010	1	05/23/2015 00:09
Pyrene	ND	0.010	1	05/23/2015 00:09
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	80	30-130		05/23/2015 00:09
2-Fluorobiphenyl	80	30-130		05/23/2015 00:09

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-17.5	1505818-018A	Soil	05/19/2015 14:25	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 12:06
Acenaphthylene	ND	0.010	1	05/27/2015 12:06
Anthracene	ND	0.010	1	05/27/2015 12:06
Benzo (a) anthracene	ND	0.010	1	05/27/2015 12:06
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 12:06
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 12:06
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 12:06
Benzo (a) pyrene	ND	0.010	1	05/27/2015 12:06
Chrysene	ND	0.010	1	05/27/2015 12:06
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 12:06
Fluoranthene	ND	0.010	1	05/27/2015 12:06
Fluorene	ND	0.010	1	05/27/2015 12:06
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 12:06
1-Methylnaphthalene	ND	0.010	1	05/27/2015 12:06
2-Methylnaphthalene	ND	0.010	1	05/27/2015 12:06
Naphthalene	ND	0.010	1	05/27/2015 12:06
Phenanthrene	ND	0.010	1	05/27/2015 12:06
Pyrene	ND	0.010	1	05/27/2015 12:06
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	76	30-130		05/27/2015 12:06
2-Fluorobiphenyl	71	30-130		05/27/2015 12:06

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-24-12.5	1505818-019A	Soil	05/19/2015 14:50	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/23/2015 00:59
Acenaphthylene	ND	0.010	1	05/23/2015 00:59
Anthracene	ND	0.010	1	05/23/2015 00:59
Benzo (a) anthracene	ND	0.010	1	05/23/2015 00:59
Benzo (b) fluoranthene	ND	0.010	1	05/23/2015 00:59
Benzo (k) fluoranthene	ND	0.010	1	05/23/2015 00:59
Benzo (g,h,i) perylene	ND	0.010	1	05/23/2015 00:59
Benzo (a) pyrene	ND	0.010	1	05/23/2015 00:59
Chrysene	ND	0.010	1	05/23/2015 00:59
Dibenzo (a,h) anthracene	ND	0.010	1	05/23/2015 00:59
Fluoranthene	ND	0.010	1	05/23/2015 00:59
Fluorene	ND	0.010	1	05/23/2015 00:59
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/23/2015 00:59
1-Methylnaphthalene	ND	0.010	1	05/23/2015 00:59
2-Methylnaphthalene	ND	0.010	1	05/23/2015 00:59
Naphthalene	ND	0.010	1	05/23/2015 00:59
Phenanthrene	ND	0.010	1	05/23/2015 00:59
Pyrene	ND	0.010	1	05/23/2015 00:59

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	82	30-130	05/23/2015 00:59
2-Fluorobiphenyl	83	30-130	05/23/2015 00:59

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-24-17.5	1505818-020A	Soil	05/19/2015 14:55	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 12:31
Acenaphthylene	ND	0.010	1	05/27/2015 12:31
Anthracene	ND	0.010	1	05/27/2015 12:31
Benzo (a) anthracene	ND	0.010	1	05/27/2015 12:31
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 12:31
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 12:31
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 12:31
Benzo (a) pyrene	ND	0.010	1	05/27/2015 12:31
Chrysene	ND	0.010	1	05/27/2015 12:31
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 12:31
Fluoranthene	ND	0.010	1	05/27/2015 12:31
Fluorene	ND	0.010	1	05/27/2015 12:31
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 12:31
1-Methylnaphthalene	ND	0.010	1	05/27/2015 12:31
2-Methylnaphthalene	ND	0.010	1	05/27/2015 12:31
Naphthalene	ND	0.010	1	05/27/2015 12:31
Phenanthrene	ND	0.010	1	05/27/2015 12:31
Pyrene	ND	0.010	1	05/27/2015 12:31

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	81	30-130	05/27/2015 12:31
2-Fluorobiphenyl	77	30-130	05/27/2015 12:31

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-35-12.5	1505818-021A	Soil	05/19/2015 15:20	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 22:05
Acenaphthylene	ND	0.010	1	05/22/2015 22:05
Anthracene	ND	0.010	1	05/22/2015 22:05
Benzo (a) anthracene	ND	0.010	1	05/22/2015 22:05
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 22:05
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 22:05
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 22:05
Benzo (a) pyrene	ND	0.010	1	05/22/2015 22:05
Chrysene	ND	0.010	1	05/22/2015 22:05
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 22:05
Fluoranthene	ND	0.010	1	05/22/2015 22:05
Fluorene	ND	0.010	1	05/22/2015 22:05
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 22:05
1-Methylnaphthalene	ND	0.010	1	05/22/2015 22:05
2-Methylnaphthalene	ND	0.010	1	05/22/2015 22:05
Naphthalene	ND	0.010	1	05/22/2015 22:05
Phenanthrene	ND	0.010	1	05/22/2015 22:05
Pyrene	ND	0.010	1	05/22/2015 22:05
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	79	30-130		05/22/2015 22:05
2-Fluorobiphenyl	76	30-130		05/22/2015 22:05

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-35-17.5	1505818-022A	Soil	05/19/2015 15:25	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 22:30
Acenaphthylene	ND	0.010	1	05/22/2015 22:30
Anthracene	ND	0.010	1	05/22/2015 22:30
Benzo (a) anthracene	ND	0.010	1	05/22/2015 22:30
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 22:30
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 22:30
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 22:30
Benzo (a) pyrene	ND	0.010	1	05/22/2015 22:30
Chrysene	ND	0.010	1	05/22/2015 22:30
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 22:30
Fluoranthene	ND	0.010	1	05/22/2015 22:30
Fluorene	ND	0.010	1	05/22/2015 22:30
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 22:30
1-Methylnaphthalene	ND	0.010	1	05/22/2015 22:30
2-Methylnaphthalene	ND	0.010	1	05/22/2015 22:30
Naphthalene	ND	0.010	1	05/22/2015 22:30
Phenanthrene	ND	0.010	1	05/22/2015 22:30
Pyrene	ND	0.010	1	05/22/2015 22:30
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	82	30-130		05/22/2015 22:30
2-Fluorobiphenyl	79	30-130		05/22/2015 22:30

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-16-12.5	1505818-023A	Soil	05/19/2015 13:34	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 22:54
Acenaphthylene	ND	0.010	1	05/22/2015 22:54
Anthracene	ND	0.010	1	05/22/2015 22:54
Benzo (a) anthracene	ND	0.010	1	05/22/2015 22:54
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 22:54
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 22:54
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 22:54
Benzo (a) pyrene	ND	0.010	1	05/22/2015 22:54
Chrysene	ND	0.010	1	05/22/2015 22:54
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 22:54
Fluoranthene	ND	0.010	1	05/22/2015 22:54
Fluorene	ND	0.010	1	05/22/2015 22:54
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 22:54
1-Methylnaphthalene	ND	0.010	1	05/22/2015 22:54
2-Methylnaphthalene	ND	0.010	1	05/22/2015 22:54
Naphthalene	ND	0.010	1	05/22/2015 22:54
Phenanthrene	ND	0.010	1	05/22/2015 22:54
Pyrene	ND	0.010	1	05/22/2015 22:54
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	85	30-130		05/22/2015 22:54
2-Fluorobiphenyl	83	30-130		05/22/2015 22:54

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-16-17.5	1505818-024A	Soil	05/19/2015 13:42	GC35	105218

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/22/2015 23:19
Acenaphthylene	ND	0.010	1	05/22/2015 23:19
Anthracene	ND	0.010	1	05/22/2015 23:19
Benzo (a) anthracene	ND	0.010	1	05/22/2015 23:19
Benzo (b) fluoranthene	ND	0.010	1	05/22/2015 23:19
Benzo (k) fluoranthene	ND	0.010	1	05/22/2015 23:19
Benzo (g,h,i) perylene	ND	0.010	1	05/22/2015 23:19
Benzo (a) pyrene	ND	0.010	1	05/22/2015 23:19
Chrysene	ND	0.010	1	05/22/2015 23:19
Dibenzo (a,h) anthracene	ND	0.010	1	05/22/2015 23:19
Fluoranthene	ND	0.010	1	05/22/2015 23:19
Fluorene	ND	0.010	1	05/22/2015 23:19
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/22/2015 23:19
1-Methylnaphthalene	ND	0.010	1	05/22/2015 23:19
2-Methylnaphthalene	ND	0.010	1	05/22/2015 23:19
Naphthalene	ND	0.010	1	05/22/2015 23:19
Phenanthrene	ND	0.010	1	05/22/2015 23:19
Pyrene	ND	0.010	1	05/22/2015 23:19

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	77	30-130	05/22/2015 23:19
2-Fluorobiphenyl	76	30-130	05/22/2015 23:19

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/23/2015 01:02
Acenaphthylene	ND	0.25	1	05/23/2015 01:02
Acetochlor	ND	0.25	1	05/23/2015 01:02
Anthracene	ND	0.25	1	05/23/2015 01:02
Benzidine	ND	1.3	1	05/23/2015 01:02
Benzo (a) anthracene	ND	0.25	1	05/23/2015 01:02
Benzo (b) fluoranthene	ND	0.25	1	05/23/2015 01:02
Benzo (k) fluoranthene	ND	0.25	1	05/23/2015 01:02
Benzo (g,h,i) perylene	ND	0.25	1	05/23/2015 01:02
Benzo (a) pyrene	ND	0.25	1	05/23/2015 01:02
Benzyl Alcohol	ND	1.3	1	05/23/2015 01:02
1,1-Biphenyl	ND	0.25	1	05/23/2015 01:02
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/23/2015 01:02
Bis (2-chloroethyl) Ether	ND	0.25	1	05/23/2015 01:02
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/23/2015 01:02
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/23/2015 01:02
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/23/2015 01:02
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/23/2015 01:02
Butylbenzyl Phthalate	ND	0.25	1	05/23/2015 01:02
4-Chloroaniline	ND	0.50	1	05/23/2015 01:02
4-Chloro-3-methylphenol	ND	0.25	1	05/23/2015 01:02
2-Chloronaphthalene	ND	0.25	1	05/23/2015 01:02
2-Chlorophenol	ND	0.25	1	05/23/2015 01:02
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/23/2015 01:02
Chrysene	ND	0.25	1	05/23/2015 01:02
Dibenzo (a,h) anthracene	ND	0.25	1	05/23/2015 01:02
Dibenzofuran	ND	0.25	1	05/23/2015 01:02
Di-n-butyl Phthalate	ND	0.25	1	05/23/2015 01:02
1,2-Dichlorobenzene	ND	0.25	1	05/23/2015 01:02
1,3-Dichlorobenzene	ND	0.25	1	05/23/2015 01:02
1,4-Dichlorobenzene	ND	0.25	1	05/23/2015 01:02
3,3-Dichlorobenzidine	ND	0.50	1	05/23/2015 01:02
2,4-Dichlorophenol	ND	0.25	1	05/23/2015 01:02
Diethyl Phthalate	ND	0.25	1	05/23/2015 01:02
2,4-Dimethylphenol	ND	0.25	1	05/23/2015 01:02
Dimethyl Phthalate	ND	0.25	1	05/23/2015 01:02
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/23/2015 01:02
2,4-Dinitrophenol	ND	6.3	1	05/23/2015 01:02

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/23/2015 01:02
2,6-Dinitrotoluene	ND	0.25	1	05/23/2015 01:02
Di-n-octyl Phthalate	ND	0.50	1	05/23/2015 01:02
1,2-Diphenylhydrazine	ND	0.25	1	05/23/2015 01:02
Fluoranthene	ND	0.25	1	05/23/2015 01:02
Fluorene	ND	0.25	1	05/23/2015 01:02
Hexachlorobenzene	ND	0.25	1	05/23/2015 01:02
Hexachlorobutadiene	ND	0.25	1	05/23/2015 01:02
Hexachlorocyclopentadiene	ND	1.3	1	05/23/2015 01:02
Hexachloroethane	ND	0.25	1	05/23/2015 01:02
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/23/2015 01:02
Isophorone	ND	0.25	1	05/23/2015 01:02
2-Methylnaphthalene	ND	0.25	1	05/23/2015 01:02
2-Methylphenol (o-Cresol)	ND	0.25	1	05/23/2015 01:02
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/23/2015 01:02
Naphthalene	ND	0.25	1	05/23/2015 01:02
2-Nitroaniline	ND	1.3	1	05/23/2015 01:02
3-Nitroaniline	ND	1.3	1	05/23/2015 01:02
4-Nitroaniline	ND	1.3	1	05/23/2015 01:02
Nitrobenzene	ND	0.25	1	05/23/2015 01:02
2-Nitrophenol	ND	1.3	1	05/23/2015 01:02
4-Nitrophenol	ND	1.3	1	05/23/2015 01:02
N-Nitrosodiphenylamine	ND	0.25	1	05/23/2015 01:02
N-Nitrosodi-n-propylamine	ND	0.25	1	05/23/2015 01:02
Pentachlorophenol	ND	1.3	1	05/23/2015 01:02
Phenanthrene	ND	0.25	1	05/23/2015 01:02
Phenol	ND	0.25	1	05/23/2015 01:02
Pyrene	ND	0.25	1	05/23/2015 01:02
1,2,4-Trichlorobenzene	ND	0.25	1	05/23/2015 01:02
2,4,5-Trichlorophenol	ND	0.25	1	05/23/2015 01:02
2,4,6-Trichlorophenol	ND	0.25	1	05/23/2015 01:02

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC17	105238

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
2-Fluorophenol	145	S	30-130		05/23/2015 01:02
Phenol-d5	156	S	30-130		05/23/2015 01:02
Nitrobenzene-d5	104		30-130		05/23/2015 01:02
2-Fluorobiphenyl	97		30-130		05/23/2015 01:02
2,4,6-Tribromophenol	80		16-130		05/23/2015 01:02
4-Terphenyl-d14	119		30-130		05/23/2015 01:02

Analyst(s): HK

Analytical Comments: c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC17	105238
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		0.25	1	05/23/2015 00:33
Acenaphthylene	ND		0.25	1	05/23/2015 00:33
Acetochlor	ND		0.25	1	05/23/2015 00:33
Anthracene	ND		0.25	1	05/23/2015 00:33
Benzidine	ND		1.3	1	05/23/2015 00:33
Benzo (a) anthracene	ND		0.25	1	05/23/2015 00:33
Benzo (b) fluoranthene	ND		0.25	1	05/23/2015 00:33
Benzo (k) fluoranthene	ND		0.25	1	05/23/2015 00:33
Benzo (g,h,i) perylene	ND		0.25	1	05/23/2015 00:33
Benzo (a) pyrene	ND		0.25	1	05/23/2015 00:33
Benzyl Alcohol	ND		1.3	1	05/23/2015 00:33
1,1-Biphenyl	ND		0.25	1	05/23/2015 00:33
Bis (2-chloroethoxy) Methane	ND		0.25	1	05/23/2015 00:33
Bis (2-chloroethyl) Ether	ND		0.25	1	05/23/2015 00:33
Bis (2-chloroisopropyl) Ether	ND		0.25	1	05/23/2015 00:33
Bis (2-ethylhexyl) Adipate	ND		0.25	1	05/23/2015 00:33
Bis (2-ethylhexyl) Phthalate	ND		0.25	1	05/23/2015 00:33
4-Bromophenyl Phenyl Ether	ND		0.25	1	05/23/2015 00:33
Butylbenzyl Phthalate	ND		0.25	1	05/23/2015 00:33
4-Chloroaniline	ND		0.50	1	05/23/2015 00:33
4-Chloro-3-methylphenol	ND		0.25	1	05/23/2015 00:33
2-Chloronaphthalene	ND		0.25	1	05/23/2015 00:33
2-Chlorophenol	ND		0.25	1	05/23/2015 00:33
4-Chlorophenyl Phenyl Ether	ND		0.25	1	05/23/2015 00:33
Chrysene	ND		0.25	1	05/23/2015 00:33
Dibenzo (a,h) anthracene	ND		0.25	1	05/23/2015 00:33
Dibenzofuran	ND		0.25	1	05/23/2015 00:33
Di-n-butyl Phthalate	ND		0.25	1	05/23/2015 00:33
1,2-Dichlorobenzene	ND		0.25	1	05/23/2015 00:33
1,3-Dichlorobenzene	ND		0.25	1	05/23/2015 00:33
1,4-Dichlorobenzene	ND		0.25	1	05/23/2015 00:33
3,3-Dichlorobenzidine	ND		0.50	1	05/23/2015 00:33
2,4-Dichlorophenol	ND		0.25	1	05/23/2015 00:33
Diethyl Phthalate	ND		0.25	1	05/23/2015 00:33
2,4-Dimethylphenol	ND		0.25	1	05/23/2015 00:33
Dimethyl Phthalate	ND		0.25	1	05/23/2015 00:33
4,6-Dinitro-2-methylphenol	ND		1.3	1	05/23/2015 00:33
2,4-Dinitrophenol	ND		6.3	1	05/23/2015 00:33

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/23/2015 00:33
2,6-Dinitrotoluene	ND	0.25	1	05/23/2015 00:33
Di-n-octyl Phthalate	ND	0.50	1	05/23/2015 00:33
1,2-Diphenylhydrazine	ND	0.25	1	05/23/2015 00:33
Fluoranthene	ND	0.25	1	05/23/2015 00:33
Fluorene	ND	0.25	1	05/23/2015 00:33
Hexachlorobenzene	ND	0.25	1	05/23/2015 00:33
Hexachlorobutadiene	ND	0.25	1	05/23/2015 00:33
Hexachlorocyclopentadiene	ND	1.3	1	05/23/2015 00:33
Hexachloroethane	ND	0.25	1	05/23/2015 00:33
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/23/2015 00:33
Isophorone	ND	0.25	1	05/23/2015 00:33
2-Methylnaphthalene	ND	0.25	1	05/23/2015 00:33
2-Methylphenol (o-Cresol)	ND	0.25	1	05/23/2015 00:33
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/23/2015 00:33
Naphthalene	ND	0.25	1	05/23/2015 00:33
2-Nitroaniline	ND	1.3	1	05/23/2015 00:33
3-Nitroaniline	ND	1.3	1	05/23/2015 00:33
4-Nitroaniline	ND	1.3	1	05/23/2015 00:33
Nitrobenzene	ND	0.25	1	05/23/2015 00:33
2-Nitrophenol	ND	1.3	1	05/23/2015 00:33
4-Nitrophenol	ND	1.3	1	05/23/2015 00:33
N-Nitrosodiphenylamine	ND	0.25	1	05/23/2015 00:33
N-Nitrosodi-n-propylamine	ND	0.25	1	05/23/2015 00:33
Pentachlorophenol	ND	1.3	1	05/23/2015 00:33
Phenanthrene	ND	0.25	1	05/23/2015 00:33
Phenol	ND	0.25	1	05/23/2015 00:33
Pyrene	ND	0.25	1	05/23/2015 00:33
1,2,4-Trichlorobenzene	ND	0.25	1	05/23/2015 00:33
2,4,5-Trichlorophenol	ND	0.25	1	05/23/2015 00:33
2,4,6-Trichlorophenol	ND	0.25	1	05/23/2015 00:33

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	125	30-130		05/23/2015 00:33
Phenol-d5	130	30-130		05/23/2015 00:33
Nitrobenzene-d5	92	30-130		05/23/2015 00:33
2-Fluorobiphenyl	78	30-130		05/23/2015 00:33
2,4,6-Tribromophenol	66	16-130		05/23/2015 00:33
4-Terphenyl-d14	91	30-130		05/23/2015 00:33

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	ICP-MS2	105158

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 18:55
Arsenic	5.2	0.50	1	05/22/2015 18:55
Barium	140	5.0	1	05/22/2015 18:55
Beryllium	0.54	0.50	1	05/22/2015 18:55
Cadmium	ND	0.25	1	05/22/2015 18:55
Chromium	48	0.50	1	05/22/2015 18:55
Cobalt	9.5	0.50	1	05/22/2015 18:55
Copper	18	0.50	1	05/22/2015 18:55
Lead	11	0.50	1	05/22/2015 18:55
Mercury	0.098	0.050	1	05/22/2015 18:55
Molybdenum	0.90	0.50	1	05/22/2015 18:55
Nickel	55	0.50	1	05/22/2015 18:55
Selenium	ND	0.50	1	05/22/2015 18:55
Silver	ND	0.50	1	05/22/2015 18:55
Thallium	ND	0.50	1	05/22/2015 18:55
Vanadium	43	0.50	1	05/22/2015 18:55
Zinc	39	5.0	1	05/22/2015 18:55
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	104	70-130		05/22/2015 18:55

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	ICP-MS2	105158

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 19:01
Arsenic	3.5	0.50	1	05/22/2015 19:01
Barium	98	5.0	1	05/22/2015 19:01
Beryllium	ND	0.50	1	05/22/2015 19:01
Cadmium	ND	0.25	1	05/22/2015 19:01
Chromium	38	0.50	1	05/22/2015 19:01
Cobalt	7.4	0.50	1	05/22/2015 19:01
Copper	11	0.50	1	05/22/2015 19:01
Lead	4.9	0.50	1	05/22/2015 19:01
Mercury	ND	0.050	1	05/22/2015 19:01
Molybdenum	0.50	0.50	1	05/22/2015 19:01
Nickel	26	0.50	1	05/22/2015 19:01
Selenium	ND	0.50	1	05/22/2015 19:01
Silver	ND	0.50	1	05/22/2015 19:01
Thallium	ND	0.50	1	05/22/2015 19:01
Vanadium	37	0.50	1	05/22/2015 19:01
Zinc	21	5.0	1	05/22/2015 19:01
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	99	70-130		05/22/2015 19:01

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-15-12.5	1505818-001A	Soil	05/19/2015 08:45	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 15:02
MTBE	---	0.050	1	05/22/2015 15:02
Benzene	ND	0.0050	1	05/22/2015 15:02
Toluene	ND	0.0050	1	05/22/2015 15:02
Ethylbenzene	ND	0.0050	1	05/22/2015 15:02
Xylenes	ND	0.0050	1	05/22/2015 15:02

Surrogates	REC (%)	Limits
2-Fluorotoluene	95	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-15-7.5	1505818-002A	Soil	05/19/2015 08:50	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 15:33
MTBE	---	0.050	1	05/22/2015 15:33
Benzene	ND	0.0050	1	05/22/2015 15:33
Toluene	ND	0.0050	1	05/22/2015 15:33
Ethylbenzene	ND	0.0050	1	05/22/2015 15:33
Xylenes	ND	0.0050	1	05/22/2015 15:33

Surrogates	REC (%)	Limits
2-Fluorotoluene	101	70-130

Analyst(s): SS

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-11-12.5	1505818-003A	Soil	05/19/2015 09:15	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 16:04
MTBE	---	0.050	1	05/22/2015 16:04
Benzene	ND	0.0050	1	05/22/2015 16:04
Toluene	ND	0.0050	1	05/22/2015 16:04
Ethylbenzene	ND	0.0050	1	05/22/2015 16:04
Xylenes	ND	0.0050	1	05/22/2015 16:04

Surrogates	REC (%)	Limits
2-Fluorotoluene	94	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-11-17.5	1505818-004A	Soil	05/19/2015 09:20	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	26	3.3	3.3	05/23/2015 08:45
MTBE	---	0.17	3.3	05/23/2015 08:45
Benzene	ND	0.017	3.3	05/23/2015 08:45
Toluene	ND	0.017	3.3	05/23/2015 08:45
Ethylbenzene	ND	0.017	3.3	05/23/2015 08:45
Xylenes	0.22	0.017	3.3	05/23/2015 08:45

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): SS

Analytical Comments: d2



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7-12.5	1505818-005A	Soil	05/19/2015 09:46	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 19:08
MTBE	---	0.050	1	05/22/2015 19:08
Benzene	ND	0.0050	1	05/22/2015 19:08
Toluene	ND	0.0050	1	05/22/2015 19:08
Ethylbenzene	ND	0.0050	1	05/22/2015 19:08
Xylenes	ND	0.0050	1	05/22/2015 19:08

Surrogates	REC (%)	Limits
2-Fluorotoluene	100	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7-17.5	1505818-006A	Soil	05/19/2015 09:54	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	10	1.0	1	05/28/2015 15:02
MTBE	---	0.050	1	05/28/2015 15:02
Benzene	ND	0.0050	1	05/28/2015 15:02
Toluene	0.072	0.0050	1	05/28/2015 15:02
Ethylbenzene	ND	0.0050	1	05/28/2015 15:02
Xylenes	0.0087	0.0050	1	05/28/2015 15:02

Surrogates	REC (%)	Limits
2-Fluorotoluene	88	70-130

Analyst(s): SS

Analytical Comments: d7,d9

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3-12.5	1505818-007A	Soil	05/19/2015 10:20	GC19	105156
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	6.8		1.0	1	05/22/2015 20:09
MTBE	---		0.050	1	05/22/2015 20:09
Benzene	ND		0.0050	1	05/22/2015 20:09
Toluene	ND		0.0050	1	05/22/2015 20:09
Ethylbenzene	ND		0.0050	1	05/22/2015 20:09
Xylenes	ND		0.0050	1	05/22/2015 20:09
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	83		70-130		05/22/2015 20:09
<u>Analyst(s):</u> SS			<u>Analytical Comments:</u> d7		

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3-17.5	1505818-008A	Soil	05/19/2015 10:25	GC19	105156
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	27		1.0	1	05/22/2015 20:40
MTBE	---		0.050	1	05/22/2015 20:40
Benzene	ND		0.0050	1	05/22/2015 20:40
Toluene	ND		0.0050	1	05/22/2015 20:40
Ethylbenzene	ND		0.0050	1	05/22/2015 20:40
Xylenes	0.015		0.0050	1	05/22/2015 20:40
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	77		70-130		05/22/2015 20:40
<u>Analyst(s):</u> SS			<u>Analytical Comments:</u> d7		

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4-12.5	1505818-009A	Soil	05/19/2015 10:45	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 22:11
MTBE	---	0.050	1	05/22/2015 22:11
Benzene	ND	0.0050	1	05/22/2015 22:11
Toluene	ND	0.0050	1	05/22/2015 22:11
Ethylbenzene	ND	0.0050	1	05/22/2015 22:11
Xylenes	ND	0.0050	1	05/22/2015 22:11

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	98	70-130	05/22/2015 22:11

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4-17.5	1505818-010A	Soil	05/19/2015 10:55	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 22:41
MTBE	---	0.050	1	05/22/2015 22:41
Benzene	ND	0.0050	1	05/22/2015 22:41
Toluene	ND	0.0050	1	05/22/2015 22:41
Ethylbenzene	ND	0.0050	1	05/22/2015 22:41
Xylenes	ND	0.0050	1	05/22/2015 22:41

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	97	70-130	05/22/2015 22:41

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8-12.5	1505818-011A	Soil	05/19/2015 11:20	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 23:11
MTBE	---	0.050	1	05/22/2015 23:11
Benzene	ND	0.0050	1	05/22/2015 23:11
Toluene	ND	0.0050	1	05/22/2015 23:11
Ethylbenzene	ND	0.0050	1	05/22/2015 23:11
Xylenes	ND	0.0050	1	05/22/2015 23:11

Surrogates	REC (%)	Limits
2-Fluorotoluene	91	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8-17.5	1505818-012A	Soil	05/19/2015 11:28	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 02:13
MTBE	---	0.050	1	05/23/2015 02:13
Benzene	ND	0.0050	1	05/23/2015 02:13
Toluene	ND	0.0050	1	05/23/2015 02:13
Ethylbenzene	ND	0.0050	1	05/23/2015 02:13
Xylenes	ND	0.0050	1	05/23/2015 02:13

Surrogates	REC (%)	Limits
2-Fluorotoluene	101	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-12-12.5	1505818-013A	Soil	05/19/2015 13:15	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 03:13
MTBE	---	0.050	1	05/23/2015 03:13
Benzene	ND	0.0050	1	05/23/2015 03:13
Toluene	ND	0.0050	1	05/23/2015 03:13
Ethylbenzene	ND	0.0050	1	05/23/2015 03:13
Xylenes	ND	0.0050	1	05/23/2015 03:13

Surrogates	REC (%)	Limits
2-Fluorotoluene	99	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-12-17.5	1505818-014A	Soil	05/19/2015 13:18	GC19	105156

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 03:43
MTBE	---	0.050	1	05/23/2015 03:43
Benzene	ND	0.0050	1	05/23/2015 03:43
Toluene	ND	0.0050	1	05/23/2015 03:43
Ethylbenzene	ND	0.0050	1	05/23/2015 03:43
Xylenes	ND	0.0050	1	05/23/2015 03:43

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-12.5	1505818-015A	Soil	05/19/2015 14:20	GC19	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 04:13
MTBE	---	0.050	1	05/23/2015 04:13
Benzene	ND	0.0050	1	05/23/2015 04:13
Toluene	ND	0.0050	1	05/23/2015 04:13
Ethylbenzene	ND	0.0050	1	05/23/2015 04:13
Xylenes	ND	0.0050	1	05/23/2015 04:13

Surrogates	REC (%)	Limits
2-Fluorotoluene	98	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC19	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 04:43
MTBE	---	0.050	1	05/23/2015 04:43
Benzene	ND	0.0050	1	05/23/2015 04:43
Toluene	ND	0.0050	1	05/23/2015 04:43
Ethylbenzene	ND	0.0050	1	05/23/2015 04:43
Xylenes	ND	0.0050	1	05/23/2015 04:43

Surrogates	REC (%)	Limits
2-Fluorotoluene	103	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC19	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 05:44
MTBE	---	0.050	1	05/23/2015 05:44
Benzene	ND	0.0050	1	05/23/2015 05:44
Toluene	ND	0.0050	1	05/23/2015 05:44
Ethylbenzene	ND	0.0050	1	05/23/2015 05:44
Xylenes	ND	0.0050	1	05/23/2015 05:44

Surrogates	REC (%)	Limits
2-Fluorotoluene	100	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-17.5	1505818-018A	Soil	05/19/2015 14:25	GC19	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 07:14
MTBE	---	0.050	1	05/23/2015 07:14
Benzene	ND	0.0050	1	05/23/2015 07:14
Toluene	ND	0.0050	1	05/23/2015 07:14
Ethylbenzene	ND	0.0050	1	05/23/2015 07:14
Xylenes	ND	0.0050	1	05/23/2015 07:14

Surrogates	REC (%)	Limits
2-Fluorotoluene	104	70-130

Analyst(s): SS

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-24-12.5	1505818-019A	Soil	05/19/2015 14:50	GC19	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 07:44
MTBE	---	0.050	1	05/23/2015 07:44
Benzene	ND	0.0050	1	05/23/2015 07:44
Toluene	ND	0.0050	1	05/23/2015 07:44
Ethylbenzene	ND	0.0050	1	05/23/2015 07:44
Xylenes	ND	0.0050	1	05/23/2015 07:44

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	98	70-130	05/23/2015 07:44

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-24-17.5	1505818-020A	Soil	05/19/2015 14:55	GC19	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 08:15
MTBE	---	0.050	1	05/23/2015 08:15
Benzene	ND	0.0050	1	05/23/2015 08:15
Toluene	ND	0.0050	1	05/23/2015 08:15
Ethylbenzene	ND	0.0050	1	05/23/2015 08:15
Xylenes	ND	0.0050	1	05/23/2015 08:15

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	100	70-130	05/23/2015 08:15

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-35-12.5	1505818-021A	Soil	05/19/2015 15:20	GC7	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 00:28
MTBE	---	0.050	1	05/23/2015 00:28
Benzene	ND	0.0050	1	05/23/2015 00:28
Toluene	ND	0.0050	1	05/23/2015 00:28
Ethylbenzene	ND	0.0050	1	05/23/2015 00:28
Xylenes	ND	0.0050	1	05/23/2015 00:28

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	94	70-130	05/23/2015 00:28

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-35-17.5	1505818-022A	Soil	05/19/2015 15:25	GC7	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 03:28
MTBE	---	0.050	1	05/23/2015 03:28
Benzene	ND	0.0050	1	05/23/2015 03:28
Toluene	ND	0.0050	1	05/23/2015 03:28
Ethylbenzene	ND	0.0050	1	05/23/2015 03:28
Xylenes	ND	0.0050	1	05/23/2015 03:28

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	90	70-130	05/23/2015 03:28

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-16-12.5	1505818-023A	Soil	05/19/2015 13:34	GC7	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 03:58
MTBE	---	0.050	1	05/23/2015 03:58
Benzene	ND	0.0050	1	05/23/2015 03:58
Toluene	ND	0.0050	1	05/23/2015 03:58
Ethylbenzene	ND	0.0050	1	05/23/2015 03:58
Xylenes	ND	0.0050	1	05/23/2015 03:58

Surrogates	REC (%)	Limits
2-Fluorotoluene	71	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-16-17.5	1505818-024A	Soil	05/19/2015 13:42	GC7	105174

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 08:54
MTBE	---	0.050	1	05/22/2015 08:54
Benzene	ND	0.0050	1	05/22/2015 08:54
Toluene	ND	0.0050	1	05/22/2015 08:54
Ethylbenzene	ND	0.0050	1	05/22/2015 08:54
Xylenes	ND	0.0050	1	05/22/2015 08:54

Surrogates	REC (%)	Limits
2-Fluorotoluene	99	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505818  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	WetChem	105240

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.59	0.1	1	05/21/2015 20:15

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	WetChem	105240

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.42	0.1	1	05/21/2015 20:18

Analyst(s): RB



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-15-12.5	1505818-001A	Soil	05/19/2015 08:45	GC11A	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/25/2015 17:41
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/25/2015 17:41

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	70-130	05/25/2015 17:41

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-15-7.5	1505818-002A	Soil	05/19/2015 08:50	GC11A	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/25/2015 21:07
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/25/2015 21:07

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	70-130	05/25/2015 21:07

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-11-12.5	1505818-003A	Soil	05/19/2015 09:15	GC2A	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/28/2015 01:34
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/28/2015 01:34

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/28/2015 01:34

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-11-17.5	1505818-004A	Soil	05/19/2015 09:20	GC2A	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	51	1.0	1	05/23/2015 04:54
TPH-Motor Oil (C18-C36)	86	5.0	1	05/23/2015 04:54

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 04:54

**Analyst(s):** HD **Analytical Comments:** e7,e4,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7-12.5	1505818-005A	Soil	05/19/2015 09:46	GC2A	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	430	20	20	05/28/2015 15:46
TPH-Motor Oil (C18-C36)	1100	100	20	05/28/2015 15:46

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/28/2015 15:46

**Analyst(s):** HD **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-7-17.5	1505818-006A	Soil	05/19/2015 09:54	GC2B	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1100	20	20	05/28/2015 11:35
TPH-Motor Oil (C18-C36)	2900	100	20	05/28/2015 11:35

Surrogates	REC (%)	Limits	Date Analyzed
C9	119	70-130	05/28/2015 11:35

**Analyst(s):** HD **Analytical Comments:** e7,e2

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3-12.5	1505818-007A	Soil	05/19/2015 10:20	GC11B	105101

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1000	50	50	05/28/2015 12:51
TPH-Motor Oil (C18-C36)	3200	250	50	05/28/2015 12:51

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	05/28/2015 12:51

**Analyst(s):** HD **Analytical Comments:** e7,e2,e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-3-17.5	1505818-008A	Soil	05/19/2015 10:25	GC11A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1200	50	50	05/28/2015 12:51
TPH-Motor Oil (C18-C36)	2800	250	50	05/28/2015 12:51

Surrogates	REC (%)	Limits	Date Analyzed
C9	81	70-130	05/28/2015 12:51

**Analyst(s):** HD **Analytical Comments:** e7,e2,e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4-12.5	1505818-009A	Soil	05/19/2015 10:45	GC2A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 17:17
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 17:17

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 17:17

**Analyst(s):** HD

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-4-17.5	1505818-010A	Soil	05/19/2015 10:55	GC2A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 16:01
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 16:01

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 16:01

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8-12.5	1505818-011A	Soil	05/19/2015 11:20	GC9a	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 08:26
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 08:26

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 08:26

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-8-17.5	1505818-012A	Soil	05/19/2015 11:28	GC9a	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 07:15
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 07:15

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 07:15

Analyst(s): HD

(Cont.)





# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-12-12.5	1505818-013A	Soil	05/19/2015 13:15	GC2A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 12:15
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 12:15

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 12:15

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-12-17.5	1505818-014A	Soil	05/19/2015 13:18	GC2A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 13:30
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 13:30

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 13:30

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-12.5	1505818-015A	Soil	05/19/2015 14:20	GC6A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/25/2015 16:33
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/25/2015 16:33

Surrogates	REC (%)	Limits	Date Analyzed
C9	102	70-130	05/25/2015 16:33

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-2.5	1505818-016A	Soil	05/19/2015 13:05	GC6A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.1	1.0	1	05/25/2015 17:45
TPH-Motor Oil (C18-C36)	5.2	5.0	1	05/25/2015 17:45

Surrogates	REC (%)	Limits	Date Analyzed
C9	103	70-130	05/25/2015 17:45

**Analyst(s):** HD **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-7.5	1505818-017A	Soil	05/19/2015 14:15	GC9a	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 06:04
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 06:04

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 06:04

**Analyst(s):** HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-20-17.5	1505818-018A	Soil	05/19/2015 14:25	GC9a	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 04:52
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 04:52

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 04:52

**Analyst(s):** HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-24-12.5	1505818-019A	Soil	05/19/2015 14:50	GC9a	105175

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 01:17
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 01:17

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	110	70-130	05/23/2015 01:17

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-24-17.5	1505818-020A	Soil	05/19/2015 14:55	GC9a	105175

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.0	1.0	1	05/23/2015 00:06
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 00:06

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	111	70-130	05/23/2015 00:06

Analyst(s): HD

Analytical Comments: e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-35-12.5	1505818-021A	Soil	05/19/2015 15:20	GC6A	105175

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 09:23
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 09:23

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	103	70-130	05/24/2015 09:23

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/20/15 19:17  
**Date Prepared:** 5/20/15

**WorkOrder:** 1505818  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-35-17.5	1505818-022A	Soil	05/19/2015 15:25	GC6A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2.8	1.0	1	05/24/2015 08:11
TPH-Motor Oil (C18-C36)	7.0	5.0	1	05/24/2015 08:11

Surrogates	REC (%)	Limits	Date Analyzed
C9	103	70-130	05/24/2015 08:11

**Analyst(s):** HD **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-16-12.5	1505818-023A	Soil	05/19/2015 13:34	GC6A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 06:59
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 06:59

Surrogates	REC (%)	Limits	Date Analyzed
C9	102	70-130	05/24/2015 06:59

**Analyst(s):** HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-16-17.5	1505818-024A	Soil	05/19/2015 13:42	GC2A	105175

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 10:59
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 10:59

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 10:59

**Analyst(s):** HD



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC22  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105157  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105157  
 1505805-001AMS/MSD

## QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0439	0.0010	0.050	-	88	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0490	0.0010	0.050	-	98	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0540	0.0010	0.050	-	108	70-130
Dieldrin	ND	0.0562	0.0010	0.050	-	112	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0488	0.0010	0.050	-	98	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0438	0.0010	0.050	-	88	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-
<b>Surrogate Recovery</b>							
Decachlorobiphenyl	0.0505	0.0546		0.050	101	109	70-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC22  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105157  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105157  
 1505805-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0447	0.0457	0.050	ND	89	91	70-130	2.23	30
g-BHC	0.0505	0.0506	0.050	ND	101	101	70-130	0	30
p,p-DDT	0.0560	0.0562	0.050	ND	112	112	70-130	0	30
Dieldrin	0.0586	0.0586	0.050	0.001012	115	115	70-130	0	30
Endrin	0.0519	0.0519	0.050	ND	104	104	70-130	0	30
Heptachlor	0.0484	0.0481	0.050	ND	97	96	70-130	0.698	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0538	0.0596	0.050		107	119	70-130	10.4	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105172  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105172

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0772	0.010	0.10	-	77	70-130
Benzene	ND	0.0858	0.010	0.10	-	86	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.310	0.10	0.40	-	77	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0947	0.010	0.10	-	95	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0832	0.0080	0.10	-	83	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0816	0.010	0.10	-	82	70-130
1,1-Dichloroethene	ND	0.0747	0.010	0.10	-	75	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105172  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105172

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0821	0.010	0.10	-	82	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0808	0.010	0.10	-	81	70-130
Freon 113	ND	-	0.010	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0770	0.010	0.10	-	77	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.100	0.010	0.10	-	100	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0957	0.010	0.10	-	96	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.204	0.206		0.25	82	83	70-130
Toluene-d8	0.232	0.231		0.25	93	92	70-130
4-BFB	0.0228	0.0221		0.025	91	89	70-130
Benzene-d6	0.170	0.165		0.20	85	83	60-140
Ethylbenzene-d10	0.202	0.215		0.20	101	108	60-140
1,2-DCB-d4	0.149	0.166		0.20	75	83	60-140

(Cont.)





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105238  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105238  
 1505864-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.85	0.25	5	-	97	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	4.65	0.25	5	-	93	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.37	0.25	5	-	107	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.71	0.25	5	-	94	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	5.25	0.25	5	-	105	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105238  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105238  
 1505864-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	4.15	1.3	5	-	83	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.47	0.25	5	-	89	30-130
Pentachlorophenol	ND	4.16	1.3	5	-	83	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.70	0.25	5	-	94	30-130
Pyrene	ND	5.47	0.25	5	-	109	30-130
1,2,4-Trichlorobenzene	ND	5.00	0.25	5	-	100	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

#### Surrogate Recovery

2-Fluorophenol	4.69	4.62		5	94	92	30-130
Phenol-d5	4.89	4.82		5	98	96	30-130
Nitrobenzene-d5	4.40	4.51		5	88	90	30-130
2-Fluorobiphenyl	4.31	4.37		5	86	87	30-130
2,4,6-Tribromophenol	3.02	3.60		5	60	72	16-130
4-Terphenyl-d14	4.80	4.67		5	96	93	30-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105238  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105238  
 1505864-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<40	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<40	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<40	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<40	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<40	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<210	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<40	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<210	NR	NR	-	NR	
Phenol	NR	NR		ND<40	NR	NR	-	NR	
Pyrene	NR	NR		ND<40	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<40	NR	NR	-	NR	

**Surrogate Recovery**

2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105199  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105199  
 1505759-004AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.226	0.010	0.20	-	113	30-130
Chrysene	ND	0.181	0.010	0.20	-	90	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.198	0.010	0.20	-	99	30-130
2-Methylnaphthalene	ND	0.200	0.010	0.20	-	100	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.193	0.010	0.20	-	96	30-130
Pyrene	ND	0.179	0.010	0.20	-	90	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.412	0.419		0.50	82	84	30-130
2-Fluorobiphenyl	0.409	0.409		0.50	82	82	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	0.259	0.258	0.20	ND	130	129	30-130	0.378	30
Chrysene	0.195	0.202	0.20	ND	98	101	30-130	3.36	30
1-Methylnaphthalene	0.205	0.210	0.20	ND	103	105	30-130	2.22	30
2-Methylnaphthalene	0.207	0.211	0.20	ND	104	105	30-130	1.69	30
Phenanthrene	0.204	0.210	0.20	ND	102	105	30-130	2.85	30
Pyrene	0.187	0.194	0.20	ND	94	97	30-130	3.21	30

### Surrogate Recovery

1-Fluoronaphthalene	0.449	0.467	0.50		90	93	30-130	4.00	30
2-Fluorobiphenyl	0.442	0.461	0.50		88	92	30-130	4.07	30

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/27/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105218  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105218  
 1505818-006AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.140	0.010	0.20	-	70	30-130
Chrysene	ND	0.121	0.010	0.20	-	60	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.134	0.010	0.20	-	67	30-130
2-Methylnaphthalene	ND	0.133	0.010	0.20	-	66	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.134	0.010	0.20	-	67	30-130
Pyrene	ND	0.116	0.010	0.20	-	58	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.340	0.334		0.50	68	67	30-130
2-Fluorobiphenyl	0.320	0.326		0.50	64	65	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		ND<0.1	NR	NR	-	NR	
Chrysene	NR	NR		ND<0.1	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.1	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.1	NR	NR	-	NR	
Phenanthrene	NR	NR		ND<0.1	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.1	NR	NR	-	NR	

### Surrogate Recovery

1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105158  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105158  
 1505805-010AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	50.4	0.50	50	-	101	75-125
Arsenic	ND	49.8	0.50	50	-	100	75-125
Barium	ND	476	5.0	500	-	95	75-125
Beryllium	ND	50.9	0.50	50	-	102	75-125
Cadmium	ND	50.2	0.25	50	-	100	75-125
Chromium	ND	50.6	0.50	50	-	101	75-125
Cobalt	ND	47.8	0.50	50	-	96	75-125
Copper	ND	52.0	0.50	50	-	104	75-125
Lead	ND	50.7	0.50	50	-	101	75-125
Mercury	ND	1.16	0.050	1.25	-	91	75-125
Molybdenum	ND	49.8	0.50	50	-	100	75-125
Nickel	ND	52.0	0.50	50	-	104	75-125
Selenium	ND	50.8	0.50	50	-	102	75-125
Silver	ND	51.2	0.50	50	-	102	75-125
Thallium	ND	48.7	0.50	50	-	97	75-125
Vanadium	ND	49.8	0.50	50	-	100	75-125
Zinc	ND	517	5.0	500	-	103	75-125
<b>Surrogate Recovery</b>							
Terbium	493	494		500	99	99	70-130



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105158  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105158  
 1505805-010AMS/MSD

### QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	49.2	54.1	50	ND	97	107	75-125	9.55	20
Arsenic	55.2	56.9	50	7.189	96	99	75-125	3.01	20
Barium	658	666	500	120	108	109	75-125	1.28	20
Beryllium	46.7	49.3	50	0.52	92	98	75-125	5.50	20
Cadmium	48.6	52.8	50	ND	97	105	75-125	8.23	20
Chromium	90.7	90.8	50	45	92	92	75-125	0	20
Cobalt	69.8	59.6	50	11	117	96	75-125	15.7	20
Copper	77.6	79.8	50	30	95	99	75-125	2.88	20
Lead	58.5	60.8	50	6.5	104	109	75-125	3.81	20
Mercury	1.20	1.26	1.25	0.074	90	95	75-125	4.23	20
Molybdenum	49.8	54.2	50	0.70	98	107	75-125	8.44	20
Nickel	91.8	88.5	50	36	113	106	75-125	3.66	20
Selenium	46.9	48.7	50	ND	93	97	75-125	3.72	20
Silver	50.2	54.1	50	ND	100	108	75-125	7.50	20
Thallium	48.3	51.9	50	ND	96	103	75-125	7.19	20
Vanadium	NR	NR	50	73	NR	NR	75-125	NR	20
Zinc	534	550	500	46	98	101	75-125	2.95	20
<b>Surrogate Recovery</b>									
Terbium	483	524	500		97	105	70-130	8.12	20



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105156  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105156  
 1505803-002AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.546	0.40	0.60	-	91	70-130
MTBE	ND	0.101	0.050	0.10	-	101	70-130
Benzene	ND	0.102	0.0050	0.10	-	102	70-130
Toluene	ND	0.0999	0.0050	0.10	-	100	70-130
Ethylbenzene	ND	0.106	0.0050	0.10	-	106	70-130
Xylenes	ND	0.329	0.0050	0.30	-	110	70-130

### Surrogate Recovery

2-Fluorotoluene	0.109	0.110		0.10	109	110	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		12	NR	NR	-	NR	
MTBE	NR	NR		ND<0.5	NR	NR	-	NR	
Benzene	NR	NR		ND<0.05	NR	NR	-	NR	
Toluene	NR	NR		ND<0.05	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND<0.05	NR	NR	-	NR	
Xylenes	NR	NR		ND<0.05	NR	NR	-	NR	

### Surrogate Recovery

2-Fluorotoluene	NR	NR			NR	NR	-	NR	
-----------------	----	----	--	--	----	----	---	----	--

(Cont.)





# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105174  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105174  
 1505818-024AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.581	0.40	0.60	-	97	70-130
MTBE	ND	0.0958	0.050	0.10	-	96	70-130
Benzene	ND	0.0877	0.0050	0.10	-	88	70-130
Toluene	ND	0.0863	0.0050	0.10	-	86	70-130
Ethylbenzene	ND	0.0925	0.0050	0.10	-	93	70-130
Xylenes	ND	0.293	0.0050	0.30	-	98	70-130

### Surrogate Recovery

2-Fluorotoluene	0.108	0.0938		0.10	108	94	70-130
-----------------	-------	--------	--	------	-----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.528	0.530	0.60	ND	88	88	70-130	0	20
MTBE	0.0785	0.0772	0.10	ND	76	75	70-130	1.61	20
Benzene	0.0890	0.0913	0.10	ND	89	91	70-130	2.57	20
Toluene	0.0876	0.0897	0.10	ND	88	90	70-130	2.37	20
Ethylbenzene	0.0941	0.0961	0.10	ND	94	96	70-130	2.07	20
Xylenes	0.292	0.298	0.30	ND	97	99	70-130	2.10	20

### Surrogate Recovery

2-Fluorotoluene	0.0963	0.0975	0.10		96	98	70-130	1.24	20
-----------------	--------	--------	------	--	----	----	--------	------	----



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15  
**Instrument:** WetChem  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105240  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1504861-008A	8.30	1	8.30	1	0	0.1
1505849-002A	7.53	1	7.55	1	0.02	0.1



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/19/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC6A, GC6B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105101  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105101  
 1505760-047AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	49.2	1.0	40	-	123	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	25.8	28.4		25	103	114	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		130	NR	NR	-	NR	
<b>Surrogate Recovery</b>									
C9	NR	NR			NR	NR	-	NR	

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC11B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505818  
**BatchID:** 105175  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105175  
 1505818-008AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	41.1	1.0	40	-	103	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	27.1	27.0		25	108	108	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR	40	1195	NR	NR	70-130	NR	30

**Surrogate Recovery**

C9	28.0	28.2	25		112	113	70-130	0.454	30
----	------	------	----	--	-----	-----	--------	-------	----

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505818

ClientCode: TWRK

WaterTrax    WriteOn    EDF    Excel    EQUIS    Email    HardCopy    ThirdParty    J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500   FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT:**

**5 days**

**Date Received: 05/20/2015**

**Date Printed: 05/20/2015**

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
1505818-001	B-15-12.5	Soil	5/19/2015 8:45	<input type="checkbox"/>			A			A		A				
1505818-002	B-15-7.5	Soil	5/19/2015 8:50	<input type="checkbox"/>			A			A		A				
1505818-003	B-11-12.5	Soil	5/19/2015 9:15	<input type="checkbox"/>			A			A		A				
1505818-004	B-11-17.5	Soil	5/19/2015 9:20	<input type="checkbox"/>			A			A		A				
1505818-005	B-7-12.5	Soil	5/19/2015 9:46	<input type="checkbox"/>			A			A		A				
1505818-006	B-7-17.5	Soil	5/19/2015 9:54	<input type="checkbox"/>			A			A		A				
1505818-007	B-3-12.5	Soil	5/19/2015 10:20	<input type="checkbox"/>			A			A		A				
1505818-008	B-3-17.5	Soil	5/19/2015 10:25	<input type="checkbox"/>			A			A		A				
1505818-009	B-4-12.5	Soil	5/19/2015 10:45	<input type="checkbox"/>			A			A		A				
1505818-010	B-4-17.5	Soil	5/19/2015 10:55	<input type="checkbox"/>			A			A		A				
1505818-011	B-8-12.5	Soil	5/19/2015 11:20	<input type="checkbox"/>			A			A		A				
1505818-012	B-8-17.5	Soil	5/19/2015 11:28	<input type="checkbox"/>			A			A		A				
1505818-013	B-12-12.5	Soil	5/19/2015 13:15	<input type="checkbox"/>			A			A		A				
1505818-014	B-12-17.5	Soil	5/19/2015 13:18	<input type="checkbox"/>			A			A		A				
1505818-015	B-20-12.5	Soil	5/19/2015 14:20	<input type="checkbox"/>			A			A		A				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

Prepared by: Jena Alfaro

**Comments:**

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

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505818

ClientCode: TWRK

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQUIS   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concurrency.com

**Requested TAT: 5 days**

**Date Received: 05/20/2015**

**Date Printed: 05/20/2015**

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	
1505818-016	B-20-2.5	Soil	5/19/2015 13:05	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505818-017	B-20-7.5	Soil	5/19/2015 14:15	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505818-018	B-20-17.5	Soil	5/19/2015 14:25	<input type="checkbox"/>			A			A		A					
1505818-019	B-24-12.5	Soil	5/19/2015 14:50	<input type="checkbox"/>			A			A		A					
1505818-020	B-24-17.5	Soil	5/19/2015 14:55	<input type="checkbox"/>			A			A		A					
1505818-021	B-35-12.5	Soil	5/19/2015 15:20	<input type="checkbox"/>			A			A		A					
1505818-022	B-35-17.5	Soil	5/19/2015 15:25	<input type="checkbox"/>			A			A		A					
1505818-023	B-16-12.5	Soil	5/19/2015 13:34	<input type="checkbox"/>			A			A		A					
1505818-024	B-16-17.5	Soil	5/19/2015 13:42	<input type="checkbox"/>			A			A		A					

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

Prepared by: Jena Alfaro

**Comments:**

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505818  
**Date Received:** 5/20/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1505818-001A	B-15-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 8:45	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505818-002A	B-15-7.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 8:50	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505818-003A	B-11-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 9:15	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505818-004A	B-11-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 9:20	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505818-005A	B-7-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 9:46	5 days		<input type="checkbox"/>			
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505818-006A	B-7-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 9:54	5 days		<input type="checkbox"/>			

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505818  
**Date Received:** 5/20/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505818-006A	B-7-17.5	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 9:54	5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-007A	B-3-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 10:20	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-008A	B-3-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 10:25	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-009A	B-4-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 10:45	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-010A	B-4-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 10:55	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-011A	B-8-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 11:20	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505818  
**Date Received:** 5/20/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505818-011A	B-8-12.5	Soil	SW8270C (PAHs/PNAs)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 11:20	5 days		<input type="checkbox"/>	
1505818-012A	B-8-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 11:28	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505818-013A	B-12-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 13:15	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505818-014A	B-12-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 13:18	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505818-015A	B-20-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 14:20	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505818-016A	B-20-2.5	Soil	SW8015B (Diesel & Motor Oil)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/19/2015 13:05	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505818  
**Date Received:** 5/20/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505818-016A	B-20-2.5	Soil	SW6020 (CAM 17)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/19/2015 13:05	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-016B	B-20-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/19/2015 13:05	5 days		<input type="checkbox"/>	
1505818-017A	B-20-7.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 14:15	5 days		<input type="checkbox"/>	
			SW9045D (pH)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505818-017B	B-20-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/19/2015 14:15	5 days		<input type="checkbox"/>	
1505818-018A	B-20-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 14:25	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505818  
**Date Received:** 5/20/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505818-019A	B-24-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 14:50	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505818-020A	B-24-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 14:55	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505818-021A	B-35-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 15:20	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505818-022A	B-35-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 15:25	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505818-023A	B-16-12.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 13:34	5 days		<input type="checkbox"/>	
			SW8021B/8015Bm (G/MBTEX)			<input type="checkbox"/>		5 days			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days			
1505818-024A	B-16-17.5	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 13:42	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505818  
**Date Received:** 5/20/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505818-024A	B-16-17.5	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	5/19/2015 13:42	5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1505818

please send work order summary to:

- 1) Liz Kimbrel: ekimbrel@langan.com
- 2) Christina Rain: crain@langan.com

009069

# 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3043 Broadway  
 Job Number: 731V37001 crain@langan.com  
 Project Manager/Contact: Christina Rain 415-955-5247  
 Samplers: Liz Kimbrel & Zubair Trabzada  
 Recorder (Signature Required): Elyan

**Turnaround  
Time**  
5d

### Analysis Requested

No. Containers  
& Preservative

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested					Remarks			
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, g/m <sup>3</sup>	BTEX	PAHs by GC	Other	Other		Other	Other	
B-15-12.5	5/19/15	0945		X								X	X	X						
B-15-17.5		0950		X								X	X	X						
B-11-12.5		0915		X								X	X	X						
B-11-17.5		0920		X								X	X	X						
B-7-12.5		0946		X								X	X	X						
B-7-17.5		0954		X								X	X	X						
B-3-12.5		1020		X								X	X	X						
B-3-17.5		#1025		X								X	X	X						
B-4-12.5		1045		X								X	X	X						
B-4-17.5		1055		X								X	X	X						
B-8-12.5		1120		X								X	X	X						
B-8-17.5		1128		X								X	X	X						
B-12-12.5		1315		X								X	X	X						
B-12-17.5		1318		X								X	X	X						

Relinquished by: (Signature) <u>Elyan</u>	Date <u>5/19/15</u>	Time <u>1700</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/20/15</u>	Time <u>1540</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/20/15</u>	Time <u>1705</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/20/15</u>	Time <u>1705</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS

Hand Carried:  Private Courier (Co. Name) FEDEX

GOOD CONDITION  APPROPRIATE

HEAD SPACE ABSENT  CONTAINERS

DECONTAMINATED IN LAB  PRESERVED IN LAB

Pink Copy - Field  VOAS  O & G  METALS  OTHER

PRESERVATION

White Copy - Original      Yellow Copy - Laboratory

Please Send work order summaries to:  
 1) Liz Kimbrel ekimbrel@langan.com  
 2) Christina Rain crain@langan.com

009070



**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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3043 Broadway

Job Number: 731037001

Project Manager/Contact: Christina Rain

Samplers: Liz Kimbrel & Abair Trabzada

Recorder (Signature Required): [Signature]

**Turnaround Time**  
5d

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, mg	BTEX	PNAs by 8270C	VOCs by 8210B	SOLs by 8270C	PCBs & Pesticides	CAM 17	pH by 7045D									
B-20-12.5	5/19/15	1420		X									X	X	X													
B-20-2.5		1305		X									X	X	X	X	X	X	X	X	X			X	hold for further metals			
B-20-7.5		1415		X									X	X	X	X	X	X	X	X	X			X	analyses			
B-20-17.5		1425		X									X	X	X													
B-24-12.5		1450		X									X	X	X													
B-24-17.5		1455		X									X	X	X													
B-35-12.5		1520		X									X	X	X													
B-35-17.5	↓	1525		X									X	X	X													
B-16-12.5	5/19/15	1334		X									X	X	X													
B-16-17.5	5/19/15	1342		X									X	X	X													

Relinquished by: (Signature) <u>[Signature]</u>	Date 5/19/2015	Time 1700	Received by: (Signature) <u>[Signature]</u>	Date 5/20/15	Time 1540
Relinquished by: (Signature) <u>[Signature]</u>	Date 5/20/15	Time 1705	Received by: (Signature) <u>[Signature]</u>	Date 5/20/15	Time 1705
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical

Laboratory Comments/Notes:

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/20/2015 7:17:33 PM**  
 Project Name: **#731637001; 3093 Broadway** Login Reviewed by: **Jena Alfaro**  
 WorkOrder No: **1505818** Matrix: Soil Carrier: Daniel (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   
 Sample/Temp Blank temperature Temp: 4.2°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505867

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/21/2015

Analytical Report reviewed & approved for release on 05/29/2015 by:

Angela Rydelius,  
Laboratory Manager

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







## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505867

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
c1	surrogate recovery outside of the control limits due to the dilution of the sample.
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



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

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505867

### **Quality Control Qualifiers**

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



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC23	105157

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	05/22/2015 10:50
a-BHC	ND	0.0050	5	05/22/2015 10:50
b-BHC	ND	0.0050	5	05/22/2015 10:50
d-BHC	ND	0.0050	5	05/22/2015 10:50
g-BHC	ND	0.0050	5	05/22/2015 10:50
Chlordane (Technical)	ND	0.12	5	05/22/2015 10:50
a-Chlordane	ND	0.0050	5	05/22/2015 10:50
g-Chlordane	ND	0.0050	5	05/22/2015 10:50
p,p-DDD	ND	0.0050	5	05/22/2015 10:50
p,p-DDE	ND	0.0050	5	05/22/2015 10:50
p,p-DDT	ND	0.0050	5	05/22/2015 10:50
Dieldrin	ND	0.0050	5	05/22/2015 10:50
Endosulfan I	ND	0.0050	5	05/22/2015 10:50
Endosulfan II	ND	0.0050	5	05/22/2015 10:50
Endosulfan sulfate	ND	0.0050	5	05/22/2015 10:50
Endrin	ND	0.0050	5	05/22/2015 10:50
Endrin aldehyde	ND	0.0050	5	05/22/2015 10:50
Endrin ketone	ND	0.0050	5	05/22/2015 10:50
Heptachlor	ND	0.0050	5	05/22/2015 10:50
Heptachlor epoxide	ND	0.0050	5	05/22/2015 10:50
Hexachlorobenzene	ND	0.050	5	05/22/2015 10:50
Hexachlorocyclopentadiene	ND	0.10	5	05/22/2015 10:50
Methoxychlor	ND	0.0050	5	05/22/2015 10:50
Toxaphene	ND	0.25	5	05/22/2015 10:50
Aroclor1016	ND	0.25	5	05/22/2015 10:50
Aroclor1221	ND	0.25	5	05/22/2015 10:50
Aroclor1232	ND	0.25	5	05/22/2015 10:50
Aroclor1242	ND	0.25	5	05/22/2015 10:50
Aroclor1248	ND	0.25	5	05/22/2015 10:50
Aroclor1254	ND	0.25	5	05/22/2015 10:50
Aroclor1260	ND	0.25	5	05/22/2015 10:50
PCBs, total	ND	0.25	5	05/22/2015 10:50

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	130	70-130	05/22/2015 10:50

Analyst(s): CK

Analytical Comments: a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC23	105157

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 14:37
a-BHC	ND	0.0010	1	05/22/2015 14:37
b-BHC	ND	0.0010	1	05/22/2015 14:37
d-BHC	ND	0.0010	1	05/22/2015 14:37
g-BHC	ND	0.0010	1	05/22/2015 14:37
Chlordane (Technical)	ND	0.025	1	05/22/2015 14:37
a-Chlordane	ND	0.0010	1	05/22/2015 14:37
g-Chlordane	ND	0.0010	1	05/22/2015 14:37
p,p-DDD	ND	0.0010	1	05/22/2015 14:37
p,p-DDE	ND	0.0010	1	05/22/2015 14:37
p,p-DDT	ND	0.0010	1	05/22/2015 14:37
Dieldrin	ND	0.0010	1	05/22/2015 14:37
Endosulfan I	ND	0.0010	1	05/22/2015 14:37
Endosulfan II	ND	0.0010	1	05/22/2015 14:37
Endosulfan sulfate	ND	0.0010	1	05/22/2015 14:37
Endrin	ND	0.0010	1	05/22/2015 14:37
Endrin aldehyde	ND	0.0010	1	05/22/2015 14:37
Endrin ketone	ND	0.0010	1	05/22/2015 14:37
Heptachlor	ND	0.0010	1	05/22/2015 14:37
Heptachlor epoxide	ND	0.0010	1	05/22/2015 14:37
Hexachlorobenzene	ND	0.010	1	05/22/2015 14:37
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 14:37
Methoxychlor	ND	0.0010	1	05/22/2015 14:37
Toxaphene	ND	0.050	1	05/22/2015 14:37
Aroclor1016	ND	0.050	1	05/22/2015 14:37
Aroclor1221	ND	0.050	1	05/22/2015 14:37
Aroclor1232	ND	0.050	1	05/22/2015 14:37
Aroclor1242	ND	0.050	1	05/22/2015 14:37
Aroclor1248	ND	0.050	1	05/22/2015 14:37
Aroclor1254	ND	0.050	1	05/22/2015 14:37
Aroclor1260	ND	0.050	1	05/22/2015 14:37
PCBs, total	ND	0.050	1	05/22/2015 14:37

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	118	70-130	05/22/2015 14:37

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC23	105157

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 13:59
a-BHC	ND	0.0010	1	05/22/2015 13:59
b-BHC	ND	0.0010	1	05/22/2015 13:59
d-BHC	ND	0.0010	1	05/22/2015 13:59
g-BHC	ND	0.0010	1	05/22/2015 13:59
Chlordane (Technical)	ND	0.025	1	05/22/2015 13:59
a-Chlordane	ND	0.0010	1	05/22/2015 13:59
g-Chlordane	ND	0.0010	1	05/22/2015 13:59
p,p-DDD	ND	0.0010	1	05/22/2015 13:59
p,p-DDE	ND	0.0010	1	05/22/2015 13:59
p,p-DDT	ND	0.0010	1	05/22/2015 13:59
Dieldrin	ND	0.0010	1	05/22/2015 13:59
Endosulfan I	ND	0.0010	1	05/22/2015 13:59
Endosulfan II	ND	0.0010	1	05/22/2015 13:59
Endosulfan sulfate	ND	0.0010	1	05/22/2015 13:59
Endrin	ND	0.0010	1	05/22/2015 13:59
Endrin aldehyde	ND	0.0010	1	05/22/2015 13:59
Endrin ketone	ND	0.0010	1	05/22/2015 13:59
Heptachlor	ND	0.0010	1	05/22/2015 13:59
Heptachlor epoxide	ND	0.0010	1	05/22/2015 13:59
Hexachlorobenzene	ND	0.010	1	05/22/2015 13:59
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 13:59
Methoxychlor	ND	0.0010	1	05/22/2015 13:59
Toxaphene	ND	0.050	1	05/22/2015 13:59
Aroclor1016	ND	0.050	1	05/22/2015 13:59
Aroclor1221	ND	0.050	1	05/22/2015 13:59
Aroclor1232	ND	0.050	1	05/22/2015 13:59
Aroclor1242	ND	0.050	1	05/22/2015 13:59
Aroclor1248	ND	0.050	1	05/22/2015 13:59
Aroclor1254	ND	0.050	1	05/22/2015 13:59
Aroclor1260	ND	0.050	1	05/22/2015 13:59
PCBs, total	ND	0.050	1	05/22/2015 13:59

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	120	70-130	05/22/2015 13:59

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC23	105157

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 13:21
a-BHC	ND	0.0010	1	05/22/2015 13:21
b-BHC	ND	0.0010	1	05/22/2015 13:21
d-BHC	ND	0.0010	1	05/22/2015 13:21
g-BHC	ND	0.0010	1	05/22/2015 13:21
Chlordane (Technical)	ND	0.025	1	05/22/2015 13:21
a-Chlordane	ND	0.0010	1	05/22/2015 13:21
g-Chlordane	ND	0.0010	1	05/22/2015 13:21
p,p-DDD	ND	0.0010	1	05/22/2015 13:21
p,p-DDE	ND	0.0010	1	05/22/2015 13:21
p,p-DDT	ND	0.0010	1	05/22/2015 13:21
Dieldrin	ND	0.0010	1	05/22/2015 13:21
Endosulfan I	ND	0.0010	1	05/22/2015 13:21
Endosulfan II	ND	0.0010	1	05/22/2015 13:21
Endosulfan sulfate	ND	0.0010	1	05/22/2015 13:21
Endrin	ND	0.0010	1	05/22/2015 13:21
Endrin aldehyde	ND	0.0010	1	05/22/2015 13:21
Endrin ketone	ND	0.0010	1	05/22/2015 13:21
Heptachlor	ND	0.0010	1	05/22/2015 13:21
Heptachlor epoxide	ND	0.0010	1	05/22/2015 13:21
Hexachlorobenzene	ND	0.010	1	05/22/2015 13:21
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 13:21
Methoxychlor	ND	0.0010	1	05/22/2015 13:21
Toxaphene	ND	0.050	1	05/22/2015 13:21
Aroclor1016	ND	0.050	1	05/22/2015 13:21
Aroclor1221	ND	0.050	1	05/22/2015 13:21
Aroclor1232	ND	0.050	1	05/22/2015 13:21
Aroclor1242	ND	0.050	1	05/22/2015 13:21
Aroclor1248	ND	0.050	1	05/22/2015 13:21
Aroclor1254	ND	0.050	1	05/22/2015 13:21
Aroclor1260	ND	0.050	1	05/22/2015 13:21
PCBs, total	ND	0.050	1	05/22/2015 13:21

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	117	70-130	05/22/2015 13:21

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 02:27
a-BHC	ND	0.0010	1	05/22/2015 02:27
b-BHC	ND	0.0010	1	05/22/2015 02:27
d-BHC	ND	0.0010	1	05/22/2015 02:27
g-BHC	ND	0.0010	1	05/22/2015 02:27
Chlordane (Technical)	ND	0.025	1	05/22/2015 02:27
a-Chlordane	ND	0.0010	1	05/22/2015 02:27
g-Chlordane	ND	0.0010	1	05/22/2015 02:27
p,p-DDD	ND	0.0010	1	05/22/2015 02:27
p,p-DDE	ND	0.0010	1	05/22/2015 02:27
p,p-DDT	ND	0.0010	1	05/22/2015 02:27
Dieldrin	ND	0.0010	1	05/22/2015 02:27
Endosulfan I	ND	0.0010	1	05/22/2015 02:27
Endosulfan II	ND	0.0010	1	05/22/2015 02:27
Endosulfan sulfate	ND	0.0010	1	05/22/2015 02:27
Endrin	ND	0.0010	1	05/22/2015 02:27
Endrin aldehyde	ND	0.0010	1	05/22/2015 02:27
Endrin ketone	ND	0.0010	1	05/22/2015 02:27
Heptachlor	ND	0.0010	1	05/22/2015 02:27
Heptachlor epoxide	ND	0.0010	1	05/22/2015 02:27
Hexachlorobenzene	ND	0.010	1	05/22/2015 02:27
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 02:27
Methoxychlor	ND	0.0010	1	05/22/2015 02:27
Toxaphene	ND	0.050	1	05/22/2015 02:27
Aroclor1016	ND	0.050	1	05/22/2015 02:27
Aroclor1221	ND	0.050	1	05/22/2015 02:27
Aroclor1232	ND	0.050	1	05/22/2015 02:27
Aroclor1242	ND	0.050	1	05/22/2015 02:27
Aroclor1248	ND	0.050	1	05/22/2015 02:27
Aroclor1254	ND	0.050	1	05/22/2015 02:27
Aroclor1260	ND	0.050	1	05/22/2015 02:27
PCBs, total	ND	0.050	1	05/22/2015 02:27
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>		
Decachlorobiphenyl	75	70-130		05/22/2015 02:27

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 08:43
a-BHC	ND	0.0010	1	05/22/2015 08:43
b-BHC	ND	0.0010	1	05/22/2015 08:43
d-BHC	ND	0.0010	1	05/22/2015 08:43
g-BHC	ND	0.0010	1	05/22/2015 08:43
Chlordane (Technical)	ND	0.025	1	05/22/2015 08:43
a-Chlordane	ND	0.0010	1	05/22/2015 08:43
g-Chlordane	ND	0.0010	1	05/22/2015 08:43
p,p-DDD	ND	0.0010	1	05/22/2015 08:43
p,p-DDE	ND	0.0010	1	05/22/2015 08:43
p,p-DDT	ND	0.0010	1	05/22/2015 08:43
Dieldrin	ND	0.0010	1	05/22/2015 08:43
Endosulfan I	ND	0.0010	1	05/22/2015 08:43
Endosulfan II	ND	0.0010	1	05/22/2015 08:43
Endosulfan sulfate	ND	0.0010	1	05/22/2015 08:43
Endrin	ND	0.0010	1	05/22/2015 08:43
Endrin aldehyde	ND	0.0010	1	05/22/2015 08:43
Endrin ketone	ND	0.0010	1	05/22/2015 08:43
Heptachlor	ND	0.0010	1	05/22/2015 08:43
Heptachlor epoxide	ND	0.0010	1	05/22/2015 08:43
Hexachlorobenzene	ND	0.010	1	05/22/2015 08:43
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 08:43
Methoxychlor	ND	0.0010	1	05/22/2015 08:43
Toxaphene	ND	0.050	1	05/22/2015 08:43
Aroclor1016	ND	0.050	1	05/22/2015 08:43
Aroclor1221	ND	0.050	1	05/22/2015 08:43
Aroclor1232	ND	0.050	1	05/22/2015 08:43
Aroclor1242	ND	0.050	1	05/22/2015 08:43
Aroclor1248	ND	0.050	1	05/22/2015 08:43
Aroclor1254	ND	0.050	1	05/22/2015 08:43
Aroclor1260	ND	0.050	1	05/22/2015 08:43
PCBs, total	ND	0.050	1	05/22/2015 08:43

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	84	70-130	05/22/2015 08:43

Analyst(s): CK

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 04:13
a-BHC	ND	0.0010	1	05/22/2015 04:13
b-BHC	ND	0.0010	1	05/22/2015 04:13
d-BHC	ND	0.0010	1	05/22/2015 04:13
g-BHC	ND	0.0010	1	05/22/2015 04:13
Chlordane (Technical)	ND	0.025	1	05/22/2015 04:13
a-Chlordane	ND	0.0010	1	05/22/2015 04:13
g-Chlordane	ND	0.0010	1	05/22/2015 04:13
p,p-DDD	ND	0.0010	1	05/22/2015 04:13
p,p-DDE	ND	0.0010	1	05/22/2015 04:13
p,p-DDT	ND	0.0010	1	05/22/2015 04:13
Dieldrin	ND	0.0010	1	05/22/2015 04:13
Endosulfan I	ND	0.0010	1	05/22/2015 04:13
Endosulfan II	ND	0.0010	1	05/22/2015 04:13
Endosulfan sulfate	ND	0.0010	1	05/22/2015 04:13
Endrin	ND	0.0010	1	05/22/2015 04:13
Endrin aldehyde	ND	0.0010	1	05/22/2015 04:13
Endrin ketone	ND	0.0010	1	05/22/2015 04:13
Heptachlor	ND	0.0010	1	05/22/2015 04:13
Heptachlor epoxide	ND	0.0010	1	05/22/2015 04:13
Hexachlorobenzene	ND	0.010	1	05/22/2015 04:13
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 04:13
Methoxychlor	ND	0.0010	1	05/22/2015 04:13
Toxaphene	ND	0.050	1	05/22/2015 04:13
Aroclor1016	ND	0.050	1	05/22/2015 04:13
Aroclor1221	ND	0.050	1	05/22/2015 04:13
Aroclor1232	ND	0.050	1	05/22/2015 04:13
Aroclor1242	ND	0.050	1	05/22/2015 04:13
Aroclor1248	ND	0.050	1	05/22/2015 04:13
Aroclor1254	ND	0.050	1	05/22/2015 04:13
Aroclor1260	ND	0.050	1	05/22/2015 04:13
PCBs, total	ND	0.050	1	05/22/2015 04:13

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	90	70-130	05/22/2015 04:13

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 15:14
a-BHC	ND	0.0010	1	05/22/2015 15:14
b-BHC	ND	0.0010	1	05/22/2015 15:14
d-BHC	ND	0.0010	1	05/22/2015 15:14
g-BHC	ND	0.0010	1	05/22/2015 15:14
Chlordane (Technical)	ND	0.025	1	05/22/2015 15:14
a-Chlordane	ND	0.0010	1	05/22/2015 15:14
g-Chlordane	ND	0.0010	1	05/22/2015 15:14
p,p-DDD	ND	0.0010	1	05/22/2015 15:14
p,p-DDE	ND	0.0010	1	05/22/2015 15:14
p,p-DDT	ND	0.0010	1	05/22/2015 15:14
Dieldrin	ND	0.0010	1	05/22/2015 15:14
Endosulfan I	ND	0.0010	1	05/22/2015 15:14
Endosulfan II	ND	0.0010	1	05/22/2015 15:14
Endosulfan sulfate	ND	0.0010	1	05/22/2015 15:14
Endrin	ND	0.0010	1	05/22/2015 15:14
Endrin aldehyde	ND	0.0010	1	05/22/2015 15:14
Endrin ketone	ND	0.0010	1	05/22/2015 15:14
Heptachlor	ND	0.0010	1	05/22/2015 15:14
Heptachlor epoxide	ND	0.0010	1	05/22/2015 15:14
Hexachlorobenzene	ND	0.010	1	05/22/2015 15:14
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 15:14
Methoxychlor	ND	0.0010	1	05/22/2015 15:14
Toxaphene	ND	0.050	1	05/22/2015 15:14
Aroclor1016	ND	0.050	1	05/22/2015 15:14
Aroclor1221	ND	0.050	1	05/22/2015 15:14
Aroclor1232	ND	0.050	1	05/22/2015 15:14
Aroclor1242	ND	0.050	1	05/22/2015 15:14
Aroclor1248	ND	0.050	1	05/22/2015 15:14
Aroclor1254	ND	0.050	1	05/22/2015 15:14
Aroclor1260	ND	0.050	1	05/22/2015 15:14
PCBs, total	ND	0.050	1	05/22/2015 15:14

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	118	70-130	05/22/2015 15:14

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 11:28
a-BHC	ND	0.0010	1	05/22/2015 11:28
b-BHC	ND	0.0010	1	05/22/2015 11:28
d-BHC	ND	0.0010	1	05/22/2015 11:28
g-BHC	ND	0.0010	1	05/22/2015 11:28
Chlordane (Technical)	ND	0.025	1	05/22/2015 11:28
a-Chlordane	ND	0.0010	1	05/22/2015 11:28
g-Chlordane	ND	0.0010	1	05/22/2015 11:28
p,p-DDD	ND	0.0010	1	05/22/2015 11:28
p,p-DDE	ND	0.0010	1	05/22/2015 11:28
p,p-DDT	ND	0.0010	1	05/22/2015 11:28
Dieldrin	ND	0.0010	1	05/22/2015 11:28
Endosulfan I	ND	0.0010	1	05/22/2015 11:28
Endosulfan II	ND	0.0010	1	05/22/2015 11:28
Endosulfan sulfate	ND	0.0010	1	05/22/2015 11:28
Endrin	ND	0.0010	1	05/22/2015 11:28
Endrin aldehyde	ND	0.0010	1	05/22/2015 11:28
Endrin ketone	ND	0.0010	1	05/22/2015 11:28
Heptachlor	ND	0.0010	1	05/22/2015 11:28
Heptachlor epoxide	ND	0.0010	1	05/22/2015 11:28
Hexachlorobenzene	ND	0.010	1	05/22/2015 11:28
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 11:28
Methoxychlor	ND	0.0010	1	05/22/2015 11:28
Toxaphene	ND	0.050	1	05/22/2015 11:28
Aroclor1016	ND	0.050	1	05/22/2015 11:28
Aroclor1221	ND	0.050	1	05/22/2015 11:28
Aroclor1232	ND	0.050	1	05/22/2015 11:28
Aroclor1242	ND	0.050	1	05/22/2015 11:28
Aroclor1248	ND	0.050	1	05/22/2015 11:28
Aroclor1254	ND	0.050	1	05/22/2015 11:28
Aroclor1260	ND	0.050	1	05/22/2015 11:28
PCBs, total	ND	0.050	1	05/22/2015 11:28
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>		
Decachlorobiphenyl	117	70-130		05/22/2015 11:28

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 12:06
a-BHC	ND	0.0010	1	05/22/2015 12:06
b-BHC	ND	0.0010	1	05/22/2015 12:06
d-BHC	ND	0.0010	1	05/22/2015 12:06
g-BHC	ND	0.0010	1	05/22/2015 12:06
Chlordane (Technical)	ND	0.025	1	05/22/2015 12:06
a-Chlordane	ND	0.0010	1	05/22/2015 12:06
g-Chlordane	ND	0.0010	1	05/22/2015 12:06
p,p-DDD	ND	0.0010	1	05/22/2015 12:06
p,p-DDE	ND	0.0010	1	05/22/2015 12:06
p,p-DDT	ND	0.0010	1	05/22/2015 12:06
Dieldrin	ND	0.0010	1	05/22/2015 12:06
Endosulfan I	ND	0.0010	1	05/22/2015 12:06
Endosulfan II	ND	0.0010	1	05/22/2015 12:06
Endosulfan sulfate	ND	0.0010	1	05/22/2015 12:06
Endrin	ND	0.0010	1	05/22/2015 12:06
Endrin aldehyde	ND	0.0010	1	05/22/2015 12:06
Endrin ketone	ND	0.0010	1	05/22/2015 12:06
Heptachlor	ND	0.0010	1	05/22/2015 12:06
Heptachlor epoxide	ND	0.0010	1	05/22/2015 12:06
Hexachlorobenzene	ND	0.010	1	05/22/2015 12:06
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 12:06
Methoxychlor	ND	0.0010	1	05/22/2015 12:06
Toxaphene	ND	0.050	1	05/22/2015 12:06
Aroclor1016	ND	0.050	1	05/22/2015 12:06
Aroclor1221	ND	0.050	1	05/22/2015 12:06
Aroclor1232	ND	0.050	1	05/22/2015 12:06
Aroclor1242	ND	0.050	1	05/22/2015 12:06
Aroclor1248	ND	0.050	1	05/22/2015 12:06
Aroclor1254	ND	0.050	1	05/22/2015 12:06
Aroclor1260	ND	0.050	1	05/22/2015 12:06
PCBs, total	ND	0.050	1	05/22/2015 12:06

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	116	70-130	05/22/2015 12:06

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.020	20	05/22/2015 06:28
a-BHC	ND	0.020	20	05/22/2015 06:28
b-BHC	ND	0.020	20	05/22/2015 06:28
d-BHC	ND	0.020	20	05/22/2015 06:28
g-BHC	ND	0.020	20	05/22/2015 06:28
Chlordane (Technical)	ND	0.50	20	05/22/2015 06:28
a-Chlordane	ND	0.020	20	05/22/2015 06:28
g-Chlordane	ND	0.020	20	05/22/2015 06:28
p,p-DDD	ND	0.020	20	05/22/2015 06:28
p,p-DDE	ND	0.020	20	05/22/2015 06:28
p,p-DDT	ND	0.020	20	05/22/2015 06:28
Dieldrin	ND	0.020	20	05/22/2015 06:28
Endosulfan I	ND	0.020	20	05/22/2015 06:28
Endosulfan II	ND	0.020	20	05/22/2015 06:28
Endosulfan sulfate	ND	0.020	20	05/22/2015 06:28
Endrin	ND	0.020	20	05/22/2015 06:28
Endrin aldehyde	ND	0.020	20	05/22/2015 06:28
Endrin ketone	ND	0.020	20	05/22/2015 06:28
Heptachlor	ND	0.020	20	05/22/2015 06:28
Heptachlor epoxide	ND	0.020	20	05/22/2015 06:28
Hexachlorobenzene	ND	0.20	20	05/22/2015 06:28
Hexachlorocyclopentadiene	ND	0.40	20	05/22/2015 06:28
Methoxychlor	ND	0.020	20	05/22/2015 06:28
Toxaphene	ND	1.0	20	05/22/2015 06:28
Aroclor1016	ND	1.0	20	05/22/2015 06:28
Aroclor1221	ND	1.0	20	05/22/2015 06:28
Aroclor1232	ND	1.0	20	05/22/2015 06:28
Aroclor1242	ND	1.0	20	05/22/2015 06:28
Aroclor1248	ND	1.0	20	05/22/2015 06:28
Aroclor1254	ND	1.0	20	05/22/2015 06:28
Aroclor1260	ND	1.0	20	05/22/2015 06:28
PCBs, total	ND	1.0	20	05/22/2015 06:28

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	86	70-130	05/22/2015 06:28

**Analyst(s):** CK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 12:43
a-BHC	ND	0.0010	1	05/22/2015 12:43
b-BHC	ND	0.0010	1	05/22/2015 12:43
d-BHC	ND	0.0010	1	05/22/2015 12:43
g-BHC	ND	0.0010	1	05/22/2015 12:43
Chlordane (Technical)	ND	0.025	1	05/22/2015 12:43
a-Chlordane	ND	0.0010	1	05/22/2015 12:43
g-Chlordane	ND	0.0010	1	05/22/2015 12:43
p,p-DDD	ND	0.0010	1	05/22/2015 12:43
p,p-DDE	ND	0.0010	1	05/22/2015 12:43
p,p-DDT	ND	0.0010	1	05/22/2015 12:43
Dieldrin	ND	0.0010	1	05/22/2015 12:43
Endosulfan I	ND	0.0010	1	05/22/2015 12:43
Endosulfan II	ND	0.0010	1	05/22/2015 12:43
Endosulfan sulfate	ND	0.0010	1	05/22/2015 12:43
Endrin	ND	0.0010	1	05/22/2015 12:43
Endrin aldehyde	ND	0.0010	1	05/22/2015 12:43
Endrin ketone	ND	0.0010	1	05/22/2015 12:43
Heptachlor	ND	0.0010	1	05/22/2015 12:43
Heptachlor epoxide	ND	0.0010	1	05/22/2015 12:43
Hexachlorobenzene	ND	0.010	1	05/22/2015 12:43
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 12:43
Methoxychlor	ND	0.0010	1	05/22/2015 12:43
Toxaphene	ND	0.050	1	05/22/2015 12:43
Aroclor1016	ND	0.050	1	05/22/2015 12:43
Aroclor1221	ND	0.050	1	05/22/2015 12:43
Aroclor1232	ND	0.050	1	05/22/2015 12:43
Aroclor1242	ND	0.050	1	05/22/2015 12:43
Aroclor1248	ND	0.050	1	05/22/2015 12:43
Aroclor1254	ND	0.050	1	05/22/2015 12:43
Aroclor1260	ND	0.050	1	05/22/2015 12:43
PCBs, total	ND	0.050	1	05/22/2015 12:43

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	123	70-130	05/22/2015 12:43

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 06:11
a-BHC	ND	0.0010	1	05/22/2015 06:11
b-BHC	ND	0.0010	1	05/22/2015 06:11
d-BHC	ND	0.0010	1	05/22/2015 06:11
g-BHC	ND	0.0010	1	05/22/2015 06:11
Chlordane (Technical)	ND	0.025	1	05/22/2015 06:11
a-Chlordane	ND	0.0010	1	05/22/2015 06:11
g-Chlordane	ND	0.0010	1	05/22/2015 06:11
p,p-DDD	ND	0.0010	1	05/22/2015 06:11
p,p-DDE	ND	0.0010	1	05/22/2015 06:11
p,p-DDT	ND	0.0010	1	05/22/2015 06:11
Dieldrin	ND	0.0010	1	05/22/2015 06:11
Endosulfan I	ND	0.0010	1	05/22/2015 06:11
Endosulfan II	ND	0.0010	1	05/22/2015 06:11
Endosulfan sulfate	ND	0.0010	1	05/22/2015 06:11
Endrin	ND	0.0010	1	05/22/2015 06:11
Endrin aldehyde	ND	0.0010	1	05/22/2015 06:11
Endrin ketone	ND	0.0010	1	05/22/2015 06:11
Heptachlor	ND	0.0010	1	05/22/2015 06:11
Heptachlor epoxide	ND	0.0010	1	05/22/2015 06:11
Hexachlorobenzene	ND	0.010	1	05/22/2015 06:11
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 06:11
Methoxychlor	ND	0.0010	1	05/22/2015 06:11
Toxaphene	ND	0.050	1	05/22/2015 06:11
Aroclor1016	ND	0.050	1	05/22/2015 06:11
Aroclor1221	ND	0.050	1	05/22/2015 06:11
Aroclor1232	ND	0.050	1	05/22/2015 06:11
Aroclor1242	ND	0.050	1	05/22/2015 06:11
Aroclor1248	ND	0.050	1	05/22/2015 06:11
Aroclor1254	ND	0.050	1	05/22/2015 06:11
Aroclor1260	ND	0.050	1	05/22/2015 06:11
PCBs, total	ND	0.050	1	05/22/2015 06:11

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	118	70-130	05/22/2015 06:11

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.050	50	05/22/2015 07:02
a-BHC	ND	0.050	50	05/22/2015 07:02
b-BHC	ND	0.050	50	05/22/2015 07:02
d-BHC	ND	0.050	50	05/22/2015 07:02
g-BHC	ND	0.050	50	05/22/2015 07:02
Chlordane (Technical)	ND	1.2	50	05/22/2015 07:02
a-Chlordane	ND	0.050	50	05/22/2015 07:02
g-Chlordane	ND	0.050	50	05/22/2015 07:02
p,p-DDD	ND	0.050	50	05/22/2015 07:02
p,p-DDE	ND	0.050	50	05/22/2015 07:02
p,p-DDT	ND	0.050	50	05/22/2015 07:02
Dieldrin	ND	0.050	50	05/22/2015 07:02
Endosulfan I	ND	0.050	50	05/22/2015 07:02
Endosulfan II	ND	0.050	50	05/22/2015 07:02
Endosulfan sulfate	ND	0.050	50	05/22/2015 07:02
Endrin	ND	0.050	50	05/22/2015 07:02
Endrin aldehyde	ND	0.050	50	05/22/2015 07:02
Endrin ketone	ND	0.050	50	05/22/2015 07:02
Heptachlor	ND	0.050	50	05/22/2015 07:02
Heptachlor epoxide	ND	0.050	50	05/22/2015 07:02
Hexachlorobenzene	ND	0.50	50	05/22/2015 07:02
Hexachlorocyclopentadiene	ND	1.0	50	05/22/2015 07:02
Methoxychlor	ND	0.050	50	05/22/2015 07:02
Toxaphene	ND	2.5	50	05/22/2015 07:02
Aroclor1016	ND	2.5	50	05/22/2015 07:02
Aroclor1221	ND	2.5	50	05/22/2015 07:02
Aroclor1232	ND	2.5	50	05/22/2015 07:02
Aroclor1242	ND	2.5	50	05/22/2015 07:02
Aroclor1248	ND	2.5	50	05/22/2015 07:02
Aroclor1254	ND	2.5	50	05/22/2015 07:02
Aroclor1260	ND	2.5	50	05/22/2015 07:02
PCBs, total	ND	2.5	50	05/22/2015 07:02

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	88	70-130	05/22/2015 07:02

**Analyst(s):** CK

**Analytical Comments:** a3

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 09:17
a-BHC	ND	0.0010	1	05/22/2015 09:17
b-BHC	ND	0.0010	1	05/22/2015 09:17
d-BHC	ND	0.0010	1	05/22/2015 09:17
g-BHC	ND	0.0010	1	05/22/2015 09:17
Chlordane (Technical)	ND	0.025	1	05/22/2015 09:17
a-Chlordane	ND	0.0010	1	05/22/2015 09:17
g-Chlordane	ND	0.0010	1	05/22/2015 09:17
p,p-DDD	ND	0.0010	1	05/22/2015 09:17
p,p-DDE	ND	0.0010	1	05/22/2015 09:17
p,p-DDT	ND	0.0010	1	05/22/2015 09:17
Dieldrin	ND	0.0010	1	05/22/2015 09:17
Endosulfan I	ND	0.0010	1	05/22/2015 09:17
Endosulfan II	ND	0.0010	1	05/22/2015 09:17
Endosulfan sulfate	ND	0.0010	1	05/22/2015 09:17
Endrin	ND	0.0010	1	05/22/2015 09:17
Endrin aldehyde	ND	0.0010	1	05/22/2015 09:17
Endrin ketone	ND	0.0010	1	05/22/2015 09:17
Heptachlor	ND	0.0010	1	05/22/2015 09:17
Heptachlor epoxide	ND	0.0010	1	05/22/2015 09:17
Hexachlorobenzene	ND	0.010	1	05/22/2015 09:17
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 09:17
Methoxychlor	ND	0.0010	1	05/22/2015 09:17
Toxaphene	ND	0.050	1	05/22/2015 09:17
Aroclor1016	ND	0.050	1	05/22/2015 09:17
Aroclor1221	ND	0.050	1	05/22/2015 09:17
Aroclor1232	ND	0.050	1	05/22/2015 09:17
Aroclor1242	ND	0.050	1	05/22/2015 09:17
Aroclor1248	ND	0.050	1	05/22/2015 09:17
Aroclor1254	ND	0.050	1	05/22/2015 09:17
Aroclor1260	ND	0.050	1	05/22/2015 09:17
PCBs, total	ND	0.050	1	05/22/2015 09:17

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	86	70-130	05/22/2015 09:17

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 04:19
a-BHC	ND	0.0010	1	05/22/2015 04:19
b-BHC	ND	0.0010	1	05/22/2015 04:19
d-BHC	ND	0.0010	1	05/22/2015 04:19
g-BHC	ND	0.0010	1	05/22/2015 04:19
Chlordane (Technical)	ND	0.025	1	05/22/2015 04:19
a-Chlordane	ND	0.0010	1	05/22/2015 04:19
g-Chlordane	ND	0.0010	1	05/22/2015 04:19
p,p-DDD	ND	0.0010	1	05/22/2015 04:19
p,p-DDE	ND	0.0010	1	05/22/2015 04:19
p,p-DDT	ND	0.0010	1	05/22/2015 04:19
Dieldrin	ND	0.0010	1	05/22/2015 04:19
Endosulfan I	ND	0.0010	1	05/22/2015 04:19
Endosulfan II	ND	0.0010	1	05/22/2015 04:19
Endosulfan sulfate	ND	0.0010	1	05/22/2015 04:19
Endrin	ND	0.0010	1	05/22/2015 04:19
Endrin aldehyde	ND	0.0010	1	05/22/2015 04:19
Endrin ketone	ND	0.0010	1	05/22/2015 04:19
Heptachlor	ND	0.0010	1	05/22/2015 04:19
Heptachlor epoxide	ND	0.0010	1	05/22/2015 04:19
Hexachlorobenzene	ND	0.010	1	05/22/2015 04:19
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 04:19
Methoxychlor	ND	0.0010	1	05/22/2015 04:19
Toxaphene	ND	0.050	1	05/22/2015 04:19
Aroclor1016	ND	0.050	1	05/22/2015 04:19
Aroclor1221	ND	0.050	1	05/22/2015 04:19
Aroclor1232	ND	0.050	1	05/22/2015 04:19
Aroclor1242	ND	0.050	1	05/22/2015 04:19
Aroclor1248	ND	0.050	1	05/22/2015 04:19
Aroclor1254	ND	0.050	1	05/22/2015 04:19
Aroclor1260	ND	0.050	1	05/22/2015 04:19
PCBs, total	ND	0.050	1	05/22/2015 04:19
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>		
Decachlorobiphenyl	74	70-130		05/22/2015 04:19

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	05/22/2015 05:21
a-BHC	ND	0.0050	5	05/22/2015 05:21
b-BHC	ND	0.0050	5	05/22/2015 05:21
d-BHC	ND	0.0050	5	05/22/2015 05:21
g-BHC	ND	0.0050	5	05/22/2015 05:21
Chlordane (Technical)	ND	0.12	5	05/22/2015 05:21
a-Chlordane	ND	0.0050	5	05/22/2015 05:21
g-Chlordane	ND	0.0050	5	05/22/2015 05:21
p,p-DDD	ND	0.0050	5	05/22/2015 05:21
p,p-DDE	ND	0.0050	5	05/22/2015 05:21
p,p-DDT	ND	0.0050	5	05/22/2015 05:21
Dieldrin	ND	0.0050	5	05/22/2015 05:21
Endosulfan I	ND	0.0050	5	05/22/2015 05:21
Endosulfan II	ND	0.0050	5	05/22/2015 05:21
Endosulfan sulfate	ND	0.0050	5	05/22/2015 05:21
Endrin	ND	0.0050	5	05/22/2015 05:21
Endrin aldehyde	ND	0.0050	5	05/22/2015 05:21
Endrin ketone	ND	0.0050	5	05/22/2015 05:21
Heptachlor	ND	0.0050	5	05/22/2015 05:21
Heptachlor epoxide	ND	0.0050	5	05/22/2015 05:21
Hexachlorobenzene	ND	0.050	5	05/22/2015 05:21
Hexachlorocyclopentadiene	ND	0.10	5	05/22/2015 05:21
Methoxychlor	ND	0.0050	5	05/22/2015 05:21
Toxaphene	ND	0.25	5	05/22/2015 05:21
Aroclor1016	ND	0.25	5	05/22/2015 05:21
Aroclor1221	ND	0.25	5	05/22/2015 05:21
Aroclor1232	ND	0.25	5	05/22/2015 05:21
Aroclor1242	ND	0.25	5	05/22/2015 05:21
Aroclor1248	ND	0.25	5	05/22/2015 05:21
Aroclor1254	ND	0.25	5	05/22/2015 05:21
Aroclor1260	ND	0.25	5	05/22/2015 05:21
PCBs, total	ND	0.25	5	05/22/2015 05:21

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	82	70-130	05/22/2015 05:21

**Analyst(s):** CK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 04:56
a-BHC	ND	0.0010	1	05/22/2015 04:56
b-BHC	ND	0.0010	1	05/22/2015 04:56
d-BHC	ND	0.0010	1	05/22/2015 04:56
g-BHC	ND	0.0010	1	05/22/2015 04:56
Chlordane (Technical)	ND	0.025	1	05/22/2015 04:56
a-Chlordane	ND	0.0010	1	05/22/2015 04:56
g-Chlordane	ND	0.0010	1	05/22/2015 04:56
p,p-DDD	ND	0.0010	1	05/22/2015 04:56
p,p-DDE	ND	0.0010	1	05/22/2015 04:56
p,p-DDT	ND	0.0010	1	05/22/2015 04:56
Dieldrin	ND	0.0010	1	05/22/2015 04:56
Endosulfan I	ND	0.0010	1	05/22/2015 04:56
Endosulfan II	ND	0.0010	1	05/22/2015 04:56
Endosulfan sulfate	ND	0.0010	1	05/22/2015 04:56
Endrin	ND	0.0010	1	05/22/2015 04:56
Endrin aldehyde	ND	0.0010	1	05/22/2015 04:56
Endrin ketone	ND	0.0010	1	05/22/2015 04:56
Heptachlor	ND	0.0010	1	05/22/2015 04:56
Heptachlor epoxide	ND	0.0010	1	05/22/2015 04:56
Hexachlorobenzene	ND	0.010	1	05/22/2015 04:56
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 04:56
Methoxychlor	ND	0.0010	1	05/22/2015 04:56
Toxaphene	ND	0.050	1	05/22/2015 04:56
Aroclor1016	ND	0.050	1	05/22/2015 04:56
Aroclor1221	ND	0.050	1	05/22/2015 04:56
Aroclor1232	ND	0.050	1	05/22/2015 04:56
Aroclor1242	ND	0.050	1	05/22/2015 04:56
Aroclor1248	ND	0.050	1	05/22/2015 04:56
Aroclor1254	ND	0.050	1	05/22/2015 04:56
Aroclor1260	ND	0.050	1	05/22/2015 04:56
PCBs, total	ND	0.050	1	05/22/2015 04:56
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>		
Decachlorobiphenyl	76	70-130		05/22/2015 04:56

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 05:34
a-BHC	ND	0.0010	1	05/22/2015 05:34
b-BHC	ND	0.0010	1	05/22/2015 05:34
d-BHC	ND	0.0010	1	05/22/2015 05:34
g-BHC	ND	0.0010	1	05/22/2015 05:34
Chlordane (Technical)	ND	0.025	1	05/22/2015 05:34
a-Chlordane	ND	0.0010	1	05/22/2015 05:34
g-Chlordane	ND	0.0010	1	05/22/2015 05:34
p,p-DDD	ND	0.0010	1	05/22/2015 05:34
p,p-DDE	ND	0.0010	1	05/22/2015 05:34
p,p-DDT	ND	0.0010	1	05/22/2015 05:34
Dieldrin	ND	0.0010	1	05/22/2015 05:34
Endosulfan I	ND	0.0010	1	05/22/2015 05:34
Endosulfan II	ND	0.0010	1	05/22/2015 05:34
Endosulfan sulfate	ND	0.0010	1	05/22/2015 05:34
Endrin	ND	0.0010	1	05/22/2015 05:34
Endrin aldehyde	ND	0.0010	1	05/22/2015 05:34
Endrin ketone	ND	0.0010	1	05/22/2015 05:34
Heptachlor	ND	0.0010	1	05/22/2015 05:34
Heptachlor epoxide	ND	0.0010	1	05/22/2015 05:34
Hexachlorobenzene	ND	0.010	1	05/22/2015 05:34
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 05:34
Methoxychlor	ND	0.0010	1	05/22/2015 05:34
Toxaphene	ND	0.050	1	05/22/2015 05:34
Aroclor1016	ND	0.050	1	05/22/2015 05:34
Aroclor1221	ND	0.050	1	05/22/2015 05:34
Aroclor1232	ND	0.050	1	05/22/2015 05:34
Aroclor1242	ND	0.050	1	05/22/2015 05:34
Aroclor1248	ND	0.050	1	05/22/2015 05:34
Aroclor1254	ND	0.050	1	05/22/2015 05:34
Aroclor1260	ND	0.050	1	05/22/2015 05:34
PCBs, total	ND	0.050	1	05/22/2015 05:34

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	73	70-130	05/22/2015 05:34

**Analyst(s):** SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.010	10	05/22/2015 04:47
a-BHC	ND	0.010	10	05/22/2015 04:47
b-BHC	ND	0.010	10	05/22/2015 04:47
d-BHC	ND	0.010	10	05/22/2015 04:47
g-BHC	ND	0.010	10	05/22/2015 04:47
Chlordane (Technical)	ND	0.25	10	05/22/2015 04:47
a-Chlordane	ND	0.010	10	05/22/2015 04:47
g-Chlordane	ND	0.010	10	05/22/2015 04:47
p,p-DDD	ND	0.010	10	05/22/2015 04:47
p,p-DDE	ND	0.010	10	05/22/2015 04:47
p,p-DDT	ND	0.010	10	05/22/2015 04:47
Dieldrin	ND	0.010	10	05/22/2015 04:47
Endosulfan I	ND	0.010	10	05/22/2015 04:47
Endosulfan II	ND	0.010	10	05/22/2015 04:47
Endosulfan sulfate	ND	0.010	10	05/22/2015 04:47
Endrin	ND	0.010	10	05/22/2015 04:47
Endrin aldehyde	ND	0.010	10	05/22/2015 04:47
Endrin ketone	ND	0.010	10	05/22/2015 04:47
Heptachlor	ND	0.010	10	05/22/2015 04:47
Heptachlor epoxide	ND	0.010	10	05/22/2015 04:47
Hexachlorobenzene	ND	0.10	10	05/22/2015 04:47
Hexachlorocyclopentadiene	ND	0.20	10	05/22/2015 04:47
Methoxychlor	ND	0.010	10	05/22/2015 04:47
Toxaphene	ND	0.50	10	05/22/2015 04:47
Aroclor1016	ND	0.50	10	05/22/2015 04:47
Aroclor1221	ND	0.50	10	05/22/2015 04:47
Aroclor1232	ND	0.50	10	05/22/2015 04:47
Aroclor1242	ND	0.50	10	05/22/2015 04:47
Aroclor1248	ND	0.50	10	05/22/2015 04:47
Aroclor1254	ND	0.50	10	05/22/2015 04:47
Aroclor1260	ND	0.50	10	05/22/2015 04:47
PCBs, total	ND	0.50	10	05/22/2015 04:47

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	91	70-130	05/22/2015 04:47

Analyst(s): CK

Analytical Comments: a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC23	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 06:49
a-BHC	ND	0.0010	1	05/22/2015 06:49
b-BHC	ND	0.0010	1	05/22/2015 06:49
d-BHC	ND	0.0010	1	05/22/2015 06:49
g-BHC	ND	0.0010	1	05/22/2015 06:49
Chlordane (Technical)	ND	0.025	1	05/22/2015 06:49
a-Chlordane	ND	0.0010	1	05/22/2015 06:49
g-Chlordane	ND	0.0010	1	05/22/2015 06:49
p,p-DDD	ND	0.0010	1	05/22/2015 06:49
p,p-DDE	ND	0.0010	1	05/22/2015 06:49
p,p-DDT	ND	0.0010	1	05/22/2015 06:49
Dieldrin	ND	0.0010	1	05/22/2015 06:49
Endosulfan I	ND	0.0010	1	05/22/2015 06:49
Endosulfan II	ND	0.0010	1	05/22/2015 06:49
Endosulfan sulfate	ND	0.0010	1	05/22/2015 06:49
Endrin	ND	0.0010	1	05/22/2015 06:49
Endrin aldehyde	ND	0.0010	1	05/22/2015 06:49
Endrin ketone	ND	0.0010	1	05/22/2015 06:49
Heptachlor	ND	0.0010	1	05/22/2015 06:49
Heptachlor epoxide	ND	0.0010	1	05/22/2015 06:49
Hexachlorobenzene	ND	0.010	1	05/22/2015 06:49
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 06:49
Methoxychlor	ND	0.0010	1	05/22/2015 06:49
Toxaphene	ND	0.050	1	05/22/2015 06:49
Aroclor1016	ND	0.050	1	05/22/2015 06:49
Aroclor1221	ND	0.050	1	05/22/2015 06:49
Aroclor1232	ND	0.050	1	05/22/2015 06:49
Aroclor1242	ND	0.050	1	05/22/2015 06:49
Aroclor1248	ND	0.050	1	05/22/2015 06:49
Aroclor1254	ND	0.050	1	05/22/2015 06:49
Aroclor1260	ND	0.050	1	05/22/2015 06:49
PCBs, total	ND	0.050	1	05/22/2015 06:49

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	122	70-130	05/22/2015 06:49

Analyst(s): CK

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0010	1	05/22/2015 08:10
a-BHC	ND	0.0010	1	05/22/2015 08:10
b-BHC	ND	0.0010	1	05/22/2015 08:10
d-BHC	ND	0.0010	1	05/22/2015 08:10
g-BHC	ND	0.0010	1	05/22/2015 08:10
Chlordane (Technical)	ND	0.025	1	05/22/2015 08:10
a-Chlordane	ND	0.0010	1	05/22/2015 08:10
g-Chlordane	ND	0.0010	1	05/22/2015 08:10
p,p-DDD	ND	0.0010	1	05/22/2015 08:10
p,p-DDE	ND	0.0010	1	05/22/2015 08:10
p,p-DDT	ND	0.0010	1	05/22/2015 08:10
Dieldrin	ND	0.0010	1	05/22/2015 08:10
Endosulfan I	ND	0.0010	1	05/22/2015 08:10
Endosulfan II	ND	0.0010	1	05/22/2015 08:10
Endosulfan sulfate	ND	0.0010	1	05/22/2015 08:10
Endrin	ND	0.0010	1	05/22/2015 08:10
Endrin aldehyde	ND	0.0010	1	05/22/2015 08:10
Endrin ketone	ND	0.0010	1	05/22/2015 08:10
Heptachlor	ND	0.0010	1	05/22/2015 08:10
Heptachlor epoxide	ND	0.0010	1	05/22/2015 08:10
Hexachlorobenzene	ND	0.010	1	05/22/2015 08:10
Hexachlorocyclopentadiene	ND	0.020	1	05/22/2015 08:10
Methoxychlor	ND	0.0010	1	05/22/2015 08:10
Toxaphene	ND	0.050	1	05/22/2015 08:10
Aroclor1016	ND	0.050	1	05/22/2015 08:10
Aroclor1221	ND	0.050	1	05/22/2015 08:10
Aroclor1232	ND	0.050	1	05/22/2015 08:10
Aroclor1242	ND	0.050	1	05/22/2015 08:10
Aroclor1248	ND	0.050	1	05/22/2015 08:10
Aroclor1254	ND	0.050	1	05/22/2015 08:10
Aroclor1260	ND	0.050	1	05/22/2015 08:10
PCBs, total	ND	0.050	1	05/22/2015 08:10
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>		
Decachlorobiphenyl	81	70-130		05/22/2015 08:10

Analyst(s): CK

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.050	50	05/22/2015 07:36
a-BHC	ND	0.050	50	05/22/2015 07:36
b-BHC	ND	0.050	50	05/22/2015 07:36
d-BHC	ND	0.050	50	05/22/2015 07:36
g-BHC	ND	0.050	50	05/22/2015 07:36
Chlordane (Technical)	ND	1.2	50	05/22/2015 07:36
a-Chlordane	ND	0.050	50	05/22/2015 07:36
g-Chlordane	ND	0.050	50	05/22/2015 07:36
p,p-DDD	ND	0.050	50	05/22/2015 07:36
p,p-DDE	ND	0.050	50	05/22/2015 07:36
p,p-DDT	ND	0.050	50	05/22/2015 07:36
Dieldrin	ND	0.050	50	05/22/2015 07:36
Endosulfan I	ND	0.050	50	05/22/2015 07:36
Endosulfan II	ND	0.050	50	05/22/2015 07:36
Endosulfan sulfate	ND	0.050	50	05/22/2015 07:36
Endrin	ND	0.050	50	05/22/2015 07:36
Endrin aldehyde	ND	0.050	50	05/22/2015 07:36
Endrin ketone	ND	0.050	50	05/22/2015 07:36
Heptachlor	ND	0.050	50	05/22/2015 07:36
Heptachlor epoxide	ND	0.050	50	05/22/2015 07:36
Hexachlorobenzene	ND	0.50	50	05/22/2015 07:36
Hexachlorocyclopentadiene	ND	1.0	50	05/22/2015 07:36
Methoxychlor	ND	0.050	50	05/22/2015 07:36
Toxaphene	ND	2.5	50	05/22/2015 07:36
Aroclor1016	ND	2.5	50	05/22/2015 07:36
Aroclor1221	ND	2.5	50	05/22/2015 07:36
Aroclor1232	ND	2.5	50	05/22/2015 07:36
Aroclor1242	ND	2.5	50	05/22/2015 07:36
Aroclor1248	ND	2.5	50	05/22/2015 07:36
Aroclor1254	ND	2.5	50	05/22/2015 07:36
Aroclor1260	ND	2.5	50	05/22/2015 07:36
PCBs, total	ND	2.5	50	05/22/2015 07:36

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	78	70-130	05/22/2015 07:36

**Analyst(s):** CK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg

### Organochlorine Pesticides (Basic Target List) + PCBs

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC22	105224

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	05/22/2015 05:55
a-BHC	ND	0.0050	5	05/22/2015 05:55
b-BHC	ND	0.0050	5	05/22/2015 05:55
d-BHC	ND	0.0050	5	05/22/2015 05:55
g-BHC	ND	0.0050	5	05/22/2015 05:55
Chlordane (Technical)	ND	0.12	5	05/22/2015 05:55
a-Chlordane	ND	0.0050	5	05/22/2015 05:55
g-Chlordane	ND	0.0050	5	05/22/2015 05:55
p,p-DDD	ND	0.0050	5	05/22/2015 05:55
p,p-DDE	ND	0.0050	5	05/22/2015 05:55
p,p-DDT	ND	0.0050	5	05/22/2015 05:55
Dieldrin	ND	0.0050	5	05/22/2015 05:55
Endosulfan I	ND	0.0050	5	05/22/2015 05:55
Endosulfan II	ND	0.0050	5	05/22/2015 05:55
Endosulfan sulfate	ND	0.0050	5	05/22/2015 05:55
Endrin	ND	0.0050	5	05/22/2015 05:55
Endrin aldehyde	ND	0.0050	5	05/22/2015 05:55
Endrin ketone	ND	0.0050	5	05/22/2015 05:55
Heptachlor	ND	0.0050	5	05/22/2015 05:55
Heptachlor epoxide	ND	0.0050	5	05/22/2015 05:55
Hexachlorobenzene	ND	0.050	5	05/22/2015 05:55
Hexachlorocyclopentadiene	ND	0.10	5	05/22/2015 05:55
Methoxychlor	ND	0.0050	5	05/22/2015 05:55
Toxaphene	ND	0.25	5	05/22/2015 05:55
Aroclor1016	ND	0.25	5	05/22/2015 05:55
Aroclor1221	ND	0.25	5	05/22/2015 05:55
Aroclor1232	ND	0.25	5	05/22/2015 05:55
Aroclor1242	ND	0.25	5	05/22/2015 05:55
Aroclor1248	ND	0.25	5	05/22/2015 05:55
Aroclor1254	ND	0.25	5	05/22/2015 05:55
Aroclor1260	ND	0.25	5	05/22/2015 05:55
PCBs, total	ND	0.25	5	05/22/2015 05:55

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	80	70-130	05/22/2015 05:55

Analyst(s): CK

Analytical Comments: a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001B	Soil	05/20/2015 07:50	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.19	1	05/22/2015 21:40
tert-Amyl methyl ether (TAME)	ND	0.0097	1	05/22/2015 21:40
Benzene	ND	0.0097	1	05/22/2015 21:40
Bromobenzene	ND	0.0097	1	05/22/2015 21:40
Bromochloromethane	ND	0.0097	1	05/22/2015 21:40
Bromodichloromethane	ND	0.0097	1	05/22/2015 21:40
Bromoform	ND	0.0097	1	05/22/2015 21:40
Bromomethane	ND	0.0097	1	05/22/2015 21:40
2-Butanone (MEK)	ND	0.039	1	05/22/2015 21:40
t-Butyl alcohol (TBA)	ND	0.097	1	05/22/2015 21:40
n-Butyl benzene	ND	0.0097	1	05/22/2015 21:40
sec-Butyl benzene	ND	0.0097	1	05/22/2015 21:40
tert-Butyl benzene	ND	0.0097	1	05/22/2015 21:40
Carbon Disulfide	ND	0.0097	1	05/22/2015 21:40
Carbon Tetrachloride	ND	0.0097	1	05/22/2015 21:40
Chlorobenzene	ND	0.0097	1	05/22/2015 21:40
Chloroethane	ND	0.0097	1	05/22/2015 21:40
Chloroform	ND	0.0097	1	05/22/2015 21:40
Chloromethane	ND	0.0097	1	05/22/2015 21:40
2-Chlorotoluene	ND	0.0097	1	05/22/2015 21:40
4-Chlorotoluene	ND	0.0097	1	05/22/2015 21:40
Dibromochloromethane	ND	0.0097	1	05/22/2015 21:40
1,2-Dibromo-3-chloropropane	ND	0.0077	1	05/22/2015 21:40
1,2-Dibromoethane (EDB)	ND	0.0077	1	05/22/2015 21:40
Dibromomethane	ND	0.0097	1	05/22/2015 21:40
1,2-Dichlorobenzene	ND	0.0097	1	05/22/2015 21:40
1,3-Dichlorobenzene	ND	0.0097	1	05/22/2015 21:40
1,4-Dichlorobenzene	ND	0.0097	1	05/22/2015 21:40
Dichlorodifluoromethane	ND	0.0097	1	05/22/2015 21:40
1,1-Dichloroethane	ND	0.0097	1	05/22/2015 21:40
1,2-Dichloroethane (1,2-DCA)	ND	0.0097	1	05/22/2015 21:40
1,1-Dichloroethene	ND	0.0097	1	05/22/2015 21:40
cis-1,2-Dichloroethene	ND	0.0097	1	05/22/2015 21:40
trans-1,2-Dichloroethene	ND	0.0097	1	05/22/2015 21:40
1,2-Dichloropropane	ND	0.0097	1	05/22/2015 21:40
1,3-Dichloropropane	ND	0.0097	1	05/22/2015 21:40
2,2-Dichloropropane	ND	0.0097	1	05/22/2015 21:40
1,1-Dichloropropene	ND	0.0097	1	05/22/2015 21:40

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001B	Soil	05/20/2015 07:50	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0097	1	05/22/2015 21:40
trans-1,3-Dichloropropene	ND	0.0097	1	05/22/2015 21:40
Diisopropyl ether (DIPE)	ND	0.0097	1	05/22/2015 21:40
Ethylbenzene	ND	0.0097	1	05/22/2015 21:40
Ethyl tert-butyl ether (ETBE)	ND	0.0097	1	05/22/2015 21:40
Freon 113	ND	0.0097	1	05/22/2015 21:40
Hexachlorobutadiene	ND	0.0097	1	05/22/2015 21:40
Hexachloroethane	ND	0.0097	1	05/22/2015 21:40
2-Hexanone	ND	0.0097	1	05/22/2015 21:40
Isopropylbenzene	ND	0.0097	1	05/22/2015 21:40
4-Isopropyl toluene	ND	0.0097	1	05/22/2015 21:40
Methyl-t-butyl ether (MTBE)	ND	0.0097	1	05/22/2015 21:40
Methylene chloride	ND	0.0097	1	05/22/2015 21:40
4-Methyl-2-pentanone (MIBK)	ND	0.0097	1	05/22/2015 21:40
Naphthalene	ND	0.0097	1	05/22/2015 21:40
n-Propyl benzene	ND	0.0097	1	05/22/2015 21:40
Styrene	ND	0.0097	1	05/22/2015 21:40
1,1,1,2-Tetrachloroethane	ND	0.0097	1	05/22/2015 21:40
1,1,2,2-Tetrachloroethane	ND	0.0097	1	05/22/2015 21:40
Tetrachloroethene	ND	0.0097	1	05/22/2015 21:40
Toluene	ND	0.0097	1	05/22/2015 21:40
1,2,3-Trichlorobenzene	ND	0.0097	1	05/22/2015 21:40
1,2,4-Trichlorobenzene	ND	0.0097	1	05/22/2015 21:40
1,1,1-Trichloroethane	ND	0.0097	1	05/22/2015 21:40
1,1,2-Trichloroethane	ND	0.0097	1	05/22/2015 21:40
Trichloroethene	ND	0.0097	1	05/22/2015 21:40
Trichlorofluoromethane	ND	0.0097	1	05/22/2015 21:40
1,2,3-Trichloropropane	ND	0.0097	1	05/22/2015 21:40
1,2,4-Trimethylbenzene	ND	0.0097	1	05/22/2015 21:40
1,3,5-Trimethylbenzene	ND	0.0097	1	05/22/2015 21:40
Vinyl Chloride	ND	0.0097	1	05/22/2015 21:40
Xylenes, Total	ND	0.0097	1	05/22/2015 21:40

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001B	Soil	05/20/2015 07:50	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	83	70-130		05/22/2015 21:40
Toluene-d8	91	70-130		05/22/2015 21:40
4-BFB	91	70-130		05/22/2015 21:40
Benzene-d6	78	60-140		05/22/2015 21:40
Ethylbenzene-d10	91	60-140		05/22/2015 21:40
1,2-DCB-d4	68	60-140		05/22/2015 21:40

Analyst(s): AK

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002B	Soil	05/20/2015 08:05	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/22/2015 22:22
tert-Amyl methyl ether (TAME)	ND	0.0083	1	05/22/2015 22:22
Benzene	ND	0.0083	1	05/22/2015 22:22
Bromobenzene	ND	0.0083	1	05/22/2015 22:22
Bromochloromethane	ND	0.0083	1	05/22/2015 22:22
Bromodichloromethane	ND	0.0083	1	05/22/2015 22:22
Bromoform	ND	0.0083	1	05/22/2015 22:22
Bromomethane	ND	0.0083	1	05/22/2015 22:22
2-Butanone (MEK)	ND	0.033	1	05/22/2015 22:22
t-Butyl alcohol (TBA)	ND	0.083	1	05/22/2015 22:22
n-Butyl benzene	ND	0.0083	1	05/22/2015 22:22
sec-Butyl benzene	ND	0.0083	1	05/22/2015 22:22
tert-Butyl benzene	ND	0.0083	1	05/22/2015 22:22
Carbon Disulfide	ND	0.0083	1	05/22/2015 22:22
Carbon Tetrachloride	ND	0.0083	1	05/22/2015 22:22
Chlorobenzene	ND	0.0083	1	05/22/2015 22:22
Chloroethane	ND	0.0083	1	05/22/2015 22:22
Chloroform	ND	0.0083	1	05/22/2015 22:22
Chloromethane	ND	0.0083	1	05/22/2015 22:22
2-Chlorotoluene	ND	0.0083	1	05/22/2015 22:22
4-Chlorotoluene	ND	0.0083	1	05/22/2015 22:22
Dibromochloromethane	ND	0.0083	1	05/22/2015 22:22
1,2-Dibromo-3-chloropropane	ND	0.0066	1	05/22/2015 22:22
1,2-Dibromoethane (EDB)	ND	0.0066	1	05/22/2015 22:22
Dibromomethane	ND	0.0083	1	05/22/2015 22:22
1,2-Dichlorobenzene	ND	0.0083	1	05/22/2015 22:22
1,3-Dichlorobenzene	ND	0.0083	1	05/22/2015 22:22
1,4-Dichlorobenzene	ND	0.0083	1	05/22/2015 22:22
Dichlorodifluoromethane	ND	0.0083	1	05/22/2015 22:22
1,1-Dichloroethane	ND	0.0083	1	05/22/2015 22:22
1,2-Dichloroethane (1,2-DCA)	ND	0.0083	1	05/22/2015 22:22
1,1-Dichloroethene	ND	0.0083	1	05/22/2015 22:22
cis-1,2-Dichloroethene	ND	0.0083	1	05/22/2015 22:22
trans-1,2-Dichloroethene	ND	0.0083	1	05/22/2015 22:22
1,2-Dichloropropane	ND	0.0083	1	05/22/2015 22:22
1,3-Dichloropropane	ND	0.0083	1	05/22/2015 22:22
2,2-Dichloropropane	ND	0.0083	1	05/22/2015 22:22
1,1-Dichloropropene	ND	0.0083	1	05/22/2015 22:22

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002B	Soil	05/20/2015 08:05	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0083	1	05/22/2015 22:22
trans-1,3-Dichloropropene	ND	0.0083	1	05/22/2015 22:22
Diisopropyl ether (DIPE)	ND	0.0083	1	05/22/2015 22:22
Ethylbenzene	ND	0.0083	1	05/22/2015 22:22
Ethyl tert-butyl ether (ETBE)	ND	0.0083	1	05/22/2015 22:22
Freon 113	ND	0.0083	1	05/22/2015 22:22
Hexachlorobutadiene	ND	0.0083	1	05/22/2015 22:22
Hexachloroethane	ND	0.0083	1	05/22/2015 22:22
2-Hexanone	ND	0.0083	1	05/22/2015 22:22
Isopropylbenzene	ND	0.0083	1	05/22/2015 22:22
4-Isopropyl toluene	ND	0.0083	1	05/22/2015 22:22
Methyl-t-butyl ether (MTBE)	ND	0.0083	1	05/22/2015 22:22
Methylene chloride	ND	0.0083	1	05/22/2015 22:22
4-Methyl-2-pentanone (MIBK)	ND	0.0083	1	05/22/2015 22:22
Naphthalene	ND	0.0083	1	05/22/2015 22:22
n-Propyl benzene	ND	0.0083	1	05/22/2015 22:22
Styrene	ND	0.0083	1	05/22/2015 22:22
1,1,1,2-Tetrachloroethane	ND	0.0083	1	05/22/2015 22:22
1,1,2,2-Tetrachloroethane	ND	0.0083	1	05/22/2015 22:22
Tetrachloroethene	ND	0.0083	1	05/22/2015 22:22
Toluene	ND	0.0083	1	05/22/2015 22:22
1,2,3-Trichlorobenzene	ND	0.0083	1	05/22/2015 22:22
1,2,4-Trichlorobenzene	ND	0.0083	1	05/22/2015 22:22
1,1,1-Trichloroethane	ND	0.0083	1	05/22/2015 22:22
1,1,2-Trichloroethane	ND	0.0083	1	05/22/2015 22:22
Trichloroethene	ND	0.0083	1	05/22/2015 22:22
Trichlorofluoromethane	ND	0.0083	1	05/22/2015 22:22
1,2,3-Trichloropropane	ND	0.0083	1	05/22/2015 22:22
1,2,4-Trimethylbenzene	ND	0.0083	1	05/22/2015 22:22
1,3,5-Trimethylbenzene	ND	0.0083	1	05/22/2015 22:22
Vinyl Chloride	ND	0.0083	1	05/22/2015 22:22
Xylenes, Total	ND	0.0083	1	05/22/2015 22:22

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002B	Soil	05/20/2015 08:05	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	82	70-130		05/22/2015 22:22
Toluene-d8	92	70-130		05/22/2015 22:22
4-BFB	89	70-130		05/22/2015 22:22
Benzene-d6	80	60-140		05/22/2015 22:22
Ethylbenzene-d10	94	60-140		05/22/2015 22:22
1,2-DCB-d4	71	60-140		05/22/2015 22:22

**Analyst(s):** AK

**Analytical Comments:** a9





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003B	Soil	05/20/2015 08:10	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/22/2015 23:04
tert-Amyl methyl ether (TAME)	ND	0.0091	1	05/22/2015 23:04
Benzene	ND	0.0091	1	05/22/2015 23:04
Bromobenzene	ND	0.0091	1	05/22/2015 23:04
Bromochloromethane	ND	0.0091	1	05/22/2015 23:04
Bromodichloromethane	ND	0.0091	1	05/22/2015 23:04
Bromoform	ND	0.0091	1	05/22/2015 23:04
Bromomethane	ND	0.0091	1	05/22/2015 23:04
2-Butanone (MEK)	ND	0.036	1	05/22/2015 23:04
t-Butyl alcohol (TBA)	ND	0.091	1	05/22/2015 23:04
n-Butyl benzene	ND	0.0091	1	05/22/2015 23:04
sec-Butyl benzene	ND	0.0091	1	05/22/2015 23:04
tert-Butyl benzene	ND	0.0091	1	05/22/2015 23:04
Carbon Disulfide	ND	0.0091	1	05/22/2015 23:04
Carbon Tetrachloride	ND	0.0091	1	05/22/2015 23:04
Chlorobenzene	ND	0.0091	1	05/22/2015 23:04
Chloroethane	ND	0.0091	1	05/22/2015 23:04
Chloroform	ND	0.0091	1	05/22/2015 23:04
Chloromethane	ND	0.0091	1	05/22/2015 23:04
2-Chlorotoluene	ND	0.0091	1	05/22/2015 23:04
4-Chlorotoluene	ND	0.0091	1	05/22/2015 23:04
Dibromochloromethane	ND	0.0091	1	05/22/2015 23:04
1,2-Dibromo-3-chloropropane	ND	0.0073	1	05/22/2015 23:04
1,2-Dibromoethane (EDB)	ND	0.0073	1	05/22/2015 23:04
Dibromomethane	ND	0.0091	1	05/22/2015 23:04
1,2-Dichlorobenzene	ND	0.0091	1	05/22/2015 23:04
1,3-Dichlorobenzene	ND	0.0091	1	05/22/2015 23:04
1,4-Dichlorobenzene	ND	0.0091	1	05/22/2015 23:04
Dichlorodifluoromethane	ND	0.0091	1	05/22/2015 23:04
1,1-Dichloroethane	ND	0.0091	1	05/22/2015 23:04
1,2-Dichloroethane (1,2-DCA)	ND	0.0091	1	05/22/2015 23:04
1,1-Dichloroethene	ND	0.0091	1	05/22/2015 23:04
cis-1,2-Dichloroethene	ND	0.0091	1	05/22/2015 23:04
trans-1,2-Dichloroethene	ND	0.0091	1	05/22/2015 23:04
1,2-Dichloropropane	ND	0.0091	1	05/22/2015 23:04
1,3-Dichloropropane	ND	0.0091	1	05/22/2015 23:04
2,2-Dichloropropane	ND	0.0091	1	05/22/2015 23:04
1,1-Dichloropropene	ND	0.0091	1	05/22/2015 23:04

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003B	Soil	05/20/2015 08:10	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0091	1	05/22/2015 23:04
trans-1,3-Dichloropropene	ND	0.0091	1	05/22/2015 23:04
Diisopropyl ether (DIPE)	ND	0.0091	1	05/22/2015 23:04
Ethylbenzene	ND	0.0091	1	05/22/2015 23:04
Ethyl tert-butyl ether (ETBE)	ND	0.0091	1	05/22/2015 23:04
Freon 113	ND	0.0091	1	05/22/2015 23:04
Hexachlorobutadiene	ND	0.0091	1	05/22/2015 23:04
Hexachloroethane	ND	0.0091	1	05/22/2015 23:04
2-Hexanone	ND	0.0091	1	05/22/2015 23:04
Isopropylbenzene	ND	0.0091	1	05/22/2015 23:04
4-Isopropyl toluene	ND	0.0091	1	05/22/2015 23:04
Methyl-t-butyl ether (MTBE)	ND	0.0091	1	05/22/2015 23:04
Methylene chloride	ND	0.0091	1	05/22/2015 23:04
4-Methyl-2-pentanone (MIBK)	ND	0.0091	1	05/22/2015 23:04
Naphthalene	ND	0.0091	1	05/22/2015 23:04
n-Propyl benzene	ND	0.0091	1	05/22/2015 23:04
Styrene	ND	0.0091	1	05/22/2015 23:04
1,1,1,2-Tetrachloroethane	ND	0.0091	1	05/22/2015 23:04
1,1,2,2-Tetrachloroethane	ND	0.0091	1	05/22/2015 23:04
Tetrachloroethene	ND	0.0091	1	05/22/2015 23:04
Toluene	ND	0.0091	1	05/22/2015 23:04
1,2,3-Trichlorobenzene	ND	0.0091	1	05/22/2015 23:04
1,2,4-Trichlorobenzene	ND	0.0091	1	05/22/2015 23:04
1,1,1-Trichloroethane	ND	0.0091	1	05/22/2015 23:04
1,1,2-Trichloroethane	ND	0.0091	1	05/22/2015 23:04
Trichloroethene	ND	0.0091	1	05/22/2015 23:04
Trichlorofluoromethane	ND	0.0091	1	05/22/2015 23:04
1,2,3-Trichloropropane	ND	0.0091	1	05/22/2015 23:04
1,2,4-Trimethylbenzene	ND	0.0091	1	05/22/2015 23:04
1,3,5-Trimethylbenzene	ND	0.0091	1	05/22/2015 23:04
Vinyl Chloride	ND	0.0091	1	05/22/2015 23:04
Xylenes, Total	ND	0.0091	1	05/22/2015 23:04

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003B	Soil	05/20/2015 08:10	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	82	70-130		05/22/2015 23:04
Toluene-d8	92	70-130		05/22/2015 23:04
4-BFB	91	70-130		05/22/2015 23:04
Benzene-d6	83	60-140		05/22/2015 23:04
Ethylbenzene-d10	97	60-140		05/22/2015 23:04
1,2-DCB-d4	74	60-140		05/22/2015 23:04

Analyst(s): AK

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004B	Soil	05/20/2015 08:25	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/22/2015 23:47
tert-Amyl methyl ether (TAME)	ND	0.0091	1	05/22/2015 23:47
Benzene	ND	0.0091	1	05/22/2015 23:47
Bromobenzene	ND	0.0091	1	05/22/2015 23:47
Bromochloromethane	ND	0.0091	1	05/22/2015 23:47
Bromodichloromethane	ND	0.0091	1	05/22/2015 23:47
Bromoform	ND	0.0091	1	05/22/2015 23:47
Bromomethane	ND	0.0091	1	05/22/2015 23:47
2-Butanone (MEK)	ND	0.036	1	05/22/2015 23:47
t-Butyl alcohol (TBA)	ND	0.091	1	05/22/2015 23:47
n-Butyl benzene	ND	0.0091	1	05/22/2015 23:47
sec-Butyl benzene	ND	0.0091	1	05/22/2015 23:47
tert-Butyl benzene	ND	0.0091	1	05/22/2015 23:47
Carbon Disulfide	ND	0.0091	1	05/22/2015 23:47
Carbon Tetrachloride	ND	0.0091	1	05/22/2015 23:47
Chlorobenzene	ND	0.0091	1	05/22/2015 23:47
Chloroethane	ND	0.0091	1	05/22/2015 23:47
Chloroform	ND	0.0091	1	05/22/2015 23:47
Chloromethane	ND	0.0091	1	05/22/2015 23:47
2-Chlorotoluene	ND	0.0091	1	05/22/2015 23:47
4-Chlorotoluene	ND	0.0091	1	05/22/2015 23:47
Dibromochloromethane	ND	0.0091	1	05/22/2015 23:47
1,2-Dibromo-3-chloropropane	ND	0.0073	1	05/22/2015 23:47
1,2-Dibromoethane (EDB)	ND	0.0073	1	05/22/2015 23:47
Dibromomethane	ND	0.0091	1	05/22/2015 23:47
1,2-Dichlorobenzene	ND	0.0091	1	05/22/2015 23:47
1,3-Dichlorobenzene	ND	0.0091	1	05/22/2015 23:47
1,4-Dichlorobenzene	ND	0.0091	1	05/22/2015 23:47
Dichlorodifluoromethane	ND	0.0091	1	05/22/2015 23:47
1,1-Dichloroethane	ND	0.0091	1	05/22/2015 23:47
1,2-Dichloroethane (1,2-DCA)	ND	0.0091	1	05/22/2015 23:47
1,1-Dichloroethene	ND	0.0091	1	05/22/2015 23:47
cis-1,2-Dichloroethene	ND	0.0091	1	05/22/2015 23:47
trans-1,2-Dichloroethene	ND	0.0091	1	05/22/2015 23:47
1,2-Dichloropropane	ND	0.0091	1	05/22/2015 23:47
1,3-Dichloropropane	ND	0.0091	1	05/22/2015 23:47
2,2-Dichloropropane	ND	0.0091	1	05/22/2015 23:47
1,1-Dichloropropene	ND	0.0091	1	05/22/2015 23:47

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004B	Soil	05/20/2015 08:25	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0091	1	05/22/2015 23:47
trans-1,3-Dichloropropene	ND	0.0091	1	05/22/2015 23:47
Diisopropyl ether (DIPE)	ND	0.0091	1	05/22/2015 23:47
Ethylbenzene	ND	0.0091	1	05/22/2015 23:47
Ethyl tert-butyl ether (ETBE)	ND	0.0091	1	05/22/2015 23:47
Freon 113	ND	0.0091	1	05/22/2015 23:47
Hexachlorobutadiene	ND	0.0091	1	05/22/2015 23:47
Hexachloroethane	ND	0.0091	1	05/22/2015 23:47
2-Hexanone	ND	0.0091	1	05/22/2015 23:47
Isopropylbenzene	ND	0.0091	1	05/22/2015 23:47
4-Isopropyl toluene	ND	0.0091	1	05/22/2015 23:47
Methyl-t-butyl ether (MTBE)	ND	0.0091	1	05/22/2015 23:47
Methylene chloride	ND	0.0091	1	05/22/2015 23:47
4-Methyl-2-pentanone (MIBK)	ND	0.0091	1	05/22/2015 23:47
Naphthalene	ND	0.0091	1	05/22/2015 23:47
n-Propyl benzene	ND	0.0091	1	05/22/2015 23:47
Styrene	ND	0.0091	1	05/22/2015 23:47
1,1,1,2-Tetrachloroethane	ND	0.0091	1	05/22/2015 23:47
1,1,2,2-Tetrachloroethane	ND	0.0091	1	05/22/2015 23:47
Tetrachloroethene	ND	0.0091	1	05/22/2015 23:47
Toluene	ND	0.0091	1	05/22/2015 23:47
1,2,3-Trichlorobenzene	ND	0.0091	1	05/22/2015 23:47
1,2,4-Trichlorobenzene	ND	0.0091	1	05/22/2015 23:47
1,1,1-Trichloroethane	ND	0.0091	1	05/22/2015 23:47
1,1,2-Trichloroethane	ND	0.0091	1	05/22/2015 23:47
Trichloroethene	ND	0.0091	1	05/22/2015 23:47
Trichlorofluoromethane	ND	0.0091	1	05/22/2015 23:47
1,2,3-Trichloropropane	ND	0.0091	1	05/22/2015 23:47
1,2,4-Trimethylbenzene	ND	0.0091	1	05/22/2015 23:47
1,3,5-Trimethylbenzene	ND	0.0091	1	05/22/2015 23:47
Vinyl Chloride	ND	0.0091	1	05/22/2015 23:47
Xylenes, Total	ND	0.0091	1	05/22/2015 23:47

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004B	Soil	05/20/2015 08:25	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	82	70-130		05/22/2015 23:47
Toluene-d8	93	70-130		05/22/2015 23:47
4-BFB	88	70-130		05/22/2015 23:47
Benzene-d6	81	60-140		05/22/2015 23:47
Ethylbenzene-d10	94	60-140		05/22/2015 23:47
1,2-DCB-d4	72	60-140		05/22/2015 23:47

Analyst(s): AK

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005B	Soil	05/20/2015 08:35	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 00:29
tert-Amyl methyl ether (TAME)	ND	0.0083	1	05/23/2015 00:29
Benzene	ND	0.0083	1	05/23/2015 00:29
Bromobenzene	ND	0.0083	1	05/23/2015 00:29
Bromochloromethane	ND	0.0083	1	05/23/2015 00:29
Bromodichloromethane	ND	0.0083	1	05/23/2015 00:29
Bromoform	ND	0.0083	1	05/23/2015 00:29
Bromomethane	ND	0.0083	1	05/23/2015 00:29
2-Butanone (MEK)	ND	0.033	1	05/23/2015 00:29
t-Butyl alcohol (TBA)	ND	0.083	1	05/23/2015 00:29
n-Butyl benzene	ND	0.0083	1	05/23/2015 00:29
sec-Butyl benzene	ND	0.0083	1	05/23/2015 00:29
tert-Butyl benzene	ND	0.0083	1	05/23/2015 00:29
Carbon Disulfide	ND	0.0083	1	05/23/2015 00:29
Carbon Tetrachloride	ND	0.0083	1	05/23/2015 00:29
Chlorobenzene	ND	0.0083	1	05/23/2015 00:29
Chloroethane	ND	0.0083	1	05/23/2015 00:29
Chloroform	ND	0.0083	1	05/23/2015 00:29
Chloromethane	ND	0.0083	1	05/23/2015 00:29
2-Chlorotoluene	ND	0.0083	1	05/23/2015 00:29
4-Chlorotoluene	ND	0.0083	1	05/23/2015 00:29
Dibromochloromethane	ND	0.0083	1	05/23/2015 00:29
1,2-Dibromo-3-chloropropane	ND	0.0066	1	05/23/2015 00:29
1,2-Dibromoethane (EDB)	ND	0.0066	1	05/23/2015 00:29
Dibromomethane	ND	0.0083	1	05/23/2015 00:29
1,2-Dichlorobenzene	ND	0.0083	1	05/23/2015 00:29
1,3-Dichlorobenzene	ND	0.0083	1	05/23/2015 00:29
1,4-Dichlorobenzene	ND	0.0083	1	05/23/2015 00:29
Dichlorodifluoromethane	ND	0.0083	1	05/23/2015 00:29
1,1-Dichloroethane	ND	0.0083	1	05/23/2015 00:29
1,2-Dichloroethane (1,2-DCA)	ND	0.0083	1	05/23/2015 00:29
1,1-Dichloroethene	ND	0.0083	1	05/23/2015 00:29
cis-1,2-Dichloroethene	ND	0.0083	1	05/23/2015 00:29
trans-1,2-Dichloroethene	ND	0.0083	1	05/23/2015 00:29
1,2-Dichloropropane	ND	0.0083	1	05/23/2015 00:29
1,3-Dichloropropane	ND	0.0083	1	05/23/2015 00:29
2,2-Dichloropropane	ND	0.0083	1	05/23/2015 00:29
1,1-Dichloropropene	ND	0.0083	1	05/23/2015 00:29

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005B	Soil	05/20/2015 08:35	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0083	1	05/23/2015 00:29
trans-1,3-Dichloropropene	ND	0.0083	1	05/23/2015 00:29
Diisopropyl ether (DIPE)	ND	0.0083	1	05/23/2015 00:29
Ethylbenzene	ND	0.0083	1	05/23/2015 00:29
Ethyl tert-butyl ether (ETBE)	ND	0.0083	1	05/23/2015 00:29
Freon 113	ND	0.0083	1	05/23/2015 00:29
Hexachlorobutadiene	ND	0.0083	1	05/23/2015 00:29
Hexachloroethane	ND	0.0083	1	05/23/2015 00:29
2-Hexanone	ND	0.0083	1	05/23/2015 00:29
Isopropylbenzene	ND	0.0083	1	05/23/2015 00:29
4-Isopropyl toluene	ND	0.0083	1	05/23/2015 00:29
Methyl-t-butyl ether (MTBE)	ND	0.0083	1	05/23/2015 00:29
Methylene chloride	ND	0.0083	1	05/23/2015 00:29
4-Methyl-2-pentanone (MIBK)	ND	0.0083	1	05/23/2015 00:29
Naphthalene	ND	0.0083	1	05/23/2015 00:29
n-Propyl benzene	ND	0.0083	1	05/23/2015 00:29
Styrene	ND	0.0083	1	05/23/2015 00:29
1,1,1,2-Tetrachloroethane	ND	0.0083	1	05/23/2015 00:29
1,1,2,2-Tetrachloroethane	ND	0.0083	1	05/23/2015 00:29
Tetrachloroethene	ND	0.0083	1	05/23/2015 00:29
Toluene	ND	0.0083	1	05/23/2015 00:29
1,2,3-Trichlorobenzene	ND	0.0083	1	05/23/2015 00:29
1,2,4-Trichlorobenzene	ND	0.0083	1	05/23/2015 00:29
1,1,1-Trichloroethane	ND	0.0083	1	05/23/2015 00:29
1,1,2-Trichloroethane	ND	0.0083	1	05/23/2015 00:29
Trichloroethene	ND	0.0083	1	05/23/2015 00:29
Trichlorofluoromethane	ND	0.0083	1	05/23/2015 00:29
1,2,3-Trichloropropane	ND	0.0083	1	05/23/2015 00:29
1,2,4-Trimethylbenzene	ND	0.0083	1	05/23/2015 00:29
1,3,5-Trimethylbenzene	ND	0.0083	1	05/23/2015 00:29
Vinyl Chloride	ND	0.0083	1	05/23/2015 00:29
Xylenes, Total	ND	0.0083	1	05/23/2015 00:29

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005B	Soil	05/20/2015 08:35	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/23/2015 00:29
Toluene-d8	94	70-130		05/23/2015 00:29
4-BFB	97	70-130		05/23/2015 00:29
Benzene-d6	84	60-140		05/23/2015 00:29
Ethylbenzene-d10	97	60-140		05/23/2015 00:29
1,2-DCB-d4	77	60-140		05/23/2015 00:29

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006B	Soil	05/20/2015 09:25	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.16	1	05/23/2015 01:11
tert-Amyl methyl ether (TAME)	ND	0.0080	1	05/23/2015 01:11
Benzene	ND	0.0080	1	05/23/2015 01:11
Bromobenzene	ND	0.0080	1	05/23/2015 01:11
Bromochloromethane	ND	0.0080	1	05/23/2015 01:11
Bromodichloromethane	ND	0.0080	1	05/23/2015 01:11
Bromoform	ND	0.0080	1	05/23/2015 01:11
Bromomethane	ND	0.0080	1	05/23/2015 01:11
2-Butanone (MEK)	ND	0.032	1	05/23/2015 01:11
t-Butyl alcohol (TBA)	ND	0.080	1	05/23/2015 01:11
n-Butyl benzene	ND	0.0080	1	05/23/2015 01:11
sec-Butyl benzene	ND	0.0080	1	05/23/2015 01:11
tert-Butyl benzene	ND	0.0080	1	05/23/2015 01:11
Carbon Disulfide	ND	0.0080	1	05/23/2015 01:11
Carbon Tetrachloride	ND	0.0080	1	05/23/2015 01:11
Chlorobenzene	ND	0.0080	1	05/23/2015 01:11
Chloroethane	ND	0.0080	1	05/23/2015 01:11
Chloroform	ND	0.0080	1	05/23/2015 01:11
Chloromethane	ND	0.0080	1	05/23/2015 01:11
2-Chlorotoluene	ND	0.0080	1	05/23/2015 01:11
4-Chlorotoluene	ND	0.0080	1	05/23/2015 01:11
Dibromochloromethane	ND	0.0080	1	05/23/2015 01:11
1,2-Dibromo-3-chloropropane	ND	0.0064	1	05/23/2015 01:11
1,2-Dibromoethane (EDB)	ND	0.0064	1	05/23/2015 01:11
Dibromomethane	ND	0.0080	1	05/23/2015 01:11
1,2-Dichlorobenzene	ND	0.0080	1	05/23/2015 01:11
1,3-Dichlorobenzene	ND	0.0080	1	05/23/2015 01:11
1,4-Dichlorobenzene	ND	0.0080	1	05/23/2015 01:11
Dichlorodifluoromethane	ND	0.0080	1	05/23/2015 01:11
1,1-Dichloroethane	ND	0.0080	1	05/23/2015 01:11
1,2-Dichloroethane (1,2-DCA)	ND	0.0080	1	05/23/2015 01:11
1,1-Dichloroethene	ND	0.0080	1	05/23/2015 01:11
cis-1,2-Dichloroethene	ND	0.0080	1	05/23/2015 01:11
trans-1,2-Dichloroethene	ND	0.0080	1	05/23/2015 01:11
1,2-Dichloropropane	ND	0.0080	1	05/23/2015 01:11
1,3-Dichloropropane	ND	0.0080	1	05/23/2015 01:11
2,2-Dichloropropane	ND	0.0080	1	05/23/2015 01:11
1,1-Dichloropropene	ND	0.0080	1	05/23/2015 01:11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006B	Soil	05/20/2015 09:25	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0080	1	05/23/2015 01:11
trans-1,3-Dichloropropene	ND	0.0080	1	05/23/2015 01:11
Diisopropyl ether (DIPE)	ND	0.0080	1	05/23/2015 01:11
Ethylbenzene	ND	0.0080	1	05/23/2015 01:11
Ethyl tert-butyl ether (ETBE)	ND	0.0080	1	05/23/2015 01:11
Freon 113	ND	0.0080	1	05/23/2015 01:11
Hexachlorobutadiene	ND	0.0080	1	05/23/2015 01:11
Hexachloroethane	ND	0.0080	1	05/23/2015 01:11
2-Hexanone	ND	0.0080	1	05/23/2015 01:11
Isopropylbenzene	ND	0.0080	1	05/23/2015 01:11
4-Isopropyl toluene	ND	0.0080	1	05/23/2015 01:11
Methyl-t-butyl ether (MTBE)	ND	0.0080	1	05/23/2015 01:11
Methylene chloride	ND	0.0080	1	05/23/2015 01:11
4-Methyl-2-pentanone (MIBK)	ND	0.0080	1	05/23/2015 01:11
Naphthalene	ND	0.0080	1	05/23/2015 01:11
n-Propyl benzene	ND	0.0080	1	05/23/2015 01:11
Styrene	ND	0.0080	1	05/23/2015 01:11
1,1,1,2-Tetrachloroethane	ND	0.0080	1	05/23/2015 01:11
1,1,2,2-Tetrachloroethane	ND	0.0080	1	05/23/2015 01:11
Tetrachloroethene	ND	0.0080	1	05/23/2015 01:11
Toluene	ND	0.0080	1	05/23/2015 01:11
1,2,3-Trichlorobenzene	ND	0.0080	1	05/23/2015 01:11
1,2,4-Trichlorobenzene	ND	0.0080	1	05/23/2015 01:11
1,1,1-Trichloroethane	ND	0.0080	1	05/23/2015 01:11
1,1,2-Trichloroethane	ND	0.0080	1	05/23/2015 01:11
Trichloroethene	ND	0.0080	1	05/23/2015 01:11
Trichlorofluoromethane	ND	0.0080	1	05/23/2015 01:11
1,2,3-Trichloropropane	ND	0.0080	1	05/23/2015 01:11
1,2,4-Trimethylbenzene	ND	0.0080	1	05/23/2015 01:11
1,3,5-Trimethylbenzene	ND	0.0080	1	05/23/2015 01:11
Vinyl Chloride	ND	0.0080	1	05/23/2015 01:11
Xylenes, Total	ND	0.0080	1	05/23/2015 01:11

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006B	Soil	05/20/2015 09:25	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	81	70-130		05/23/2015 01:11
Toluene-d8	94	70-130		05/23/2015 01:11
4-BFB	94	70-130		05/23/2015 01:11
Benzene-d6	82	60-140		05/23/2015 01:11
Ethylbenzene-d10	93	60-140		05/23/2015 01:11
1,2-DCB-d4	74	60-140		05/23/2015 01:11

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007B	Soil	05/20/2015 09:30	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 01:54
tert-Amyl methyl ether (TAME)	ND	0.0086	1	05/23/2015 01:54
Benzene	ND	0.0086	1	05/23/2015 01:54
Bromobenzene	ND	0.0086	1	05/23/2015 01:54
Bromochloromethane	ND	0.0086	1	05/23/2015 01:54
Bromodichloromethane	ND	0.0086	1	05/23/2015 01:54
Bromoform	ND	0.0086	1	05/23/2015 01:54
Bromomethane	ND	0.0086	1	05/23/2015 01:54
2-Butanone (MEK)	ND	0.034	1	05/23/2015 01:54
t-Butyl alcohol (TBA)	ND	0.086	1	05/23/2015 01:54
n-Butyl benzene	ND	0.0086	1	05/23/2015 01:54
sec-Butyl benzene	ND	0.0086	1	05/23/2015 01:54
tert-Butyl benzene	ND	0.0086	1	05/23/2015 01:54
Carbon Disulfide	ND	0.0086	1	05/23/2015 01:54
Carbon Tetrachloride	ND	0.0086	1	05/23/2015 01:54
Chlorobenzene	ND	0.0086	1	05/23/2015 01:54
Chloroethane	ND	0.0086	1	05/23/2015 01:54
Chloroform	ND	0.0086	1	05/23/2015 01:54
Chloromethane	ND	0.0086	1	05/23/2015 01:54
2-Chlorotoluene	ND	0.0086	1	05/23/2015 01:54
4-Chlorotoluene	ND	0.0086	1	05/23/2015 01:54
Dibromochloromethane	ND	0.0086	1	05/23/2015 01:54
1,2-Dibromo-3-chloropropane	ND	0.0069	1	05/23/2015 01:54
1,2-Dibromoethane (EDB)	ND	0.0069	1	05/23/2015 01:54
Dibromomethane	ND	0.0086	1	05/23/2015 01:54
1,2-Dichlorobenzene	ND	0.0086	1	05/23/2015 01:54
1,3-Dichlorobenzene	ND	0.0086	1	05/23/2015 01:54
1,4-Dichlorobenzene	ND	0.0086	1	05/23/2015 01:54
Dichlorodifluoromethane	ND	0.0086	1	05/23/2015 01:54
1,1-Dichloroethane	ND	0.0086	1	05/23/2015 01:54
1,2-Dichloroethane (1,2-DCA)	ND	0.0086	1	05/23/2015 01:54
1,1-Dichloroethene	ND	0.0086	1	05/23/2015 01:54
cis-1,2-Dichloroethene	ND	0.0086	1	05/23/2015 01:54
trans-1,2-Dichloroethene	ND	0.0086	1	05/23/2015 01:54
1,2-Dichloropropane	ND	0.0086	1	05/23/2015 01:54
1,3-Dichloropropane	ND	0.0086	1	05/23/2015 01:54
2,2-Dichloropropane	ND	0.0086	1	05/23/2015 01:54
1,1-Dichloropropene	ND	0.0086	1	05/23/2015 01:54

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007B	Soil	05/20/2015 09:30	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0086	1	05/23/2015 01:54
trans-1,3-Dichloropropene	ND	0.0086	1	05/23/2015 01:54
Diisopropyl ether (DIPE)	ND	0.0086	1	05/23/2015 01:54
Ethylbenzene	ND	0.0086	1	05/23/2015 01:54
Ethyl tert-butyl ether (ETBE)	ND	0.0086	1	05/23/2015 01:54
Freon 113	ND	0.0086	1	05/23/2015 01:54
Hexachlorobutadiene	ND	0.0086	1	05/23/2015 01:54
Hexachloroethane	ND	0.0086	1	05/23/2015 01:54
2-Hexanone	ND	0.0086	1	05/23/2015 01:54
Isopropylbenzene	ND	0.0086	1	05/23/2015 01:54
4-Isopropyl toluene	ND	0.0086	1	05/23/2015 01:54
Methyl-t-butyl ether (MTBE)	ND	0.0086	1	05/23/2015 01:54
Methylene chloride	ND	0.0086	1	05/23/2015 01:54
4-Methyl-2-pentanone (MIBK)	ND	0.0086	1	05/23/2015 01:54
Naphthalene	ND	0.0086	1	05/23/2015 01:54
n-Propyl benzene	ND	0.0086	1	05/23/2015 01:54
Styrene	ND	0.0086	1	05/23/2015 01:54
1,1,1,2-Tetrachloroethane	ND	0.0086	1	05/23/2015 01:54
1,1,2,2-Tetrachloroethane	ND	0.0086	1	05/23/2015 01:54
Tetrachloroethene	ND	0.0086	1	05/23/2015 01:54
Toluene	ND	0.0086	1	05/23/2015 01:54
1,2,3-Trichlorobenzene	ND	0.0086	1	05/23/2015 01:54
1,2,4-Trichlorobenzene	ND	0.0086	1	05/23/2015 01:54
1,1,1-Trichloroethane	ND	0.0086	1	05/23/2015 01:54
1,1,2-Trichloroethane	ND	0.0086	1	05/23/2015 01:54
Trichloroethene	ND	0.0086	1	05/23/2015 01:54
Trichlorofluoromethane	ND	0.0086	1	05/23/2015 01:54
1,2,3-Trichloropropane	ND	0.0086	1	05/23/2015 01:54
1,2,4-Trimethylbenzene	ND	0.0086	1	05/23/2015 01:54
1,3,5-Trimethylbenzene	ND	0.0086	1	05/23/2015 01:54
Vinyl Chloride	ND	0.0086	1	05/23/2015 01:54
Xylenes, Total	ND	0.0086	1	05/23/2015 01:54

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007B	Soil	05/20/2015 09:30	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/23/2015 01:54
Toluene-d8	91	70-130		05/23/2015 01:54
4-BFB	91	70-130		05/23/2015 01:54
Benzene-d6	81	60-140		05/23/2015 01:54
Ethylbenzene-d10	95	60-140		05/23/2015 01:54
1,2-DCB-d4	73	60-140		05/23/2015 01:54

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008B	Soil	05/20/2015 09:35	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/23/2015 02:36
tert-Amyl methyl ether (TAME)	ND	0.0090	1	05/23/2015 02:36
Benzene	ND	0.0090	1	05/23/2015 02:36
Bromobenzene	ND	0.0090	1	05/23/2015 02:36
Bromochloromethane	ND	0.0090	1	05/23/2015 02:36
Bromodichloromethane	ND	0.0090	1	05/23/2015 02:36
Bromoform	ND	0.0090	1	05/23/2015 02:36
Bromomethane	ND	0.0090	1	05/23/2015 02:36
2-Butanone (MEK)	ND	0.036	1	05/23/2015 02:36
t-Butyl alcohol (TBA)	ND	0.090	1	05/23/2015 02:36
n-Butyl benzene	ND	0.0090	1	05/23/2015 02:36
sec-Butyl benzene	ND	0.0090	1	05/23/2015 02:36
tert-Butyl benzene	ND	0.0090	1	05/23/2015 02:36
Carbon Disulfide	ND	0.0090	1	05/23/2015 02:36
Carbon Tetrachloride	ND	0.0090	1	05/23/2015 02:36
Chlorobenzene	ND	0.0090	1	05/23/2015 02:36
Chloroethane	ND	0.0090	1	05/23/2015 02:36
Chloroform	ND	0.0090	1	05/23/2015 02:36
Chloromethane	ND	0.0090	1	05/23/2015 02:36
2-Chlorotoluene	ND	0.0090	1	05/23/2015 02:36
4-Chlorotoluene	ND	0.0090	1	05/23/2015 02:36
Dibromochloromethane	ND	0.0090	1	05/23/2015 02:36
1,2-Dibromo-3-chloropropane	ND	0.0072	1	05/23/2015 02:36
1,2-Dibromoethane (EDB)	ND	0.0072	1	05/23/2015 02:36
Dibromomethane	ND	0.0090	1	05/23/2015 02:36
1,2-Dichlorobenzene	ND	0.0090	1	05/23/2015 02:36
1,3-Dichlorobenzene	ND	0.0090	1	05/23/2015 02:36
1,4-Dichlorobenzene	ND	0.0090	1	05/23/2015 02:36
Dichlorodifluoromethane	ND	0.0090	1	05/23/2015 02:36
1,1-Dichloroethane	ND	0.0090	1	05/23/2015 02:36
1,2-Dichloroethane (1,2-DCA)	ND	0.0090	1	05/23/2015 02:36
1,1-Dichloroethene	ND	0.0090	1	05/23/2015 02:36
cis-1,2-Dichloroethene	ND	0.0090	1	05/23/2015 02:36
trans-1,2-Dichloroethene	ND	0.0090	1	05/23/2015 02:36
1,2-Dichloropropane	ND	0.0090	1	05/23/2015 02:36
1,3-Dichloropropane	ND	0.0090	1	05/23/2015 02:36
2,2-Dichloropropane	ND	0.0090	1	05/23/2015 02:36
1,1-Dichloropropene	ND	0.0090	1	05/23/2015 02:36

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008B	Soil	05/20/2015 09:35	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0090	1	05/23/2015 02:36
trans-1,3-Dichloropropene	ND	0.0090	1	05/23/2015 02:36
Diisopropyl ether (DIPE)	ND	0.0090	1	05/23/2015 02:36
Ethylbenzene	ND	0.0090	1	05/23/2015 02:36
Ethyl tert-butyl ether (ETBE)	ND	0.0090	1	05/23/2015 02:36
Freon 113	ND	0.0090	1	05/23/2015 02:36
Hexachlorobutadiene	ND	0.0090	1	05/23/2015 02:36
Hexachloroethane	ND	0.0090	1	05/23/2015 02:36
2-Hexanone	ND	0.0090	1	05/23/2015 02:36
Isopropylbenzene	ND	0.0090	1	05/23/2015 02:36
4-Isopropyl toluene	ND	0.0090	1	05/23/2015 02:36
Methyl-t-butyl ether (MTBE)	ND	0.0090	1	05/23/2015 02:36
Methylene chloride	ND	0.0090	1	05/23/2015 02:36
4-Methyl-2-pentanone (MIBK)	ND	0.0090	1	05/23/2015 02:36
Naphthalene	ND	0.0090	1	05/23/2015 02:36
n-Propyl benzene	ND	0.0090	1	05/23/2015 02:36
Styrene	ND	0.0090	1	05/23/2015 02:36
1,1,1,2-Tetrachloroethane	ND	0.0090	1	05/23/2015 02:36
1,1,2,2-Tetrachloroethane	ND	0.0090	1	05/23/2015 02:36
Tetrachloroethene	ND	0.0090	1	05/23/2015 02:36
Toluene	ND	0.0090	1	05/23/2015 02:36
1,2,3-Trichlorobenzene	ND	0.0090	1	05/23/2015 02:36
1,2,4-Trichlorobenzene	ND	0.0090	1	05/23/2015 02:36
1,1,1-Trichloroethane	ND	0.0090	1	05/23/2015 02:36
1,1,2-Trichloroethane	ND	0.0090	1	05/23/2015 02:36
Trichloroethene	ND	0.0090	1	05/23/2015 02:36
Trichlorofluoromethane	ND	0.0090	1	05/23/2015 02:36
1,2,3-Trichloropropane	ND	0.0090	1	05/23/2015 02:36
1,2,4-Trimethylbenzene	ND	0.0090	1	05/23/2015 02:36
1,3,5-Trimethylbenzene	ND	0.0090	1	05/23/2015 02:36
Vinyl Chloride	ND	0.0090	1	05/23/2015 02:36
Xylenes, Total	ND	0.0090	1	05/23/2015 02:36

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008B	Soil	05/20/2015 09:35	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	83	70-130		05/23/2015 02:36
Toluene-d8	91	70-130		05/23/2015 02:36
4-BFB	92	70-130		05/23/2015 02:36
Benzene-d6	82	60-140		05/23/2015 02:36
Ethylbenzene-d10	94	60-140		05/23/2015 02:36
1,2-DCB-d4	74	60-140		05/23/2015 02:36

Analyst(s): AK

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009B	Soil	05/20/2015 09:45	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.20	1	05/23/2015 03:18
tert-Amyl methyl ether (TAME)	ND	0.010	1	05/23/2015 03:18
Benzene	ND	0.010	1	05/23/2015 03:18
Bromobenzene	ND	0.010	1	05/23/2015 03:18
Bromochloromethane	ND	0.010	1	05/23/2015 03:18
Bromodichloromethane	ND	0.010	1	05/23/2015 03:18
Bromoform	ND	0.010	1	05/23/2015 03:18
Bromomethane	ND	0.010	1	05/23/2015 03:18
2-Butanone (MEK)	ND	0.040	1	05/23/2015 03:18
t-Butyl alcohol (TBA)	ND	0.10	1	05/23/2015 03:18
n-Butyl benzene	ND	0.010	1	05/23/2015 03:18
sec-Butyl benzene	ND	0.010	1	05/23/2015 03:18
tert-Butyl benzene	ND	0.010	1	05/23/2015 03:18
Carbon Disulfide	ND	0.010	1	05/23/2015 03:18
Carbon Tetrachloride	ND	0.010	1	05/23/2015 03:18
Chlorobenzene	ND	0.010	1	05/23/2015 03:18
Chloroethane	ND	0.010	1	05/23/2015 03:18
Chloroform	ND	0.010	1	05/23/2015 03:18
Chloromethane	ND	0.010	1	05/23/2015 03:18
2-Chlorotoluene	ND	0.010	1	05/23/2015 03:18
4-Chlorotoluene	ND	0.010	1	05/23/2015 03:18
Dibromochloromethane	ND	0.010	1	05/23/2015 03:18
1,2-Dibromo-3-chloropropane	ND	0.0080	1	05/23/2015 03:18
1,2-Dibromoethane (EDB)	ND	0.0080	1	05/23/2015 03:18
Dibromomethane	ND	0.010	1	05/23/2015 03:18
1,2-Dichlorobenzene	ND	0.010	1	05/23/2015 03:18
1,3-Dichlorobenzene	ND	0.010	1	05/23/2015 03:18
1,4-Dichlorobenzene	ND	0.010	1	05/23/2015 03:18
Dichlorodifluoromethane	ND	0.010	1	05/23/2015 03:18
1,1-Dichloroethane	ND	0.010	1	05/23/2015 03:18
1,2-Dichloroethane (1,2-DCA)	ND	0.010	1	05/23/2015 03:18
1,1-Dichloroethene	ND	0.010	1	05/23/2015 03:18
cis-1,2-Dichloroethene	ND	0.010	1	05/23/2015 03:18
trans-1,2-Dichloroethene	ND	0.010	1	05/23/2015 03:18
1,2-Dichloropropane	ND	0.010	1	05/23/2015 03:18
1,3-Dichloropropane	ND	0.010	1	05/23/2015 03:18
2,2-Dichloropropane	ND	0.010	1	05/23/2015 03:18
1,1-Dichloropropene	ND	0.010	1	05/23/2015 03:18

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009B	Soil	05/20/2015 09:45	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.010	1	05/23/2015 03:18
trans-1,3-Dichloropropene	ND	0.010	1	05/23/2015 03:18
Diisopropyl ether (DIPE)	ND	0.010	1	05/23/2015 03:18
Ethylbenzene	ND	0.010	1	05/23/2015 03:18
Ethyl tert-butyl ether (ETBE)	ND	0.010	1	05/23/2015 03:18
Freon 113	ND	0.010	1	05/23/2015 03:18
Hexachlorobutadiene	ND	0.010	1	05/23/2015 03:18
Hexachloroethane	ND	0.010	1	05/23/2015 03:18
2-Hexanone	ND	0.010	1	05/23/2015 03:18
Isopropylbenzene	ND	0.010	1	05/23/2015 03:18
4-Isopropyl toluene	ND	0.010	1	05/23/2015 03:18
Methyl-t-butyl ether (MTBE)	ND	0.010	1	05/23/2015 03:18
Methylene chloride	ND	0.010	1	05/23/2015 03:18
4-Methyl-2-pentanone (MIBK)	ND	0.010	1	05/23/2015 03:18
Naphthalene	ND	0.010	1	05/23/2015 03:18
n-Propyl benzene	ND	0.010	1	05/23/2015 03:18
Styrene	ND	0.010	1	05/23/2015 03:18
1,1,1,2-Tetrachloroethane	ND	0.010	1	05/23/2015 03:18
1,1,2,2-Tetrachloroethane	ND	0.010	1	05/23/2015 03:18
Tetrachloroethene	ND	0.010	1	05/23/2015 03:18
Toluene	ND	0.010	1	05/23/2015 03:18
1,2,3-Trichlorobenzene	ND	0.010	1	05/23/2015 03:18
1,2,4-Trichlorobenzene	ND	0.010	1	05/23/2015 03:18
1,1,1-Trichloroethane	ND	0.010	1	05/23/2015 03:18
1,1,2-Trichloroethane	ND	0.010	1	05/23/2015 03:18
Trichloroethene	ND	0.010	1	05/23/2015 03:18
Trichlorofluoromethane	ND	0.010	1	05/23/2015 03:18
1,2,3-Trichloropropane	ND	0.010	1	05/23/2015 03:18
1,2,4-Trimethylbenzene	ND	0.010	1	05/23/2015 03:18
1,3,5-Trimethylbenzene	ND	0.010	1	05/23/2015 03:18
Vinyl Chloride	ND	0.010	1	05/23/2015 03:18
Xylenes, Total	ND	0.010	1	05/23/2015 03:18

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009B	Soil	05/20/2015 09:45	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/23/2015 03:18
Toluene-d8	93	70-130		05/23/2015 03:18
4-BFB	100	70-130		05/23/2015 03:18
Benzene-d6	81	60-140		05/23/2015 03:18
Ethylbenzene-d10	93	60-140		05/23/2015 03:18
1,2-DCB-d4	76	60-140		05/23/2015 03:18

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010B	Soil	05/20/2015 09:50	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.19	1	05/23/2015 04:01
tert-Amyl methyl ether (TAME)	ND	0.0093	1	05/23/2015 04:01
Benzene	ND	0.0093	1	05/23/2015 04:01
Bromobenzene	ND	0.0093	1	05/23/2015 04:01
Bromochloromethane	ND	0.0093	1	05/23/2015 04:01
Bromodichloromethane	ND	0.0093	1	05/23/2015 04:01
Bromoform	ND	0.0093	1	05/23/2015 04:01
Bromomethane	ND	0.0093	1	05/23/2015 04:01
2-Butanone (MEK)	ND	0.037	1	05/23/2015 04:01
t-Butyl alcohol (TBA)	ND	0.093	1	05/23/2015 04:01
n-Butyl benzene	ND	0.0093	1	05/23/2015 04:01
sec-Butyl benzene	ND	0.0093	1	05/23/2015 04:01
tert-Butyl benzene	ND	0.0093	1	05/23/2015 04:01
Carbon Disulfide	ND	0.0093	1	05/23/2015 04:01
Carbon Tetrachloride	ND	0.0093	1	05/23/2015 04:01
Chlorobenzene	ND	0.0093	1	05/23/2015 04:01
Chloroethane	ND	0.0093	1	05/23/2015 04:01
Chloroform	ND	0.0093	1	05/23/2015 04:01
Chloromethane	ND	0.0093	1	05/23/2015 04:01
2-Chlorotoluene	ND	0.0093	1	05/23/2015 04:01
4-Chlorotoluene	ND	0.0093	1	05/23/2015 04:01
Dibromochloromethane	ND	0.0093	1	05/23/2015 04:01
1,2-Dibromo-3-chloropropane	ND	0.0075	1	05/23/2015 04:01
1,2-Dibromoethane (EDB)	ND	0.0075	1	05/23/2015 04:01
Dibromomethane	ND	0.0093	1	05/23/2015 04:01
1,2-Dichlorobenzene	ND	0.0093	1	05/23/2015 04:01
1,3-Dichlorobenzene	ND	0.0093	1	05/23/2015 04:01
1,4-Dichlorobenzene	ND	0.0093	1	05/23/2015 04:01
Dichlorodifluoromethane	ND	0.0093	1	05/23/2015 04:01
1,1-Dichloroethane	ND	0.0093	1	05/23/2015 04:01
1,2-Dichloroethane (1,2-DCA)	ND	0.0093	1	05/23/2015 04:01
1,1-Dichloroethene	ND	0.0093	1	05/23/2015 04:01
cis-1,2-Dichloroethene	ND	0.0093	1	05/23/2015 04:01
trans-1,2-Dichloroethene	ND	0.0093	1	05/23/2015 04:01
1,2-Dichloropropane	ND	0.0093	1	05/23/2015 04:01
1,3-Dichloropropane	ND	0.0093	1	05/23/2015 04:01
2,2-Dichloropropane	ND	0.0093	1	05/23/2015 04:01
1,1-Dichloropropene	ND	0.0093	1	05/23/2015 04:01

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010B	Soil	05/20/2015 09:50	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0093	1	05/23/2015 04:01
trans-1,3-Dichloropropene	ND	0.0093	1	05/23/2015 04:01
Diisopropyl ether (DIPE)	ND	0.0093	1	05/23/2015 04:01
Ethylbenzene	ND	0.0093	1	05/23/2015 04:01
Ethyl tert-butyl ether (ETBE)	ND	0.0093	1	05/23/2015 04:01
Freon 113	ND	0.0093	1	05/23/2015 04:01
Hexachlorobutadiene	ND	0.0093	1	05/23/2015 04:01
Hexachloroethane	ND	0.0093	1	05/23/2015 04:01
2-Hexanone	ND	0.0093	1	05/23/2015 04:01
Isopropylbenzene	ND	0.0093	1	05/23/2015 04:01
4-Isopropyl toluene	ND	0.0093	1	05/23/2015 04:01
Methyl-t-butyl ether (MTBE)	ND	0.0093	1	05/23/2015 04:01
Methylene chloride	ND	0.0093	1	05/23/2015 04:01
4-Methyl-2-pentanone (MIBK)	ND	0.0093	1	05/23/2015 04:01
Naphthalene	ND	0.0093	1	05/23/2015 04:01
n-Propyl benzene	ND	0.0093	1	05/23/2015 04:01
Styrene	ND	0.0093	1	05/23/2015 04:01
1,1,1,2-Tetrachloroethane	ND	0.0093	1	05/23/2015 04:01
1,1,2,2-Tetrachloroethane	ND	0.0093	1	05/23/2015 04:01
Tetrachloroethene	ND	0.0093	1	05/23/2015 04:01
Toluene	ND	0.0093	1	05/23/2015 04:01
1,2,3-Trichlorobenzene	ND	0.0093	1	05/23/2015 04:01
1,2,4-Trichlorobenzene	ND	0.0093	1	05/23/2015 04:01
1,1,1-Trichloroethane	ND	0.0093	1	05/23/2015 04:01
1,1,2-Trichloroethane	ND	0.0093	1	05/23/2015 04:01
Trichloroethene	ND	0.0093	1	05/23/2015 04:01
Trichlorofluoromethane	ND	0.0093	1	05/23/2015 04:01
1,2,3-Trichloropropane	ND	0.0093	1	05/23/2015 04:01
1,2,4-Trimethylbenzene	ND	0.0093	1	05/23/2015 04:01
1,3,5-Trimethylbenzene	ND	0.0093	1	05/23/2015 04:01
Vinyl Chloride	ND	0.0093	1	05/23/2015 04:01
Xylenes, Total	ND	0.0093	1	05/23/2015 04:01

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010B	Soil	05/20/2015 09:50	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	83	70-130		05/23/2015 04:01
Toluene-d8	92	70-130		05/23/2015 04:01
4-BFB	89	70-130		05/23/2015 04:01
Benzene-d6	79	60-140		05/23/2015 04:01
Ethylbenzene-d10	90	60-140		05/23/2015 04:01
1,2-DCB-d4	71	60-140		05/23/2015 04:01

Analyst(s): AK

Analytical Comments: a9





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011B	Soil	05/20/2015 10:15	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 04:43
tert-Amyl methyl ether (TAME)	ND	0.0084	1	05/23/2015 04:43
Benzene	ND	0.0084	1	05/23/2015 04:43
Bromobenzene	ND	0.0084	1	05/23/2015 04:43
Bromochloromethane	ND	0.0084	1	05/23/2015 04:43
Bromodichloromethane	ND	0.0084	1	05/23/2015 04:43
Bromoform	ND	0.0084	1	05/23/2015 04:43
Bromomethane	ND	0.0084	1	05/23/2015 04:43
2-Butanone (MEK)	ND	0.034	1	05/23/2015 04:43
t-Butyl alcohol (TBA)	ND	0.084	1	05/23/2015 04:43
n-Butyl benzene	ND	0.0084	1	05/23/2015 04:43
sec-Butyl benzene	ND	0.0084	1	05/23/2015 04:43
tert-Butyl benzene	ND	0.0084	1	05/23/2015 04:43
Carbon Disulfide	ND	0.0084	1	05/23/2015 04:43
Carbon Tetrachloride	ND	0.0084	1	05/23/2015 04:43
Chlorobenzene	ND	0.0084	1	05/23/2015 04:43
Chloroethane	ND	0.0084	1	05/23/2015 04:43
Chloroform	ND	0.0084	1	05/23/2015 04:43
Chloromethane	ND	0.0084	1	05/23/2015 04:43
2-Chlorotoluene	ND	0.0084	1	05/23/2015 04:43
4-Chlorotoluene	ND	0.0084	1	05/23/2015 04:43
Dibromochloromethane	ND	0.0084	1	05/23/2015 04:43
1,2-Dibromo-3-chloropropane	ND	0.0067	1	05/23/2015 04:43
1,2-Dibromoethane (EDB)	ND	0.0067	1	05/23/2015 04:43
Dibromomethane	ND	0.0084	1	05/23/2015 04:43
1,2-Dichlorobenzene	ND	0.0084	1	05/23/2015 04:43
1,3-Dichlorobenzene	ND	0.0084	1	05/23/2015 04:43
1,4-Dichlorobenzene	ND	0.0084	1	05/23/2015 04:43
Dichlorodifluoromethane	ND	0.0084	1	05/23/2015 04:43
1,1-Dichloroethane	ND	0.0084	1	05/23/2015 04:43
1,2-Dichloroethane (1,2-DCA)	ND	0.0084	1	05/23/2015 04:43
1,1-Dichloroethene	ND	0.0084	1	05/23/2015 04:43
cis-1,2-Dichloroethene	ND	0.0084	1	05/23/2015 04:43
trans-1,2-Dichloroethene	ND	0.0084	1	05/23/2015 04:43
1,2-Dichloropropane	ND	0.0084	1	05/23/2015 04:43
1,3-Dichloropropane	ND	0.0084	1	05/23/2015 04:43
2,2-Dichloropropane	ND	0.0084	1	05/23/2015 04:43
1,1-Dichloropropene	ND	0.0084	1	05/23/2015 04:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011B	Soil	05/20/2015 10:15	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0084	1	05/23/2015 04:43
trans-1,3-Dichloropropene	ND	0.0084	1	05/23/2015 04:43
Diisopropyl ether (DIPE)	ND	0.0084	1	05/23/2015 04:43
Ethylbenzene	ND	0.0084	1	05/23/2015 04:43
Ethyl tert-butyl ether (ETBE)	ND	0.0084	1	05/23/2015 04:43
Freon 113	ND	0.0084	1	05/23/2015 04:43
Hexachlorobutadiene	ND	0.0084	1	05/23/2015 04:43
Hexachloroethane	ND	0.0084	1	05/23/2015 04:43
2-Hexanone	ND	0.0084	1	05/23/2015 04:43
Isopropylbenzene	ND	0.0084	1	05/23/2015 04:43
4-Isopropyl toluene	ND	0.0084	1	05/23/2015 04:43
Methyl-t-butyl ether (MTBE)	ND	0.0084	1	05/23/2015 04:43
Methylene chloride	ND	0.0084	1	05/23/2015 04:43
4-Methyl-2-pentanone (MIBK)	ND	0.0084	1	05/23/2015 04:43
Naphthalene	ND	0.0084	1	05/23/2015 04:43
n-Propyl benzene	ND	0.0084	1	05/23/2015 04:43
Styrene	ND	0.0084	1	05/23/2015 04:43
1,1,1,2-Tetrachloroethane	ND	0.0084	1	05/23/2015 04:43
1,1,2,2-Tetrachloroethane	ND	0.0084	1	05/23/2015 04:43
Tetrachloroethene	ND	0.0084	1	05/23/2015 04:43
Toluene	ND	0.0084	1	05/23/2015 04:43
1,2,3-Trichlorobenzene	ND	0.0084	1	05/23/2015 04:43
1,2,4-Trichlorobenzene	ND	0.0084	1	05/23/2015 04:43
1,1,1-Trichloroethane	ND	0.0084	1	05/23/2015 04:43
1,1,2-Trichloroethane	ND	0.0084	1	05/23/2015 04:43
Trichloroethene	ND	0.0084	1	05/23/2015 04:43
Trichlorofluoromethane	ND	0.0084	1	05/23/2015 04:43
1,2,3-Trichloropropane	ND	0.0084	1	05/23/2015 04:43
1,2,4-Trimethylbenzene	ND	0.0084	1	05/23/2015 04:43
1,3,5-Trimethylbenzene	ND	0.0084	1	05/23/2015 04:43
Vinyl Chloride	ND	0.0084	1	05/23/2015 04:43
Xylenes, Total	ND	0.0084	1	05/23/2015 04:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011B	Soil	05/20/2015 10:15	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	83	70-130		05/23/2015 04:43
Toluene-d8	93	70-130		05/23/2015 04:43
4-BFB	90	70-130		05/23/2015 04:43
Benzene-d6	82	60-140		05/23/2015 04:43
Ethylbenzene-d10	95	60-140		05/23/2015 04:43
1,2-DCB-d4	72	60-140		05/23/2015 04:43

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012B	Soil	05/20/2015 10:30	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/23/2015 05:25
tert-Amyl methyl ether (TAME)	ND	0.0089	1	05/23/2015 05:25
Benzene	ND	0.0089	1	05/23/2015 05:25
Bromobenzene	ND	0.0089	1	05/23/2015 05:25
Bromochloromethane	ND	0.0089	1	05/23/2015 05:25
Bromodichloromethane	ND	0.0089	1	05/23/2015 05:25
Bromoform	ND	0.0089	1	05/23/2015 05:25
Bromomethane	ND	0.0089	1	05/23/2015 05:25
2-Butanone (MEK)	ND	0.036	1	05/23/2015 05:25
t-Butyl alcohol (TBA)	ND	0.089	1	05/23/2015 05:25
n-Butyl benzene	ND	0.0089	1	05/23/2015 05:25
sec-Butyl benzene	ND	0.0089	1	05/23/2015 05:25
tert-Butyl benzene	ND	0.0089	1	05/23/2015 05:25
Carbon Disulfide	ND	0.0089	1	05/23/2015 05:25
Carbon Tetrachloride	ND	0.0089	1	05/23/2015 05:25
Chlorobenzene	ND	0.0089	1	05/23/2015 05:25
Chloroethane	ND	0.0089	1	05/23/2015 05:25
Chloroform	ND	0.0089	1	05/23/2015 05:25
Chloromethane	ND	0.0089	1	05/23/2015 05:25
2-Chlorotoluene	ND	0.0089	1	05/23/2015 05:25
4-Chlorotoluene	ND	0.0089	1	05/23/2015 05:25
Dibromochloromethane	ND	0.0089	1	05/23/2015 05:25
1,2-Dibromo-3-chloropropane	ND	0.0071	1	05/23/2015 05:25
1,2-Dibromoethane (EDB)	ND	0.0071	1	05/23/2015 05:25
Dibromomethane	ND	0.0089	1	05/23/2015 05:25
1,2-Dichlorobenzene	ND	0.0089	1	05/23/2015 05:25
1,3-Dichlorobenzene	ND	0.0089	1	05/23/2015 05:25
1,4-Dichlorobenzene	ND	0.0089	1	05/23/2015 05:25
Dichlorodifluoromethane	ND	0.0089	1	05/23/2015 05:25
1,1-Dichloroethane	ND	0.0089	1	05/23/2015 05:25
1,2-Dichloroethane (1,2-DCA)	ND	0.0089	1	05/23/2015 05:25
1,1-Dichloroethene	ND	0.0089	1	05/23/2015 05:25
cis-1,2-Dichloroethene	ND	0.0089	1	05/23/2015 05:25
trans-1,2-Dichloroethene	ND	0.0089	1	05/23/2015 05:25
1,2-Dichloropropane	ND	0.0089	1	05/23/2015 05:25
1,3-Dichloropropane	ND	0.0089	1	05/23/2015 05:25
2,2-Dichloropropane	ND	0.0089	1	05/23/2015 05:25
1,1-Dichloropropene	ND	0.0089	1	05/23/2015 05:25

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012B	Soil	05/20/2015 10:30	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0089	1	05/23/2015 05:25
trans-1,3-Dichloropropene	ND	0.0089	1	05/23/2015 05:25
Diisopropyl ether (DIPE)	ND	0.0089	1	05/23/2015 05:25
Ethylbenzene	ND	0.0089	1	05/23/2015 05:25
Ethyl tert-butyl ether (ETBE)	ND	0.0089	1	05/23/2015 05:25
Freon 113	ND	0.0089	1	05/23/2015 05:25
Hexachlorobutadiene	ND	0.0089	1	05/23/2015 05:25
Hexachloroethane	ND	0.0089	1	05/23/2015 05:25
2-Hexanone	ND	0.0089	1	05/23/2015 05:25
Isopropylbenzene	ND	0.0089	1	05/23/2015 05:25
4-Isopropyl toluene	ND	0.0089	1	05/23/2015 05:25
Methyl-t-butyl ether (MTBE)	ND	0.0089	1	05/23/2015 05:25
Methylene chloride	ND	0.0089	1	05/23/2015 05:25
4-Methyl-2-pentanone (MIBK)	ND	0.0089	1	05/23/2015 05:25
Naphthalene	ND	0.0089	1	05/23/2015 05:25
n-Propyl benzene	ND	0.0089	1	05/23/2015 05:25
Styrene	ND	0.0089	1	05/23/2015 05:25
1,1,1,2-Tetrachloroethane	ND	0.0089	1	05/23/2015 05:25
1,1,2,2-Tetrachloroethane	ND	0.0089	1	05/23/2015 05:25
Tetrachloroethene	ND	0.0089	1	05/23/2015 05:25
Toluene	ND	0.0089	1	05/23/2015 05:25
1,2,3-Trichlorobenzene	ND	0.0089	1	05/23/2015 05:25
1,2,4-Trichlorobenzene	ND	0.0089	1	05/23/2015 05:25
1,1,1-Trichloroethane	ND	0.0089	1	05/23/2015 05:25
1,1,2-Trichloroethane	ND	0.0089	1	05/23/2015 05:25
Trichloroethene	ND	0.0089	1	05/23/2015 05:25
Trichlorofluoromethane	ND	0.0089	1	05/23/2015 05:25
1,2,3-Trichloropropane	ND	0.0089	1	05/23/2015 05:25
1,2,4-Trimethylbenzene	ND	0.0089	1	05/23/2015 05:25
1,3,5-Trimethylbenzene	ND	0.0089	1	05/23/2015 05:25
Vinyl Chloride	ND	0.0089	1	05/23/2015 05:25
Xylenes, Total	ND	0.0089	1	05/23/2015 05:25

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012B	Soil	05/20/2015 10:30	GC16	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	82	70-130		05/23/2015 05:25
Toluene-d8	94	70-130		05/23/2015 05:25
4-BFB	96	70-130		05/23/2015 05:25
Benzene-d6	80	60-140		05/23/2015 05:25
Ethylbenzene-d10	92	60-140		05/23/2015 05:25
1,2-DCB-d4	73	60-140		05/23/2015 05:25

**Analyst(s):** AK

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013B	Soil	05/20/2015 10:35	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.16	1	05/27/2015 07:31
tert-Amyl methyl ether (TAME)	ND	0.0082	1	05/27/2015 07:31
Benzene	ND	0.0082	1	05/27/2015 07:31
Bromobenzene	ND	0.0082	1	05/27/2015 07:31
Bromochloromethane	ND	0.0082	1	05/27/2015 07:31
Bromodichloromethane	ND	0.0082	1	05/27/2015 07:31
Bromoform	ND	0.0082	1	05/27/2015 07:31
Bromomethane	ND	0.0082	1	05/27/2015 07:31
2-Butanone (MEK)	ND	0.033	1	05/27/2015 07:31
t-Butyl alcohol (TBA)	ND	0.082	1	05/27/2015 07:31
n-Butyl benzene	ND	0.0082	1	05/27/2015 07:31
sec-Butyl benzene	ND	0.0082	1	05/27/2015 07:31
tert-Butyl benzene	ND	0.0082	1	05/27/2015 07:31
Carbon Disulfide	ND	0.0082	1	05/27/2015 07:31
Carbon Tetrachloride	ND	0.0082	1	05/27/2015 07:31
Chlorobenzene	ND	0.0082	1	05/27/2015 07:31
Chloroethane	ND	0.0082	1	05/27/2015 07:31
Chloroform	ND	0.0082	1	05/27/2015 07:31
Chloromethane	ND	0.0082	1	05/27/2015 07:31
2-Chlorotoluene	ND	0.0082	1	05/27/2015 07:31
4-Chlorotoluene	ND	0.0082	1	05/27/2015 07:31
Dibromochloromethane	ND	0.0082	1	05/27/2015 07:31
1,2-Dibromo-3-chloropropane	ND	0.0065	1	05/27/2015 07:31
1,2-Dibromoethane (EDB)	ND	0.0065	1	05/27/2015 07:31
Dibromomethane	ND	0.0082	1	05/27/2015 07:31
1,2-Dichlorobenzene	ND	0.0082	1	05/27/2015 07:31
1,3-Dichlorobenzene	ND	0.0082	1	05/27/2015 07:31
1,4-Dichlorobenzene	ND	0.0082	1	05/27/2015 07:31
Dichlorodifluoromethane	ND	0.0082	1	05/27/2015 07:31
1,1-Dichloroethane	ND	0.0082	1	05/27/2015 07:31
1,2-Dichloroethane (1,2-DCA)	ND	0.0082	1	05/27/2015 07:31
1,1-Dichloroethene	ND	0.0082	1	05/27/2015 07:31
cis-1,2-Dichloroethene	ND	0.0082	1	05/27/2015 07:31
trans-1,2-Dichloroethene	ND	0.0082	1	05/27/2015 07:31
1,2-Dichloropropane	ND	0.0082	1	05/27/2015 07:31
1,3-Dichloropropane	ND	0.0082	1	05/27/2015 07:31
2,2-Dichloropropane	ND	0.0082	1	05/27/2015 07:31
1,1-Dichloropropene	ND	0.0082	1	05/27/2015 07:31

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013B	Soil	05/20/2015 10:35	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0082	1	05/27/2015 07:31
trans-1,3-Dichloropropene	ND	0.0082	1	05/27/2015 07:31
Diisopropyl ether (DIPE)	ND	0.0082	1	05/27/2015 07:31
Ethylbenzene	ND	0.0082	1	05/27/2015 07:31
Ethyl tert-butyl ether (ETBE)	ND	0.0082	1	05/27/2015 07:31
Freon 113	ND	0.0082	1	05/27/2015 07:31
Hexachlorobutadiene	ND	0.0082	1	05/27/2015 07:31
Hexachloroethane	ND	0.0082	1	05/27/2015 07:31
2-Hexanone	ND	0.0082	1	05/27/2015 07:31
Isopropylbenzene	ND	0.0082	1	05/27/2015 07:31
4-Isopropyl toluene	ND	0.0082	1	05/27/2015 07:31
Methyl-t-butyl ether (MTBE)	ND	0.0082	1	05/27/2015 07:31
Methylene chloride	ND	0.0082	1	05/27/2015 07:31
4-Methyl-2-pentanone (MIBK)	ND	0.0082	1	05/27/2015 07:31
Naphthalene	ND	0.0082	1	05/27/2015 07:31
n-Propyl benzene	ND	0.0082	1	05/27/2015 07:31
Styrene	ND	0.0082	1	05/27/2015 07:31
1,1,1,2-Tetrachloroethane	ND	0.0082	1	05/27/2015 07:31
1,1,2,2-Tetrachloroethane	ND	0.0082	1	05/27/2015 07:31
Tetrachloroethene	ND	0.0082	1	05/27/2015 07:31
Toluene	ND	0.0082	1	05/27/2015 07:31
1,2,3-Trichlorobenzene	ND	0.0082	1	05/27/2015 07:31
1,2,4-Trichlorobenzene	ND	0.0082	1	05/27/2015 07:31
1,1,1-Trichloroethane	ND	0.0082	1	05/27/2015 07:31
1,1,2-Trichloroethane	ND	0.0082	1	05/27/2015 07:31
Trichloroethene	ND	0.0082	1	05/27/2015 07:31
Trichlorofluoromethane	ND	0.0082	1	05/27/2015 07:31
1,2,3-Trichloropropane	ND	0.0082	1	05/27/2015 07:31
1,2,4-Trimethylbenzene	ND	0.0082	1	05/27/2015 07:31
1,3,5-Trimethylbenzene	ND	0.0082	1	05/27/2015 07:31
Vinyl Chloride	ND	0.0082	1	05/27/2015 07:31
Xylenes, Total	ND	0.0082	1	05/27/2015 07:31

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013B	Soil	05/20/2015 10:35	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		05/27/2015 07:31
Toluene-d8	93	70-130		05/27/2015 07:31
4-BFB	97	70-130		05/27/2015 07:31
Benzene-d6	85	60-140		05/27/2015 07:31
Ethylbenzene-d10	97	60-140		05/27/2015 07:31
1,2-DCB-d4	83	60-140		05/27/2015 07:31

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014B	Soil	05/20/2015 10:54	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/22/2015 22:50
tert-Amyl methyl ether (TAME)	ND	0.0092	1	05/22/2015 22:50
Benzene	ND	0.0092	1	05/22/2015 22:50
Bromobenzene	ND	0.0092	1	05/22/2015 22:50
Bromochloromethane	ND	0.0092	1	05/22/2015 22:50
Bromodichloromethane	ND	0.0092	1	05/22/2015 22:50
Bromoform	ND	0.0092	1	05/22/2015 22:50
Bromomethane	ND	0.0092	1	05/22/2015 22:50
2-Butanone (MEK)	ND	0.037	1	05/22/2015 22:50
t-Butyl alcohol (TBA)	ND	0.092	1	05/22/2015 22:50
n-Butyl benzene	ND	0.0092	1	05/22/2015 22:50
sec-Butyl benzene	ND	0.0092	1	05/22/2015 22:50
tert-Butyl benzene	ND	0.0092	1	05/22/2015 22:50
Carbon Disulfide	ND	0.0092	1	05/22/2015 22:50
Carbon Tetrachloride	ND	0.0092	1	05/22/2015 22:50
Chlorobenzene	ND	0.0092	1	05/22/2015 22:50
Chloroethane	ND	0.0092	1	05/22/2015 22:50
Chloroform	ND	0.0092	1	05/22/2015 22:50
Chloromethane	ND	0.0092	1	05/22/2015 22:50
2-Chlorotoluene	ND	0.0092	1	05/22/2015 22:50
4-Chlorotoluene	ND	0.0092	1	05/22/2015 22:50
Dibromochloromethane	ND	0.0092	1	05/22/2015 22:50
1,2-Dibromo-3-chloropropane	ND	0.0074	1	05/22/2015 22:50
1,2-Dibromoethane (EDB)	ND	0.0074	1	05/22/2015 22:50
Dibromomethane	ND	0.0092	1	05/22/2015 22:50
1,2-Dichlorobenzene	ND	0.0092	1	05/22/2015 22:50
1,3-Dichlorobenzene	ND	0.0092	1	05/22/2015 22:50
1,4-Dichlorobenzene	ND	0.0092	1	05/22/2015 22:50
Dichlorodifluoromethane	ND	0.0092	1	05/22/2015 22:50
1,1-Dichloroethane	ND	0.0092	1	05/22/2015 22:50
1,2-Dichloroethane (1,2-DCA)	ND	0.0092	1	05/22/2015 22:50
1,1-Dichloroethene	ND	0.0092	1	05/22/2015 22:50
cis-1,2-Dichloroethene	ND	0.0092	1	05/22/2015 22:50
trans-1,2-Dichloroethene	ND	0.0092	1	05/22/2015 22:50
1,2-Dichloropropane	ND	0.0092	1	05/22/2015 22:50
1,3-Dichloropropane	ND	0.0092	1	05/22/2015 22:50
2,2-Dichloropropane	ND	0.0092	1	05/22/2015 22:50
1,1-Dichloropropene	ND	0.0092	1	05/22/2015 22:50

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014B	Soil	05/20/2015 10:54	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0092	1	05/22/2015 22:50
trans-1,3-Dichloropropene	ND	0.0092	1	05/22/2015 22:50
Diisopropyl ether (DIPE)	ND	0.0092	1	05/22/2015 22:50
Ethylbenzene	ND	0.0092	1	05/22/2015 22:50
Ethyl tert-butyl ether (ETBE)	ND	0.0092	1	05/22/2015 22:50
Freon 113	ND	0.0092	1	05/22/2015 22:50
Hexachlorobutadiene	ND	0.0092	1	05/22/2015 22:50
Hexachloroethane	ND	0.0092	1	05/22/2015 22:50
2-Hexanone	ND	0.0092	1	05/22/2015 22:50
Isopropylbenzene	ND	0.0092	1	05/22/2015 22:50
4-Isopropyl toluene	ND	0.0092	1	05/22/2015 22:50
Methyl-t-butyl ether (MTBE)	ND	0.0092	1	05/22/2015 22:50
Methylene chloride	ND	0.0092	1	05/22/2015 22:50
4-Methyl-2-pentanone (MIBK)	ND	0.0092	1	05/22/2015 22:50
Naphthalene	ND	0.0092	1	05/22/2015 22:50
n-Propyl benzene	ND	0.0092	1	05/22/2015 22:50
Styrene	ND	0.0092	1	05/22/2015 22:50
1,1,1,2-Tetrachloroethane	ND	0.0092	1	05/22/2015 22:50
1,1,2,2-Tetrachloroethane	ND	0.0092	1	05/22/2015 22:50
Tetrachloroethene	ND	0.0092	1	05/22/2015 22:50
Toluene	ND	0.0092	1	05/22/2015 22:50
1,2,3-Trichlorobenzene	ND	0.0092	1	05/22/2015 22:50
1,2,4-Trichlorobenzene	ND	0.0092	1	05/22/2015 22:50
1,1,1-Trichloroethane	ND	0.0092	1	05/22/2015 22:50
1,1,2-Trichloroethane	ND	0.0092	1	05/22/2015 22:50
Trichloroethene	ND	0.0092	1	05/22/2015 22:50
Trichlorofluoromethane	ND	0.0092	1	05/22/2015 22:50
1,2,3-Trichloropropane	ND	0.0092	1	05/22/2015 22:50
1,2,4-Trimethylbenzene	ND	0.0092	1	05/22/2015 22:50
1,3,5-Trimethylbenzene	ND	0.0092	1	05/22/2015 22:50
Vinyl Chloride	ND	0.0092	1	05/22/2015 22:50
Xylenes, Total	ND	0.0092	1	05/22/2015 22:50

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014B	Soil	05/20/2015 10:54	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
Dibromofluoromethane	107		70-130	05/22/2015 22:50
Toluene-d8	96		70-130	05/22/2015 22:50
4-BFB	155	S	70-130	05/22/2015 22:50
Benzene-d6	87		60-140	05/22/2015 22:50
Ethylbenzene-d10	96		60-140	05/22/2015 22:50
1,2-DCB-d4	81		60-140	05/22/2015 22:50

**Analyst(s):** KBO

**Analytical Comments:** a9,c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015B	Soil	05/20/2015 11:10	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/27/2015 02:43
tert-Amyl methyl ether (TAME)	ND	0.0084	1	05/27/2015 02:43
Benzene	ND	0.0084	1	05/27/2015 02:43
Bromobenzene	ND	0.0084	1	05/27/2015 02:43
Bromochloromethane	ND	0.0084	1	05/27/2015 02:43
Bromodichloromethane	ND	0.0084	1	05/27/2015 02:43
Bromoform	ND	0.0084	1	05/27/2015 02:43
Bromomethane	ND	0.0084	1	05/27/2015 02:43
2-Butanone (MEK)	ND	0.034	1	05/27/2015 02:43
t-Butyl alcohol (TBA)	ND	0.084	1	05/27/2015 02:43
n-Butyl benzene	ND	0.0084	1	05/27/2015 02:43
sec-Butyl benzene	ND	0.0084	1	05/27/2015 02:43
tert-Butyl benzene	ND	0.0084	1	05/27/2015 02:43
Carbon Disulfide	ND	0.0084	1	05/27/2015 02:43
Carbon Tetrachloride	ND	0.0084	1	05/27/2015 02:43
Chlorobenzene	ND	0.0084	1	05/27/2015 02:43
Chloroethane	ND	0.0084	1	05/27/2015 02:43
Chloroform	ND	0.0084	1	05/27/2015 02:43
Chloromethane	ND	0.0084	1	05/27/2015 02:43
2-Chlorotoluene	ND	0.0084	1	05/27/2015 02:43
4-Chlorotoluene	ND	0.0084	1	05/27/2015 02:43
Dibromochloromethane	ND	0.0084	1	05/27/2015 02:43
1,2-Dibromo-3-chloropropane	ND	0.0067	1	05/27/2015 02:43
1,2-Dibromoethane (EDB)	ND	0.0067	1	05/27/2015 02:43
Dibromomethane	ND	0.0084	1	05/27/2015 02:43
1,2-Dichlorobenzene	ND	0.0084	1	05/27/2015 02:43
1,3-Dichlorobenzene	ND	0.0084	1	05/27/2015 02:43
1,4-Dichlorobenzene	ND	0.0084	1	05/27/2015 02:43
Dichlorodifluoromethane	ND	0.0084	1	05/27/2015 02:43
1,1-Dichloroethane	ND	0.0084	1	05/27/2015 02:43
1,2-Dichloroethane (1,2-DCA)	ND	0.0084	1	05/27/2015 02:43
1,1-Dichloroethene	ND	0.0084	1	05/27/2015 02:43
cis-1,2-Dichloroethene	ND	0.0084	1	05/27/2015 02:43
trans-1,2-Dichloroethene	ND	0.0084	1	05/27/2015 02:43
1,2-Dichloropropane	ND	0.0084	1	05/27/2015 02:43
1,3-Dichloropropane	ND	0.0084	1	05/27/2015 02:43
2,2-Dichloropropane	ND	0.0084	1	05/27/2015 02:43
1,1-Dichloropropene	ND	0.0084	1	05/27/2015 02:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015B	Soil	05/20/2015 11:10	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0084	1	05/27/2015 02:43
trans-1,3-Dichloropropene	ND	0.0084	1	05/27/2015 02:43
Diisopropyl ether (DIPE)	ND	0.0084	1	05/27/2015 02:43
Ethylbenzene	ND	0.0084	1	05/27/2015 02:43
Ethyl tert-butyl ether (ETBE)	ND	0.0084	1	05/27/2015 02:43
Freon 113	ND	0.0084	1	05/27/2015 02:43
Hexachlorobutadiene	ND	0.0084	1	05/27/2015 02:43
Hexachloroethane	ND	0.0084	1	05/27/2015 02:43
2-Hexanone	ND	0.0084	1	05/27/2015 02:43
Isopropylbenzene	ND	0.0084	1	05/27/2015 02:43
4-Isopropyl toluene	ND	0.0084	1	05/27/2015 02:43
Methyl-t-butyl ether (MTBE)	ND	0.0084	1	05/27/2015 02:43
Methylene chloride	ND	0.0084	1	05/27/2015 02:43
4-Methyl-2-pentanone (MIBK)	ND	0.0084	1	05/27/2015 02:43
Naphthalene	ND	0.0084	1	05/27/2015 02:43
n-Propyl benzene	ND	0.0084	1	05/27/2015 02:43
Styrene	ND	0.0084	1	05/27/2015 02:43
1,1,1,2-Tetrachloroethane	ND	0.0084	1	05/27/2015 02:43
1,1,2,2-Tetrachloroethane	ND	0.0084	1	05/27/2015 02:43
Tetrachloroethene	ND	0.0084	1	05/27/2015 02:43
Toluene	ND	0.0084	1	05/27/2015 02:43
1,2,3-Trichlorobenzene	ND	0.0084	1	05/27/2015 02:43
1,2,4-Trichlorobenzene	ND	0.0084	1	05/27/2015 02:43
1,1,1-Trichloroethane	ND	0.0084	1	05/27/2015 02:43
1,1,2-Trichloroethane	ND	0.0084	1	05/27/2015 02:43
Trichloroethene	ND	0.0084	1	05/27/2015 02:43
Trichlorofluoromethane	ND	0.0084	1	05/27/2015 02:43
1,2,3-Trichloropropane	ND	0.0084	1	05/27/2015 02:43
1,2,4-Trimethylbenzene	ND	0.0084	1	05/27/2015 02:43
1,3,5-Trimethylbenzene	ND	0.0084	1	05/27/2015 02:43
Vinyl Chloride	ND	0.0084	1	05/27/2015 02:43
Xylenes, Total	ND	0.0084	1	05/27/2015 02:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015B	Soil	05/20/2015 11:10	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	70-130		05/27/2015 02:43
Toluene-d8	92	70-130		05/27/2015 02:43
4-BFB	97	70-130		05/27/2015 02:43
Benzene-d6	83	60-140		05/27/2015 02:43
Ethylbenzene-d10	95	60-140		05/27/2015 02:43
1,2-DCB-d4	83	60-140		05/27/2015 02:43

Analyst(s): KBO

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016B	Soil	05/20/2015 11:15	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/23/2015 00:12
tert-Amyl methyl ether (TAME)	ND	0.0084	1	05/23/2015 00:12
Benzene	ND	0.0084	1	05/23/2015 00:12
Bromobenzene	ND	0.0084	1	05/23/2015 00:12
Bromochloromethane	ND	0.0084	1	05/23/2015 00:12
Bromodichloromethane	ND	0.0084	1	05/23/2015 00:12
Bromoform	ND	0.0084	1	05/23/2015 00:12
Bromomethane	ND	0.0084	1	05/23/2015 00:12
2-Butanone (MEK)	ND	0.034	1	05/23/2015 00:12
t-Butyl alcohol (TBA)	ND	0.084	1	05/23/2015 00:12
n-Butyl benzene	ND	0.0084	1	05/23/2015 00:12
sec-Butyl benzene	ND	0.0084	1	05/23/2015 00:12
tert-Butyl benzene	ND	0.0084	1	05/23/2015 00:12
Carbon Disulfide	ND	0.0084	1	05/23/2015 00:12
Carbon Tetrachloride	ND	0.0084	1	05/23/2015 00:12
Chlorobenzene	ND	0.0084	1	05/23/2015 00:12
Chloroethane	ND	0.0084	1	05/23/2015 00:12
Chloroform	ND	0.0084	1	05/23/2015 00:12
Chloromethane	ND	0.0084	1	05/23/2015 00:12
2-Chlorotoluene	ND	0.0084	1	05/23/2015 00:12
4-Chlorotoluene	ND	0.0084	1	05/23/2015 00:12
Dibromochloromethane	ND	0.0084	1	05/23/2015 00:12
1,2-Dibromo-3-chloropropane	ND	0.0068	1	05/23/2015 00:12
1,2-Dibromoethane (EDB)	ND	0.0068	1	05/23/2015 00:12
Dibromomethane	ND	0.0084	1	05/23/2015 00:12
1,2-Dichlorobenzene	ND	0.0084	1	05/23/2015 00:12
1,3-Dichlorobenzene	ND	0.0084	1	05/23/2015 00:12
1,4-Dichlorobenzene	ND	0.0084	1	05/23/2015 00:12
Dichlorodifluoromethane	ND	0.0084	1	05/23/2015 00:12
1,1-Dichloroethane	ND	0.0084	1	05/23/2015 00:12
1,2-Dichloroethane (1,2-DCA)	ND	0.0084	1	05/23/2015 00:12
1,1-Dichloroethene	ND	0.0084	1	05/23/2015 00:12
cis-1,2-Dichloroethene	ND	0.0084	1	05/23/2015 00:12
trans-1,2-Dichloroethene	ND	0.0084	1	05/23/2015 00:12
1,2-Dichloropropane	ND	0.0084	1	05/23/2015 00:12
1,3-Dichloropropane	ND	0.0084	1	05/23/2015 00:12
2,2-Dichloropropane	ND	0.0084	1	05/23/2015 00:12
1,1-Dichloropropene	ND	0.0084	1	05/23/2015 00:12

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016B	Soil	05/20/2015 11:15	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0084	1	05/23/2015 00:12
trans-1,3-Dichloropropene	ND	0.0084	1	05/23/2015 00:12
Diisopropyl ether (DIPE)	ND	0.0084	1	05/23/2015 00:12
Ethylbenzene	ND	0.0084	1	05/23/2015 00:12
Ethyl tert-butyl ether (ETBE)	ND	0.0084	1	05/23/2015 00:12
Freon 113	ND	0.0084	1	05/23/2015 00:12
Hexachlorobutadiene	ND	0.0084	1	05/23/2015 00:12
Hexachloroethane	ND	0.0084	1	05/23/2015 00:12
2-Hexanone	ND	0.0084	1	05/23/2015 00:12
Isopropylbenzene	ND	0.0084	1	05/23/2015 00:12
4-Isopropyl toluene	ND	0.0084	1	05/23/2015 00:12
Methyl-t-butyl ether (MTBE)	ND	0.0084	1	05/23/2015 00:12
Methylene chloride	ND	0.0084	1	05/23/2015 00:12
4-Methyl-2-pentanone (MIBK)	ND	0.0084	1	05/23/2015 00:12
Naphthalene	ND	0.0084	1	05/23/2015 00:12
n-Propyl benzene	ND	0.0084	1	05/23/2015 00:12
Styrene	ND	0.0084	1	05/23/2015 00:12
1,1,1,2-Tetrachloroethane	ND	0.0084	1	05/23/2015 00:12
1,1,2,2-Tetrachloroethane	ND	0.0084	1	05/23/2015 00:12
Tetrachloroethene	ND	0.0084	1	05/23/2015 00:12
Toluene	ND	0.0084	1	05/23/2015 00:12
1,2,3-Trichlorobenzene	ND	0.0084	1	05/23/2015 00:12
1,2,4-Trichlorobenzene	ND	0.0084	1	05/23/2015 00:12
1,1,1-Trichloroethane	ND	0.0084	1	05/23/2015 00:12
1,1,2-Trichloroethane	ND	0.0084	1	05/23/2015 00:12
Trichloroethene	ND	0.0084	1	05/23/2015 00:12
Trichlorofluoromethane	ND	0.0084	1	05/23/2015 00:12
1,2,3-Trichloropropane	ND	0.0084	1	05/23/2015 00:12
1,2,4-Trimethylbenzene	ND	0.0084	1	05/23/2015 00:12
1,3,5-Trimethylbenzene	ND	0.0084	1	05/23/2015 00:12
Vinyl Chloride	ND	0.0084	1	05/23/2015 00:12
Xylenes, Total	ND	0.0084	1	05/23/2015 00:12

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016B	Soil	05/20/2015 11:15	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	108	70-130		05/23/2015 00:12
Toluene-d8	95	70-130		05/23/2015 00:12
4-BFB	121	70-130		05/23/2015 00:12
Benzene-d6	84	60-140		05/23/2015 00:12
Ethylbenzene-d10	93	60-140		05/23/2015 00:12
1,2-DCB-d4	79	60-140		05/23/2015 00:12

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017B	Soil	05/20/2015 11:50	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/27/2015 03:24
tert-Amyl methyl ether (TAME)	ND	0.0085	1	05/27/2015 03:24
Benzene	ND	0.0085	1	05/27/2015 03:24
Bromobenzene	ND	0.0085	1	05/27/2015 03:24
Bromochloromethane	ND	0.0085	1	05/27/2015 03:24
Bromodichloromethane	ND	0.0085	1	05/27/2015 03:24
Bromoform	ND	0.0085	1	05/27/2015 03:24
Bromomethane	ND	0.0085	1	05/27/2015 03:24
2-Butanone (MEK)	ND	0.034	1	05/27/2015 03:24
t-Butyl alcohol (TBA)	ND	0.085	1	05/27/2015 03:24
n-Butyl benzene	ND	0.0085	1	05/27/2015 03:24
sec-Butyl benzene	ND	0.0085	1	05/27/2015 03:24
tert-Butyl benzene	ND	0.0085	1	05/27/2015 03:24
Carbon Disulfide	ND	0.0085	1	05/27/2015 03:24
Carbon Tetrachloride	ND	0.0085	1	05/27/2015 03:24
Chlorobenzene	ND	0.0085	1	05/27/2015 03:24
Chloroethane	ND	0.0085	1	05/27/2015 03:24
Chloroform	ND	0.0085	1	05/27/2015 03:24
Chloromethane	ND	0.0085	1	05/27/2015 03:24
2-Chlorotoluene	ND	0.0085	1	05/27/2015 03:24
4-Chlorotoluene	ND	0.0085	1	05/27/2015 03:24
Dibromochloromethane	ND	0.0085	1	05/27/2015 03:24
1,2-Dibromo-3-chloropropane	ND	0.0068	1	05/27/2015 03:24
1,2-Dibromoethane (EDB)	ND	0.0068	1	05/27/2015 03:24
Dibromomethane	ND	0.0085	1	05/27/2015 03:24
1,2-Dichlorobenzene	ND	0.0085	1	05/27/2015 03:24
1,3-Dichlorobenzene	ND	0.0085	1	05/27/2015 03:24
1,4-Dichlorobenzene	ND	0.0085	1	05/27/2015 03:24
Dichlorodifluoromethane	ND	0.0085	1	05/27/2015 03:24
1,1-Dichloroethane	ND	0.0085	1	05/27/2015 03:24
1,2-Dichloroethane (1,2-DCA)	ND	0.0085	1	05/27/2015 03:24
1,1-Dichloroethene	ND	0.0085	1	05/27/2015 03:24
cis-1,2-Dichloroethene	ND	0.0085	1	05/27/2015 03:24
trans-1,2-Dichloroethene	ND	0.0085	1	05/27/2015 03:24
1,2-Dichloropropane	ND	0.0085	1	05/27/2015 03:24
1,3-Dichloropropane	ND	0.0085	1	05/27/2015 03:24
2,2-Dichloropropane	ND	0.0085	1	05/27/2015 03:24
1,1-Dichloropropene	ND	0.0085	1	05/27/2015 03:24

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017B	Soil	05/20/2015 11:50	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0085	1	05/27/2015 03:24
trans-1,3-Dichloropropene	ND	0.0085	1	05/27/2015 03:24
Diisopropyl ether (DIPE)	ND	0.0085	1	05/27/2015 03:24
Ethylbenzene	ND	0.0085	1	05/27/2015 03:24
Ethyl tert-butyl ether (ETBE)	ND	0.0085	1	05/27/2015 03:24
Freon 113	ND	0.0085	1	05/27/2015 03:24
Hexachlorobutadiene	ND	0.0085	1	05/27/2015 03:24
Hexachloroethane	ND	0.0085	1	05/27/2015 03:24
2-Hexanone	ND	0.0085	1	05/27/2015 03:24
Isopropylbenzene	ND	0.0085	1	05/27/2015 03:24
4-Isopropyl toluene	ND	0.0085	1	05/27/2015 03:24
Methyl-t-butyl ether (MTBE)	ND	0.0085	1	05/27/2015 03:24
Methylene chloride	ND	0.0085	1	05/27/2015 03:24
4-Methyl-2-pentanone (MIBK)	ND	0.0085	1	05/27/2015 03:24
Naphthalene	ND	0.0085	1	05/27/2015 03:24
n-Propyl benzene	ND	0.0085	1	05/27/2015 03:24
Styrene	ND	0.0085	1	05/27/2015 03:24
1,1,1,2-Tetrachloroethane	ND	0.0085	1	05/27/2015 03:24
1,1,2,2-Tetrachloroethane	ND	0.0085	1	05/27/2015 03:24
Tetrachloroethene	ND	0.0085	1	05/27/2015 03:24
Toluene	ND	0.0085	1	05/27/2015 03:24
1,2,3-Trichlorobenzene	ND	0.0085	1	05/27/2015 03:24
1,2,4-Trichlorobenzene	ND	0.0085	1	05/27/2015 03:24
1,1,1-Trichloroethane	ND	0.0085	1	05/27/2015 03:24
1,1,2-Trichloroethane	ND	0.0085	1	05/27/2015 03:24
Trichloroethene	ND	0.0085	1	05/27/2015 03:24
Trichlorofluoromethane	ND	0.0085	1	05/27/2015 03:24
1,2,3-Trichloropropane	ND	0.0085	1	05/27/2015 03:24
1,2,4-Trimethylbenzene	ND	0.0085	1	05/27/2015 03:24
1,3,5-Trimethylbenzene	ND	0.0085	1	05/27/2015 03:24
Vinyl Chloride	ND	0.0085	1	05/27/2015 03:24
Xylenes, Total	ND	0.0085	1	05/27/2015 03:24

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017B	Soil	05/20/2015 11:50	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		05/27/2015 03:24
Toluene-d8	92	70-130		05/27/2015 03:24
4-BFB	99	70-130		05/27/2015 03:24
Benzene-d6	82	60-140		05/27/2015 03:24
Ethylbenzene-d10	94	60-140		05/27/2015 03:24
1,2-DCB-d4	82	60-140		05/27/2015 03:24

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018B	Soil	05/20/2015 13:00	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.16	1	05/23/2015 01:34
tert-Amyl methyl ether (TAME)	ND	0.0081	1	05/23/2015 01:34
Benzene	ND	0.0081	1	05/23/2015 01:34
Bromobenzene	ND	0.0081	1	05/23/2015 01:34
Bromochloromethane	ND	0.0081	1	05/23/2015 01:34
Bromodichloromethane	ND	0.0081	1	05/23/2015 01:34
Bromoform	ND	0.0081	1	05/23/2015 01:34
Bromomethane	ND	0.0081	1	05/23/2015 01:34
2-Butanone (MEK)	ND	0.033	1	05/23/2015 01:34
t-Butyl alcohol (TBA)	ND	0.081	1	05/23/2015 01:34
n-Butyl benzene	ND	0.0081	1	05/23/2015 01:34
sec-Butyl benzene	ND	0.0081	1	05/23/2015 01:34
tert-Butyl benzene	ND	0.0081	1	05/23/2015 01:34
Carbon Disulfide	ND	0.0081	1	05/23/2015 01:34
Carbon Tetrachloride	ND	0.0081	1	05/23/2015 01:34
Chlorobenzene	ND	0.0081	1	05/23/2015 01:34
Chloroethane	ND	0.0081	1	05/23/2015 01:34
Chloroform	ND	0.0081	1	05/23/2015 01:34
Chloromethane	ND	0.0081	1	05/23/2015 01:34
2-Chlorotoluene	ND	0.0081	1	05/23/2015 01:34
4-Chlorotoluene	ND	0.0081	1	05/23/2015 01:34
Dibromochloromethane	ND	0.0081	1	05/23/2015 01:34
1,2-Dibromo-3-chloropropane	ND	0.0065	1	05/23/2015 01:34
1,2-Dibromoethane (EDB)	ND	0.0065	1	05/23/2015 01:34
Dibromomethane	ND	0.0081	1	05/23/2015 01:34
1,2-Dichlorobenzene	ND	0.0081	1	05/23/2015 01:34
1,3-Dichlorobenzene	ND	0.0081	1	05/23/2015 01:34
1,4-Dichlorobenzene	ND	0.0081	1	05/23/2015 01:34
Dichlorodifluoromethane	ND	0.0081	1	05/23/2015 01:34
1,1-Dichloroethane	ND	0.0081	1	05/23/2015 01:34
1,2-Dichloroethane (1,2-DCA)	ND	0.0081	1	05/23/2015 01:34
1,1-Dichloroethene	ND	0.0081	1	05/23/2015 01:34
cis-1,2-Dichloroethene	ND	0.0081	1	05/23/2015 01:34
trans-1,2-Dichloroethene	ND	0.0081	1	05/23/2015 01:34
1,2-Dichloropropane	ND	0.0081	1	05/23/2015 01:34
1,3-Dichloropropane	ND	0.0081	1	05/23/2015 01:34
2,2-Dichloropropane	ND	0.0081	1	05/23/2015 01:34
1,1-Dichloropropene	ND	0.0081	1	05/23/2015 01:34

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018B	Soil	05/20/2015 13:00	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0081	1	05/23/2015 01:34
trans-1,3-Dichloropropene	ND	0.0081	1	05/23/2015 01:34
Diisopropyl ether (DIPE)	ND	0.0081	1	05/23/2015 01:34
Ethylbenzene	ND	0.0081	1	05/23/2015 01:34
Ethyl tert-butyl ether (ETBE)	ND	0.0081	1	05/23/2015 01:34
Freon 113	ND	0.0081	1	05/23/2015 01:34
Hexachlorobutadiene	ND	0.0081	1	05/23/2015 01:34
Hexachloroethane	ND	0.0081	1	05/23/2015 01:34
2-Hexanone	ND	0.0081	1	05/23/2015 01:34
Isopropylbenzene	ND	0.0081	1	05/23/2015 01:34
4-Isopropyl toluene	ND	0.0081	1	05/23/2015 01:34
Methyl-t-butyl ether (MTBE)	ND	0.0081	1	05/23/2015 01:34
Methylene chloride	ND	0.0081	1	05/23/2015 01:34
4-Methyl-2-pentanone (MIBK)	ND	0.0081	1	05/23/2015 01:34
Naphthalene	ND	0.0081	1	05/23/2015 01:34
n-Propyl benzene	ND	0.0081	1	05/23/2015 01:34
Styrene	ND	0.0081	1	05/23/2015 01:34
1,1,1,2-Tetrachloroethane	ND	0.0081	1	05/23/2015 01:34
1,1,2,2-Tetrachloroethane	ND	0.0081	1	05/23/2015 01:34
Tetrachloroethene	ND	0.0081	1	05/23/2015 01:34
Toluene	ND	0.0081	1	05/23/2015 01:34
1,2,3-Trichlorobenzene	ND	0.0081	1	05/23/2015 01:34
1,2,4-Trichlorobenzene	ND	0.0081	1	05/23/2015 01:34
1,1,1-Trichloroethane	ND	0.0081	1	05/23/2015 01:34
1,1,2-Trichloroethane	ND	0.0081	1	05/23/2015 01:34
Trichloroethene	ND	0.0081	1	05/23/2015 01:34
Trichlorofluoromethane	ND	0.0081	1	05/23/2015 01:34
1,2,3-Trichloropropane	ND	0.0081	1	05/23/2015 01:34
1,2,4-Trimethylbenzene	ND	0.0081	1	05/23/2015 01:34
1,3,5-Trimethylbenzene	ND	0.0081	1	05/23/2015 01:34
Vinyl Chloride	ND	0.0081	1	05/23/2015 01:34
Xylenes, Total	ND	0.0081	1	05/23/2015 01:34

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018B	Soil	05/20/2015 13:00	GC10	105172

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	104	70-130		05/23/2015 01:34
Toluene-d8	96	70-130		05/23/2015 01:34
4-BFB	116	70-130		05/23/2015 01:34
Benzene-d6	87	60-140		05/23/2015 01:34
Ethylbenzene-d10	99	60-140		05/23/2015 01:34
1,2-DCB-d4	85	60-140		05/23/2015 01:34

**Analyst(s):** KBO

**Analytical Comments:** a9





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019B	Soil	05/20/2015 13:05	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/27/2015 04:06
tert-Amyl methyl ether (TAME)	ND	0.0089	1	05/27/2015 04:06
Benzene	ND	0.0089	1	05/27/2015 04:06
Bromobenzene	ND	0.0089	1	05/27/2015 04:06
Bromochloromethane	ND	0.0089	1	05/27/2015 04:06
Bromodichloromethane	ND	0.0089	1	05/27/2015 04:06
Bromoform	ND	0.0089	1	05/27/2015 04:06
Bromomethane	ND	0.0089	1	05/27/2015 04:06
2-Butanone (MEK)	ND	0.036	1	05/27/2015 04:06
t-Butyl alcohol (TBA)	ND	0.089	1	05/27/2015 04:06
n-Butyl benzene	ND	0.0089	1	05/27/2015 04:06
sec-Butyl benzene	ND	0.0089	1	05/27/2015 04:06
tert-Butyl benzene	ND	0.0089	1	05/27/2015 04:06
Carbon Disulfide	ND	0.0089	1	05/27/2015 04:06
Carbon Tetrachloride	ND	0.0089	1	05/27/2015 04:06
Chlorobenzene	ND	0.0089	1	05/27/2015 04:06
Chloroethane	ND	0.0089	1	05/27/2015 04:06
Chloroform	ND	0.0089	1	05/27/2015 04:06
Chloromethane	ND	0.0089	1	05/27/2015 04:06
2-Chlorotoluene	ND	0.0089	1	05/27/2015 04:06
4-Chlorotoluene	ND	0.0089	1	05/27/2015 04:06
Dibromochloromethane	ND	0.0089	1	05/27/2015 04:06
1,2-Dibromo-3-chloropropane	ND	0.0072	1	05/27/2015 04:06
1,2-Dibromoethane (EDB)	ND	0.0072	1	05/27/2015 04:06
Dibromomethane	ND	0.0089	1	05/27/2015 04:06
1,2-Dichlorobenzene	ND	0.0089	1	05/27/2015 04:06
1,3-Dichlorobenzene	ND	0.0089	1	05/27/2015 04:06
1,4-Dichlorobenzene	ND	0.0089	1	05/27/2015 04:06
Dichlorodifluoromethane	ND	0.0089	1	05/27/2015 04:06
1,1-Dichloroethane	ND	0.0089	1	05/27/2015 04:06
1,2-Dichloroethane (1,2-DCA)	ND	0.0089	1	05/27/2015 04:06
1,1-Dichloroethene	ND	0.0089	1	05/27/2015 04:06
cis-1,2-Dichloroethene	ND	0.0089	1	05/27/2015 04:06
trans-1,2-Dichloroethene	ND	0.0089	1	05/27/2015 04:06
1,2-Dichloropropane	ND	0.0089	1	05/27/2015 04:06
1,3-Dichloropropane	ND	0.0089	1	05/27/2015 04:06
2,2-Dichloropropane	ND	0.0089	1	05/27/2015 04:06
1,1-Dichloropropene	ND	0.0089	1	05/27/2015 04:06

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019B	Soil	05/20/2015 13:05	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0089	1	05/27/2015 04:06
trans-1,3-Dichloropropene	ND	0.0089	1	05/27/2015 04:06
Diisopropyl ether (DIPE)	ND	0.0089	1	05/27/2015 04:06
Ethylbenzene	ND	0.0089	1	05/27/2015 04:06
Ethyl tert-butyl ether (ETBE)	ND	0.0089	1	05/27/2015 04:06
Freon 113	ND	0.0089	1	05/27/2015 04:06
Hexachlorobutadiene	ND	0.0089	1	05/27/2015 04:06
Hexachloroethane	ND	0.0089	1	05/27/2015 04:06
2-Hexanone	ND	0.0089	1	05/27/2015 04:06
Isopropylbenzene	ND	0.0089	1	05/27/2015 04:06
4-Isopropyl toluene	ND	0.0089	1	05/27/2015 04:06
Methyl-t-butyl ether (MTBE)	ND	0.0089	1	05/27/2015 04:06
Methylene chloride	ND	0.0089	1	05/27/2015 04:06
4-Methyl-2-pentanone (MIBK)	ND	0.0089	1	05/27/2015 04:06
Naphthalene	ND	0.0089	1	05/27/2015 04:06
n-Propyl benzene	ND	0.0089	1	05/27/2015 04:06
Styrene	ND	0.0089	1	05/27/2015 04:06
1,1,1,2-Tetrachloroethane	ND	0.0089	1	05/27/2015 04:06
1,1,2,2-Tetrachloroethane	ND	0.0089	1	05/27/2015 04:06
Tetrachloroethene	ND	0.0089	1	05/27/2015 04:06
Toluene	ND	0.0089	1	05/27/2015 04:06
1,2,3-Trichlorobenzene	ND	0.0089	1	05/27/2015 04:06
1,2,4-Trichlorobenzene	ND	0.0089	1	05/27/2015 04:06
1,1,1-Trichloroethane	ND	0.0089	1	05/27/2015 04:06
1,1,2-Trichloroethane	ND	0.0089	1	05/27/2015 04:06
Trichloroethene	ND	0.0089	1	05/27/2015 04:06
Trichlorofluoromethane	ND	0.0089	1	05/27/2015 04:06
1,2,3-Trichloropropane	ND	0.0089	1	05/27/2015 04:06
1,2,4-Trimethylbenzene	ND	0.0089	1	05/27/2015 04:06
1,3,5-Trimethylbenzene	ND	0.0089	1	05/27/2015 04:06
Vinyl Chloride	ND	0.0089	1	05/27/2015 04:06
Xylenes, Total	ND	0.0089	1	05/27/2015 04:06

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019B	Soil	05/20/2015 13:05	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	70-130		05/27/2015 04:06
Toluene-d8	92	70-130		05/27/2015 04:06
4-BFB	100	70-130		05/27/2015 04:06
Benzene-d6	83	60-140		05/27/2015 04:06
Ethylbenzene-d10	95	60-140		05/27/2015 04:06
1,2-DCB-d4	83	60-140		05/27/2015 04:06

Analyst(s): KBO

Analytical Comments: a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020B	Soil	05/20/2015 13:20	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/27/2015 04:47
tert-Amyl methyl ether (TAME)	ND	0.0084	1	05/27/2015 04:47
Benzene	ND	0.0084	1	05/27/2015 04:47
Bromobenzene	ND	0.0084	1	05/27/2015 04:47
Bromochloromethane	ND	0.0084	1	05/27/2015 04:47
Bromodichloromethane	ND	0.0084	1	05/27/2015 04:47
Bromoform	ND	0.0084	1	05/27/2015 04:47
Bromomethane	ND	0.0084	1	05/27/2015 04:47
2-Butanone (MEK)	ND	0.034	1	05/27/2015 04:47
t-Butyl alcohol (TBA)	ND	0.084	1	05/27/2015 04:47
n-Butyl benzene	ND	0.0084	1	05/27/2015 04:47
sec-Butyl benzene	ND	0.0084	1	05/27/2015 04:47
tert-Butyl benzene	ND	0.0084	1	05/27/2015 04:47
Carbon Disulfide	ND	0.0084	1	05/27/2015 04:47
Carbon Tetrachloride	ND	0.0084	1	05/27/2015 04:47
Chlorobenzene	ND	0.0084	1	05/27/2015 04:47
Chloroethane	ND	0.0084	1	05/27/2015 04:47
Chloroform	ND	0.0084	1	05/27/2015 04:47
Chloromethane	ND	0.0084	1	05/27/2015 04:47
2-Chlorotoluene	ND	0.0084	1	05/27/2015 04:47
4-Chlorotoluene	ND	0.0084	1	05/27/2015 04:47
Dibromochloromethane	ND	0.0084	1	05/27/2015 04:47
1,2-Dibromo-3-chloropropane	ND	0.0067	1	05/27/2015 04:47
1,2-Dibromoethane (EDB)	ND	0.0067	1	05/27/2015 04:47
Dibromomethane	ND	0.0084	1	05/27/2015 04:47
1,2-Dichlorobenzene	ND	0.0084	1	05/27/2015 04:47
1,3-Dichlorobenzene	ND	0.0084	1	05/27/2015 04:47
1,4-Dichlorobenzene	ND	0.0084	1	05/27/2015 04:47
Dichlorodifluoromethane	ND	0.0084	1	05/27/2015 04:47
1,1-Dichloroethane	ND	0.0084	1	05/27/2015 04:47
1,2-Dichloroethane (1,2-DCA)	ND	0.0084	1	05/27/2015 04:47
1,1-Dichloroethene	ND	0.0084	1	05/27/2015 04:47
cis-1,2-Dichloroethene	ND	0.0084	1	05/27/2015 04:47
trans-1,2-Dichloroethene	ND	0.0084	1	05/27/2015 04:47
1,2-Dichloropropane	ND	0.0084	1	05/27/2015 04:47
1,3-Dichloropropane	ND	0.0084	1	05/27/2015 04:47
2,2-Dichloropropane	ND	0.0084	1	05/27/2015 04:47
1,1-Dichloropropene	ND	0.0084	1	05/27/2015 04:47

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020B	Soil	05/20/2015 13:20	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0084	1	05/27/2015 04:47
trans-1,3-Dichloropropene	ND	0.0084	1	05/27/2015 04:47
Diisopropyl ether (DIPE)	ND	0.0084	1	05/27/2015 04:47
Ethylbenzene	ND	0.0084	1	05/27/2015 04:47
Ethyl tert-butyl ether (ETBE)	ND	0.0084	1	05/27/2015 04:47
Freon 113	ND	0.0084	1	05/27/2015 04:47
Hexachlorobutadiene	ND	0.0084	1	05/27/2015 04:47
Hexachloroethane	ND	0.0084	1	05/27/2015 04:47
2-Hexanone	ND	0.0084	1	05/27/2015 04:47
Isopropylbenzene	ND	0.0084	1	05/27/2015 04:47
4-Isopropyl toluene	ND	0.0084	1	05/27/2015 04:47
Methyl-t-butyl ether (MTBE)	ND	0.0084	1	05/27/2015 04:47
Methylene chloride	ND	0.0084	1	05/27/2015 04:47
4-Methyl-2-pentanone (MIBK)	ND	0.0084	1	05/27/2015 04:47
Naphthalene	ND	0.0084	1	05/27/2015 04:47
n-Propyl benzene	ND	0.0084	1	05/27/2015 04:47
Styrene	ND	0.0084	1	05/27/2015 04:47
1,1,1,2-Tetrachloroethane	ND	0.0084	1	05/27/2015 04:47
1,1,2,2-Tetrachloroethane	ND	0.0084	1	05/27/2015 04:47
Tetrachloroethene	ND	0.0084	1	05/27/2015 04:47
Toluene	ND	0.0084	1	05/27/2015 04:47
1,2,3-Trichlorobenzene	ND	0.0084	1	05/27/2015 04:47
1,2,4-Trichlorobenzene	ND	0.0084	1	05/27/2015 04:47
1,1,1-Trichloroethane	ND	0.0084	1	05/27/2015 04:47
1,1,2-Trichloroethane	ND	0.0084	1	05/27/2015 04:47
Trichloroethene	ND	0.0084	1	05/27/2015 04:47
Trichlorofluoromethane	ND	0.0084	1	05/27/2015 04:47
1,2,3-Trichloropropane	ND	0.0084	1	05/27/2015 04:47
1,2,4-Trimethylbenzene	ND	0.0084	1	05/27/2015 04:47
1,3,5-Trimethylbenzene	ND	0.0084	1	05/27/2015 04:47
Vinyl Chloride	ND	0.0084	1	05/27/2015 04:47
Xylenes, Total	ND	0.0084	1	05/27/2015 04:47

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020B	Soil	05/20/2015 13:20	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		05/27/2015 04:47
Toluene-d8	92	70-130		05/27/2015 04:47
4-BFB	99	70-130		05/27/2015 04:47
Benzene-d6	82	60-140		05/27/2015 04:47
Ethylbenzene-d10	93	60-140		05/27/2015 04:47
1,2-DCB-d4	83	60-140		05/27/2015 04:47

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021B	Soil	05/20/2015 13:30	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/27/2015 05:28
tert-Amyl methyl ether (TAME)	ND	0.0090	1	05/27/2015 05:28
Benzene	ND	0.0090	1	05/27/2015 05:28
Bromobenzene	ND	0.0090	1	05/27/2015 05:28
Bromochloromethane	ND	0.0090	1	05/27/2015 05:28
Bromodichloromethane	ND	0.0090	1	05/27/2015 05:28
Bromoform	ND	0.0090	1	05/27/2015 05:28
Bromomethane	ND	0.0090	1	05/27/2015 05:28
2-Butanone (MEK)	ND	0.036	1	05/27/2015 05:28
t-Butyl alcohol (TBA)	ND	0.090	1	05/27/2015 05:28
n-Butyl benzene	ND	0.0090	1	05/27/2015 05:28
sec-Butyl benzene	ND	0.0090	1	05/27/2015 05:28
tert-Butyl benzene	ND	0.0090	1	05/27/2015 05:28
Carbon Disulfide	ND	0.0090	1	05/27/2015 05:28
Carbon Tetrachloride	ND	0.0090	1	05/27/2015 05:28
Chlorobenzene	ND	0.0090	1	05/27/2015 05:28
Chloroethane	ND	0.0090	1	05/27/2015 05:28
Chloroform	ND	0.0090	1	05/27/2015 05:28
Chloromethane	ND	0.0090	1	05/27/2015 05:28
2-Chlorotoluene	ND	0.0090	1	05/27/2015 05:28
4-Chlorotoluene	ND	0.0090	1	05/27/2015 05:28
Dibromochloromethane	ND	0.0090	1	05/27/2015 05:28
1,2-Dibromo-3-chloropropane	ND	0.0072	1	05/27/2015 05:28
1,2-Dibromoethane (EDB)	ND	0.0072	1	05/27/2015 05:28
Dibromomethane	ND	0.0090	1	05/27/2015 05:28
1,2-Dichlorobenzene	ND	0.0090	1	05/27/2015 05:28
1,3-Dichlorobenzene	ND	0.0090	1	05/27/2015 05:28
1,4-Dichlorobenzene	ND	0.0090	1	05/27/2015 05:28
Dichlorodifluoromethane	ND	0.0090	1	05/27/2015 05:28
1,1-Dichloroethane	ND	0.0090	1	05/27/2015 05:28
1,2-Dichloroethane (1,2-DCA)	ND	0.0090	1	05/27/2015 05:28
1,1-Dichloroethene	ND	0.0090	1	05/27/2015 05:28
cis-1,2-Dichloroethene	ND	0.0090	1	05/27/2015 05:28
trans-1,2-Dichloroethene	ND	0.0090	1	05/27/2015 05:28
1,2-Dichloropropane	ND	0.0090	1	05/27/2015 05:28
1,3-Dichloropropane	ND	0.0090	1	05/27/2015 05:28
2,2-Dichloropropane	ND	0.0090	1	05/27/2015 05:28
1,1-Dichloropropene	ND	0.0090	1	05/27/2015 05:28

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021B	Soil	05/20/2015 13:30	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0090	1	05/27/2015 05:28
trans-1,3-Dichloropropene	ND	0.0090	1	05/27/2015 05:28
Diisopropyl ether (DIPE)	ND	0.0090	1	05/27/2015 05:28
Ethylbenzene	ND	0.0090	1	05/27/2015 05:28
Ethyl tert-butyl ether (ETBE)	ND	0.0090	1	05/27/2015 05:28
Freon 113	ND	0.0090	1	05/27/2015 05:28
Hexachlorobutadiene	ND	0.0090	1	05/27/2015 05:28
Hexachloroethane	ND	0.0090	1	05/27/2015 05:28
2-Hexanone	ND	0.0090	1	05/27/2015 05:28
Isopropylbenzene	ND	0.0090	1	05/27/2015 05:28
4-Isopropyl toluene	ND	0.0090	1	05/27/2015 05:28
Methyl-t-butyl ether (MTBE)	ND	0.0090	1	05/27/2015 05:28
Methylene chloride	ND	0.0090	1	05/27/2015 05:28
4-Methyl-2-pentanone (MIBK)	ND	0.0090	1	05/27/2015 05:28
Naphthalene	ND	0.0090	1	05/27/2015 05:28
n-Propyl benzene	ND	0.0090	1	05/27/2015 05:28
Styrene	ND	0.0090	1	05/27/2015 05:28
1,1,1,2-Tetrachloroethane	ND	0.0090	1	05/27/2015 05:28
1,1,2,2-Tetrachloroethane	ND	0.0090	1	05/27/2015 05:28
Tetrachloroethene	ND	0.0090	1	05/27/2015 05:28
Toluene	ND	0.0090	1	05/27/2015 05:28
1,2,3-Trichlorobenzene	ND	0.0090	1	05/27/2015 05:28
1,2,4-Trichlorobenzene	ND	0.0090	1	05/27/2015 05:28
1,1,1-Trichloroethane	ND	0.0090	1	05/27/2015 05:28
1,1,2-Trichloroethane	ND	0.0090	1	05/27/2015 05:28
Trichloroethene	ND	0.0090	1	05/27/2015 05:28
Trichlorofluoromethane	ND	0.0090	1	05/27/2015 05:28
1,2,3-Trichloropropane	ND	0.0090	1	05/27/2015 05:28
1,2,4-Trimethylbenzene	ND	0.0090	1	05/27/2015 05:28
1,3,5-Trimethylbenzene	ND	0.0090	1	05/27/2015 05:28
Vinyl Chloride	ND	0.0090	1	05/27/2015 05:28
Xylenes, Total	ND	0.0090	1	05/27/2015 05:28

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021B	Soil	05/20/2015 13:30	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	70-130		05/27/2015 05:28
Toluene-d8	92	70-130		05/27/2015 05:28
4-BFB	97	70-130		05/27/2015 05:28
Benzene-d6	85	60-140		05/27/2015 05:28
Ethylbenzene-d10	96	60-140		05/27/2015 05:28
1,2-DCB-d4	84	60-140		05/27/2015 05:28

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022B	Soil	05/20/2015 13:35	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/27/2015 06:09
tert-Amyl methyl ether (TAME)	ND	0.0090	1	05/27/2015 06:09
Benzene	ND	0.0090	1	05/27/2015 06:09
Bromobenzene	ND	0.0090	1	05/27/2015 06:09
Bromochloromethane	ND	0.0090	1	05/27/2015 06:09
Bromodichloromethane	ND	0.0090	1	05/27/2015 06:09
Bromoform	ND	0.0090	1	05/27/2015 06:09
Bromomethane	ND	0.0090	1	05/27/2015 06:09
2-Butanone (MEK)	ND	0.036	1	05/27/2015 06:09
t-Butyl alcohol (TBA)	ND	0.090	1	05/27/2015 06:09
n-Butyl benzene	ND	0.0090	1	05/27/2015 06:09
sec-Butyl benzene	ND	0.0090	1	05/27/2015 06:09
tert-Butyl benzene	ND	0.0090	1	05/27/2015 06:09
Carbon Disulfide	ND	0.0090	1	05/27/2015 06:09
Carbon Tetrachloride	ND	0.0090	1	05/27/2015 06:09
Chlorobenzene	ND	0.0090	1	05/27/2015 06:09
Chloroethane	ND	0.0090	1	05/27/2015 06:09
Chloroform	ND	0.0090	1	05/27/2015 06:09
Chloromethane	ND	0.0090	1	05/27/2015 06:09
2-Chlorotoluene	ND	0.0090	1	05/27/2015 06:09
4-Chlorotoluene	ND	0.0090	1	05/27/2015 06:09
Dibromochloromethane	ND	0.0090	1	05/27/2015 06:09
1,2-Dibromo-3-chloropropane	ND	0.0072	1	05/27/2015 06:09
1,2-Dibromoethane (EDB)	ND	0.0072	1	05/27/2015 06:09
Dibromomethane	ND	0.0090	1	05/27/2015 06:09
1,2-Dichlorobenzene	ND	0.0090	1	05/27/2015 06:09
1,3-Dichlorobenzene	ND	0.0090	1	05/27/2015 06:09
1,4-Dichlorobenzene	ND	0.0090	1	05/27/2015 06:09
Dichlorodifluoromethane	ND	0.0090	1	05/27/2015 06:09
1,1-Dichloroethane	ND	0.0090	1	05/27/2015 06:09
1,2-Dichloroethane (1,2-DCA)	ND	0.0090	1	05/27/2015 06:09
1,1-Dichloroethene	ND	0.0090	1	05/27/2015 06:09
cis-1,2-Dichloroethene	ND	0.0090	1	05/27/2015 06:09
trans-1,2-Dichloroethene	ND	0.0090	1	05/27/2015 06:09
1,2-Dichloropropane	ND	0.0090	1	05/27/2015 06:09
1,3-Dichloropropane	ND	0.0090	1	05/27/2015 06:09
2,2-Dichloropropane	ND	0.0090	1	05/27/2015 06:09
1,1-Dichloropropene	ND	0.0090	1	05/27/2015 06:09

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022B	Soil	05/20/2015 13:35	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0090	1	05/27/2015 06:09
trans-1,3-Dichloropropene	ND	0.0090	1	05/27/2015 06:09
Diisopropyl ether (DIPE)	ND	0.0090	1	05/27/2015 06:09
Ethylbenzene	ND	0.0090	1	05/27/2015 06:09
Ethyl tert-butyl ether (ETBE)	ND	0.0090	1	05/27/2015 06:09
Freon 113	ND	0.0090	1	05/27/2015 06:09
Hexachlorobutadiene	ND	0.0090	1	05/27/2015 06:09
Hexachloroethane	ND	0.0090	1	05/27/2015 06:09
2-Hexanone	ND	0.0090	1	05/27/2015 06:09
Isopropylbenzene	ND	0.0090	1	05/27/2015 06:09
4-Isopropyl toluene	ND	0.0090	1	05/27/2015 06:09
Methyl-t-butyl ether (MTBE)	ND	0.0090	1	05/27/2015 06:09
Methylene chloride	ND	0.0090	1	05/27/2015 06:09
4-Methyl-2-pentanone (MIBK)	ND	0.0090	1	05/27/2015 06:09
Naphthalene	ND	0.0090	1	05/27/2015 06:09
n-Propyl benzene	ND	0.0090	1	05/27/2015 06:09
Styrene	ND	0.0090	1	05/27/2015 06:09
1,1,1,2-Tetrachloroethane	ND	0.0090	1	05/27/2015 06:09
1,1,2,2-Tetrachloroethane	ND	0.0090	1	05/27/2015 06:09
Tetrachloroethene	ND	0.0090	1	05/27/2015 06:09
Toluene	ND	0.0090	1	05/27/2015 06:09
1,2,3-Trichlorobenzene	ND	0.0090	1	05/27/2015 06:09
1,2,4-Trichlorobenzene	ND	0.0090	1	05/27/2015 06:09
1,1,1-Trichloroethane	ND	0.0090	1	05/27/2015 06:09
1,1,2-Trichloroethane	ND	0.0090	1	05/27/2015 06:09
Trichloroethene	ND	0.0090	1	05/27/2015 06:09
Trichlorofluoromethane	ND	0.0090	1	05/27/2015 06:09
1,2,3-Trichloropropane	ND	0.0090	1	05/27/2015 06:09
1,2,4-Trimethylbenzene	ND	0.0090	1	05/27/2015 06:09
1,3,5-Trimethylbenzene	ND	0.0090	1	05/27/2015 06:09
Vinyl Chloride	ND	0.0090	1	05/27/2015 06:09
Xylenes, Total	ND	0.0090	1	05/27/2015 06:09

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022B	Soil	05/20/2015 13:35	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		05/27/2015 06:09
Toluene-d8	92	70-130		05/27/2015 06:09
4-BFB	97	70-130		05/27/2015 06:09
Benzene-d6	86	60-140		05/27/2015 06:09
Ethylbenzene-d10	99	60-140		05/27/2015 06:09
1,2-DCB-d4	85	60-140		05/27/2015 06:09

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023B	Soil	05/20/2015 13:46	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.18	1	05/23/2015 04:58
tert-Amyl methyl ether (TAME)	ND	0.0090	1	05/23/2015 04:58
Benzene	ND	0.0090	1	05/23/2015 04:58
Bromobenzene	ND	0.0090	1	05/23/2015 04:58
Bromochloromethane	ND	0.0090	1	05/23/2015 04:58
Bromodichloromethane	ND	0.0090	1	05/23/2015 04:58
Bromoform	ND	0.0090	1	05/23/2015 04:58
Bromomethane	ND	0.0090	1	05/23/2015 04:58
2-Butanone (MEK)	ND	0.036	1	05/23/2015 04:58
t-Butyl alcohol (TBA)	ND	0.090	1	05/23/2015 04:58
n-Butyl benzene	ND	0.0090	1	05/23/2015 04:58
sec-Butyl benzene	ND	0.0090	1	05/23/2015 04:58
tert-Butyl benzene	ND	0.0090	1	05/23/2015 04:58
Carbon Disulfide	ND	0.0090	1	05/23/2015 04:58
Carbon Tetrachloride	ND	0.0090	1	05/23/2015 04:58
Chlorobenzene	ND	0.0090	1	05/23/2015 04:58
Chloroethane	ND	0.0090	1	05/23/2015 04:58
Chloroform	ND	0.0090	1	05/23/2015 04:58
Chloromethane	ND	0.0090	1	05/23/2015 04:58
2-Chlorotoluene	ND	0.0090	1	05/23/2015 04:58
4-Chlorotoluene	ND	0.0090	1	05/23/2015 04:58
Dibromochloromethane	ND	0.0090	1	05/23/2015 04:58
1,2-Dibromo-3-chloropropane	ND	0.0072	1	05/23/2015 04:58
1,2-Dibromoethane (EDB)	ND	0.0072	1	05/23/2015 04:58
Dibromomethane	ND	0.0090	1	05/23/2015 04:58
1,2-Dichlorobenzene	ND	0.0090	1	05/23/2015 04:58
1,3-Dichlorobenzene	ND	0.0090	1	05/23/2015 04:58
1,4-Dichlorobenzene	ND	0.0090	1	05/23/2015 04:58
Dichlorodifluoromethane	ND	0.0090	1	05/23/2015 04:58
1,1-Dichloroethane	ND	0.0090	1	05/23/2015 04:58
1,2-Dichloroethane (1,2-DCA)	ND	0.0090	1	05/23/2015 04:58
1,1-Dichloroethene	ND	0.0090	1	05/23/2015 04:58
cis-1,2-Dichloroethene	ND	0.0090	1	05/23/2015 04:58
trans-1,2-Dichloroethene	ND	0.0090	1	05/23/2015 04:58
1,2-Dichloropropane	ND	0.0090	1	05/23/2015 04:58
1,3-Dichloropropane	ND	0.0090	1	05/23/2015 04:58
2,2-Dichloropropane	ND	0.0090	1	05/23/2015 04:58
1,1-Dichloropropene	ND	0.0090	1	05/23/2015 04:58

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023B	Soil	05/20/2015 13:46	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0090	1	05/23/2015 04:58
trans-1,3-Dichloropropene	ND	0.0090	1	05/23/2015 04:58
Diisopropyl ether (DIPE)	ND	0.0090	1	05/23/2015 04:58
Ethylbenzene	ND	0.0090	1	05/23/2015 04:58
Ethyl tert-butyl ether (ETBE)	ND	0.0090	1	05/23/2015 04:58
Freon 113	ND	0.0090	1	05/23/2015 04:58
Hexachlorobutadiene	ND	0.0090	1	05/23/2015 04:58
Hexachloroethane	ND	0.0090	1	05/23/2015 04:58
2-Hexanone	ND	0.0090	1	05/23/2015 04:58
Isopropylbenzene	ND	0.0090	1	05/23/2015 04:58
4-Isopropyl toluene	ND	0.0090	1	05/23/2015 04:58
Methyl-t-butyl ether (MTBE)	ND	0.0090	1	05/23/2015 04:58
Methylene chloride	ND	0.0090	1	05/23/2015 04:58
4-Methyl-2-pentanone (MIBK)	ND	0.0090	1	05/23/2015 04:58
Naphthalene	ND	0.0090	1	05/23/2015 04:58
n-Propyl benzene	ND	0.0090	1	05/23/2015 04:58
Styrene	ND	0.0090	1	05/23/2015 04:58
1,1,1,2-Tetrachloroethane	ND	0.0090	1	05/23/2015 04:58
1,1,2,2-Tetrachloroethane	ND	0.0090	1	05/23/2015 04:58
Tetrachloroethene	ND	0.0090	1	05/23/2015 04:58
Toluene	ND	0.0090	1	05/23/2015 04:58
1,2,3-Trichlorobenzene	ND	0.0090	1	05/23/2015 04:58
1,2,4-Trichlorobenzene	ND	0.0090	1	05/23/2015 04:58
1,1,1-Trichloroethane	ND	0.0090	1	05/23/2015 04:58
1,1,2-Trichloroethane	ND	0.0090	1	05/23/2015 04:58
Trichloroethene	ND	0.0090	1	05/23/2015 04:58
Trichlorofluoromethane	ND	0.0090	1	05/23/2015 04:58
1,2,3-Trichloropropane	ND	0.0090	1	05/23/2015 04:58
1,2,4-Trimethylbenzene	ND	0.0090	1	05/23/2015 04:58
1,3,5-Trimethylbenzene	ND	0.0090	1	05/23/2015 04:58
Vinyl Chloride	ND	0.0090	1	05/23/2015 04:58
Xylenes, Total	ND	0.0090	1	05/23/2015 04:58

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023B	Soil	05/20/2015 13:46	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	105	70-130		05/23/2015 04:58
Toluene-d8	95	70-130		05/23/2015 04:58
4-BFB	102	70-130		05/23/2015 04:58
Benzene-d6	87	60-140		05/23/2015 04:58
Ethylbenzene-d10	98	60-140		05/23/2015 04:58
1,2-DCB-d4	78	60-140		05/23/2015 04:58

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024B	Soil	05/20/2015 13:50	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.17	1	05/27/2015 06:50
tert-Amyl methyl ether (TAME)	ND	0.0085	1	05/27/2015 06:50
Benzene	ND	0.0085	1	05/27/2015 06:50
Bromobenzene	ND	0.0085	1	05/27/2015 06:50
Bromochloromethane	ND	0.0085	1	05/27/2015 06:50
Bromodichloromethane	ND	0.0085	1	05/27/2015 06:50
Bromoform	ND	0.0085	1	05/27/2015 06:50
Bromomethane	ND	0.0085	1	05/27/2015 06:50
2-Butanone (MEK)	ND	0.034	1	05/27/2015 06:50
t-Butyl alcohol (TBA)	ND	0.085	1	05/27/2015 06:50
n-Butyl benzene	ND	0.0085	1	05/27/2015 06:50
sec-Butyl benzene	ND	0.0085	1	05/27/2015 06:50
tert-Butyl benzene	ND	0.0085	1	05/27/2015 06:50
Carbon Disulfide	ND	0.0085	1	05/27/2015 06:50
Carbon Tetrachloride	ND	0.0085	1	05/27/2015 06:50
Chlorobenzene	ND	0.0085	1	05/27/2015 06:50
Chloroethane	ND	0.0085	1	05/27/2015 06:50
Chloroform	ND	0.0085	1	05/27/2015 06:50
Chloromethane	ND	0.0085	1	05/27/2015 06:50
2-Chlorotoluene	ND	0.0085	1	05/27/2015 06:50
4-Chlorotoluene	ND	0.0085	1	05/27/2015 06:50
Dibromochloromethane	ND	0.0085	1	05/27/2015 06:50
1,2-Dibromo-3-chloropropane	ND	0.0068	1	05/27/2015 06:50
1,2-Dibromoethane (EDB)	ND	0.0068	1	05/27/2015 06:50
Dibromomethane	ND	0.0085	1	05/27/2015 06:50
1,2-Dichlorobenzene	ND	0.0085	1	05/27/2015 06:50
1,3-Dichlorobenzene	ND	0.0085	1	05/27/2015 06:50
1,4-Dichlorobenzene	ND	0.0085	1	05/27/2015 06:50
Dichlorodifluoromethane	ND	0.0085	1	05/27/2015 06:50
1,1-Dichloroethane	ND	0.0085	1	05/27/2015 06:50
1,2-Dichloroethane (1,2-DCA)	ND	0.0085	1	05/27/2015 06:50
1,1-Dichloroethene	ND	0.0085	1	05/27/2015 06:50
cis-1,2-Dichloroethene	ND	0.0085	1	05/27/2015 06:50
trans-1,2-Dichloroethene	ND	0.0085	1	05/27/2015 06:50
1,2-Dichloropropane	ND	0.0085	1	05/27/2015 06:50
1,3-Dichloropropane	ND	0.0085	1	05/27/2015 06:50
2,2-Dichloropropane	ND	0.0085	1	05/27/2015 06:50
1,1-Dichloropropene	ND	0.0085	1	05/27/2015 06:50

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024B	Soil	05/20/2015 13:50	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0085	1	05/27/2015 06:50
trans-1,3-Dichloropropene	ND	0.0085	1	05/27/2015 06:50
Diisopropyl ether (DIPE)	ND	0.0085	1	05/27/2015 06:50
Ethylbenzene	ND	0.0085	1	05/27/2015 06:50
Ethyl tert-butyl ether (ETBE)	ND	0.0085	1	05/27/2015 06:50
Freon 113	ND	0.0085	1	05/27/2015 06:50
Hexachlorobutadiene	ND	0.0085	1	05/27/2015 06:50
Hexachloroethane	ND	0.0085	1	05/27/2015 06:50
2-Hexanone	ND	0.0085	1	05/27/2015 06:50
Isopropylbenzene	ND	0.0085	1	05/27/2015 06:50
4-Isopropyl toluene	ND	0.0085	1	05/27/2015 06:50
Methyl-t-butyl ether (MTBE)	ND	0.0085	1	05/27/2015 06:50
Methylene chloride	ND	0.0085	1	05/27/2015 06:50
4-Methyl-2-pentanone (MIBK)	ND	0.0085	1	05/27/2015 06:50
Naphthalene	ND	0.0085	1	05/27/2015 06:50
n-Propyl benzene	ND	0.0085	1	05/27/2015 06:50
Styrene	ND	0.0085	1	05/27/2015 06:50
1,1,1,2-Tetrachloroethane	ND	0.0085	1	05/27/2015 06:50
1,1,2,2-Tetrachloroethane	ND	0.0085	1	05/27/2015 06:50
Tetrachloroethene	ND	0.0085	1	05/27/2015 06:50
Toluene	ND	0.0085	1	05/27/2015 06:50
1,2,3-Trichlorobenzene	ND	0.0085	1	05/27/2015 06:50
1,2,4-Trichlorobenzene	ND	0.0085	1	05/27/2015 06:50
1,1,1-Trichloroethane	ND	0.0085	1	05/27/2015 06:50
1,1,2-Trichloroethane	ND	0.0085	1	05/27/2015 06:50
Trichloroethene	ND	0.0085	1	05/27/2015 06:50
Trichlorofluoromethane	ND	0.0085	1	05/27/2015 06:50
1,2,3-Trichloropropane	ND	0.0085	1	05/27/2015 06:50
1,2,4-Trimethylbenzene	ND	0.0085	1	05/27/2015 06:50
1,3,5-Trimethylbenzene	ND	0.0085	1	05/27/2015 06:50
Vinyl Chloride	ND	0.0085	1	05/27/2015 06:50
Xylenes, Total	ND	0.0085	1	05/27/2015 06:50

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024B	Soil	05/20/2015 13:50	GC10	105226

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		05/27/2015 06:50
Toluene-d8	92	70-130		05/27/2015 06:50
4-BFB	94	70-130		05/27/2015 06:50
Benzene-d6	86	60-140		05/27/2015 06:50
Ethylbenzene-d10	99	60-140		05/27/2015 06:50
1,2-DCB-d4	83	60-140		05/27/2015 06:50

**Analyst(s):** KBO

**Analytical Comments:** a9



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.050	5	05/28/2015 20:41
Acenaphthylene	ND	0.050	5	05/28/2015 20:41
Anthracene	ND	0.050	5	05/28/2015 20:41
Benzo (a) anthracene	ND	0.050	5	05/28/2015 20:41
Benzo (b) fluoranthene	ND	0.050	5	05/28/2015 20:41
Benzo (k) fluoranthene	ND	0.050	5	05/28/2015 20:41
Benzo (g,h,i) perylene	ND	0.050	5	05/28/2015 20:41
Benzo (a) pyrene	ND	0.050	5	05/28/2015 20:41
Chrysene	ND	0.050	5	05/28/2015 20:41
Dibenzo (a,h) anthracene	ND	0.050	5	05/28/2015 20:41
Fluoranthene	ND	0.050	5	05/28/2015 20:41
Fluorene	ND	0.050	5	05/28/2015 20:41
Indeno (1,2,3-cd) pyrene	ND	0.050	5	05/28/2015 20:41
1-Methylnaphthalene	ND	0.050	5	05/28/2015 20:41
2-Methylnaphthalene	ND	0.050	5	05/28/2015 20:41
Naphthalene	ND	0.050	5	05/28/2015 20:41
Phenanthrene	ND	0.050	5	05/28/2015 20:41
Pyrene	ND	0.050	5	05/28/2015 20:41

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	88	30-130	05/28/2015 20:41
2-Fluorobiphenyl	86	30-130	05/28/2015 20:41

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 17:13
Acenaphthylene	ND	0.010	1	05/27/2015 17:13
Anthracene	ND	0.010	1	05/27/2015 17:13
Benzo (a) anthracene	ND	0.010	1	05/27/2015 17:13
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 17:13
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 17:13
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 17:13
Benzo (a) pyrene	ND	0.010	1	05/27/2015 17:13
Chrysene	ND	0.010	1	05/27/2015 17:13
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 17:13
Fluoranthene	ND	0.010	1	05/27/2015 17:13
Fluorene	ND	0.010	1	05/27/2015 17:13
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 17:13
1-Methylnaphthalene	ND	0.010	1	05/27/2015 17:13
2-Methylnaphthalene	ND	0.010	1	05/27/2015 17:13
Naphthalene	ND	0.010	1	05/27/2015 17:13
Phenanthrene	ND	0.010	1	05/27/2015 17:13
Pyrene	ND	0.010	1	05/27/2015 17:13

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	73	30-130	05/27/2015 17:13
2-Fluorobiphenyl	73	30-130	05/27/2015 17:13

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 17:38
Acenaphthylene	ND	0.010	1	05/27/2015 17:38
Anthracene	ND	0.010	1	05/27/2015 17:38
Benzo (a) anthracene	ND	0.010	1	05/27/2015 17:38
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 17:38
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 17:38
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 17:38
Benzo (a) pyrene	ND	0.010	1	05/27/2015 17:38
Chrysene	ND	0.010	1	05/27/2015 17:38
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 17:38
Fluoranthene	ND	0.010	1	05/27/2015 17:38
Fluorene	ND	0.010	1	05/27/2015 17:38
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 17:38
1-Methylnaphthalene	ND	0.010	1	05/27/2015 17:38
2-Methylnaphthalene	ND	0.010	1	05/27/2015 17:38
Naphthalene	ND	0.010	1	05/27/2015 17:38
Phenanthrene	ND	0.010	1	05/27/2015 17:38
Pyrene	ND	0.010	1	05/27/2015 17:38

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	79	30-130	05/27/2015 17:38
2-Fluorobiphenyl	77	30-130	05/27/2015 17:38

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 18:03
Acenaphthylene	ND	0.010	1	05/27/2015 18:03
Anthracene	ND	0.010	1	05/27/2015 18:03
Benzo (a) anthracene	ND	0.010	1	05/27/2015 18:03
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 18:03
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 18:03
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 18:03
Benzo (a) pyrene	ND	0.010	1	05/27/2015 18:03
Chrysene	ND	0.010	1	05/27/2015 18:03
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 18:03
Fluoranthene	ND	0.010	1	05/27/2015 18:03
Fluorene	ND	0.010	1	05/27/2015 18:03
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 18:03
1-Methylnaphthalene	ND	0.010	1	05/27/2015 18:03
2-Methylnaphthalene	ND	0.010	1	05/27/2015 18:03
Naphthalene	ND	0.010	1	05/27/2015 18:03
Phenanthrene	ND	0.010	1	05/27/2015 18:03
Pyrene	ND	0.010	1	05/27/2015 18:03

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	78	30-130	05/27/2015 18:03
2-Fluorobiphenyl	76	30-130	05/27/2015 18:03

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 13:55
Acenaphthylene	ND	0.010	1	05/28/2015 13:55
Anthracene	ND	0.010	1	05/28/2015 13:55
Benzo (a) anthracene	ND	0.010	1	05/28/2015 13:55
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 13:55
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 13:55
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 13:55
Benzo (a) pyrene	ND	0.010	1	05/28/2015 13:55
Chrysene	ND	0.010	1	05/28/2015 13:55
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 13:55
Fluoranthene	ND	0.010	1	05/28/2015 13:55
Fluorene	ND	0.010	1	05/28/2015 13:55
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 13:55
1-Methylnaphthalene	ND	0.010	1	05/28/2015 13:55
2-Methylnaphthalene	ND	0.010	1	05/28/2015 13:55
Naphthalene	ND	0.010	1	05/28/2015 13:55
Phenanthrene	ND	0.010	1	05/28/2015 13:55
Pyrene	ND	0.010	1	05/28/2015 13:55

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	89	30-130	05/28/2015 13:55
2-Fluorobiphenyl	85	30-130	05/28/2015 13:55

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 18:53
Acenaphthylene	ND	0.010	1	05/27/2015 18:53
Anthracene	ND	0.010	1	05/27/2015 18:53
Benzo (a) anthracene	ND	0.010	1	05/27/2015 18:53
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 18:53
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 18:53
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 18:53
Benzo (a) pyrene	ND	0.010	1	05/27/2015 18:53
Chrysene	ND	0.010	1	05/27/2015 18:53
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 18:53
Fluoranthene	ND	0.010	1	05/27/2015 18:53
Fluorene	ND	0.010	1	05/27/2015 18:53
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 18:53
1-Methylnaphthalene	ND	0.010	1	05/27/2015 18:53
2-Methylnaphthalene	ND	0.010	1	05/27/2015 18:53
Naphthalene	ND	0.010	1	05/27/2015 18:53
Phenanthrene	ND	0.010	1	05/27/2015 18:53
Pyrene	ND	0.010	1	05/27/2015 18:53

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	72	30-130	05/27/2015 18:53
2-Fluorobiphenyl	71	30-130	05/27/2015 18:53

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/23/2015 03:53
Acenaphthylene	ND	0.010	1	05/23/2015 03:53
Anthracene	ND	0.010	1	05/23/2015 03:53
Benzo (a) anthracene	ND	0.010	1	05/23/2015 03:53
Benzo (b) fluoranthene	ND	0.010	1	05/23/2015 03:53
Benzo (k) fluoranthene	ND	0.010	1	05/23/2015 03:53
Benzo (g,h,i) perylene	ND	0.010	1	05/23/2015 03:53
Benzo (a) pyrene	ND	0.010	1	05/23/2015 03:53
Chrysene	ND	0.010	1	05/23/2015 03:53
Dibenzo (a,h) anthracene	ND	0.010	1	05/23/2015 03:53
Fluoranthene	ND	0.010	1	05/23/2015 03:53
Fluorene	ND	0.010	1	05/23/2015 03:53
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/23/2015 03:53
1-Methylnaphthalene	ND	0.010	1	05/23/2015 03:53
2-Methylnaphthalene	ND	0.010	1	05/23/2015 03:53
Naphthalene	ND	0.010	1	05/23/2015 03:53
Phenanthrene	ND	0.010	1	05/23/2015 03:53
Pyrene	ND	0.010	1	05/23/2015 03:53
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	79	30-130		05/23/2015 03:53
2-Fluorobiphenyl	77	30-130		05/23/2015 03:53

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 13:30
Acenaphthylene	ND	0.010	1	05/28/2015 13:30
Anthracene	ND	0.010	1	05/28/2015 13:30
Benzo (a) anthracene	ND	0.010	1	05/28/2015 13:30
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 13:30
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 13:30
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 13:30
Benzo (a) pyrene	ND	0.010	1	05/28/2015 13:30
Chrysene	ND	0.010	1	05/28/2015 13:30
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 13:30
Fluoranthene	ND	0.010	1	05/28/2015 13:30
Fluorene	ND	0.010	1	05/28/2015 13:30
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 13:30
1-Methylnaphthalene	ND	0.010	1	05/28/2015 13:30
2-Methylnaphthalene	ND	0.010	1	05/28/2015 13:30
Naphthalene	ND	0.010	1	05/28/2015 13:30
Phenanthrene	ND	0.010	1	05/28/2015 13:30
Pyrene	ND	0.010	1	05/28/2015 13:30
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	114	30-130		05/28/2015 13:30
2-Fluorobiphenyl	115	30-130		05/28/2015 13:30

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 16:22
Acenaphthylene	ND	0.010	1	05/27/2015 16:22
Anthracene	ND	0.010	1	05/27/2015 16:22
Benzo (a) anthracene	ND	0.010	1	05/27/2015 16:22
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 16:22
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 16:22
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 16:22
Benzo (a) pyrene	ND	0.010	1	05/27/2015 16:22
Chrysene	ND	0.010	1	05/27/2015 16:22
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 16:22
Fluoranthene	ND	0.010	1	05/27/2015 16:22
Fluorene	ND	0.010	1	05/27/2015 16:22
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 16:22
1-Methylnaphthalene	ND	0.010	1	05/27/2015 16:22
2-Methylnaphthalene	ND	0.010	1	05/27/2015 16:22
Naphthalene	ND	0.010	1	05/27/2015 16:22
Phenanthrene	ND	0.010	1	05/27/2015 16:22
Pyrene	ND	0.010	1	05/27/2015 16:22

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	77	30-130	05/27/2015 16:22
2-Fluorobiphenyl	78	30-130	05/27/2015 16:22

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 15:57
Acenaphthylene	ND	0.010	1	05/27/2015 15:57
Anthracene	ND	0.010	1	05/27/2015 15:57
Benzo (a) anthracene	ND	0.010	1	05/27/2015 15:57
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 15:57
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 15:57
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 15:57
Benzo (a) pyrene	ND	0.010	1	05/27/2015 15:57
Chrysene	ND	0.010	1	05/27/2015 15:57
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 15:57
Fluoranthene	ND	0.010	1	05/27/2015 15:57
Fluorene	ND	0.010	1	05/27/2015 15:57
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 15:57
1-Methylnaphthalene	ND	0.010	1	05/27/2015 15:57
2-Methylnaphthalene	ND	0.010	1	05/27/2015 15:57
Naphthalene	ND	0.010	1	05/27/2015 15:57
Phenanthrene	ND	0.010	1	05/27/2015 15:57
Pyrene	ND	0.010	1	05/27/2015 15:57
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	78	30-130		05/27/2015 15:57
2-Fluorobiphenyl	76	30-130		05/27/2015 15:57

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.10	10	05/28/2015 21:31
Acenaphthylene	ND	0.10	10	05/28/2015 21:31
Anthracene	ND	0.10	10	05/28/2015 21:31
Benzo (a) anthracene	ND	0.10	10	05/28/2015 21:31
Benzo (b) fluoranthene	ND	0.10	10	05/28/2015 21:31
Benzo (k) fluoranthene	ND	0.10	10	05/28/2015 21:31
Benzo (g,h,i) perylene	ND	0.10	10	05/28/2015 21:31
Benzo (a) pyrene	ND	0.10	10	05/28/2015 21:31
Chrysene	ND	0.10	10	05/28/2015 21:31
Dibenzo (a,h) anthracene	ND	0.10	10	05/28/2015 21:31
Fluoranthene	ND	0.10	10	05/28/2015 21:31
Fluorene	ND	0.10	10	05/28/2015 21:31
Indeno (1,2,3-cd) pyrene	ND	0.10	10	05/28/2015 21:31
1-Methylnaphthalene	ND	0.10	10	05/28/2015 21:31
2-Methylnaphthalene	ND	0.10	10	05/28/2015 21:31
Naphthalene	ND	0.10	10	05/28/2015 21:31
Phenanthrene	ND	0.10	10	05/28/2015 21:31
Pyrene	ND	0.10	10	05/28/2015 21:31

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	90	30-130	05/28/2015 21:31
2-Fluorobiphenyl	91	30-130	05/28/2015 21:31

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 14:20
Acenaphthylene	ND	0.010	1	05/28/2015 14:20
Anthracene	ND	0.010	1	05/28/2015 14:20
Benzo (a) anthracene	ND	0.010	1	05/28/2015 14:20
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 14:20
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 14:20
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 14:20
Benzo (a) pyrene	ND	0.010	1	05/28/2015 14:20
Chrysene	ND	0.010	1	05/28/2015 14:20
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 14:20
Fluoranthene	ND	0.010	1	05/28/2015 14:20
Fluorene	ND	0.010	1	05/28/2015 14:20
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 14:20
1-Methylnaphthalene	ND	0.010	1	05/28/2015 14:20
2-Methylnaphthalene	ND	0.010	1	05/28/2015 14:20
Naphthalene	ND	0.010	1	05/28/2015 14:20
Phenanthrene	ND	0.010	1	05/28/2015 14:20
Pyrene	ND	0.010	1	05/28/2015 14:20

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	106	30-130	05/28/2015 14:20
2-Fluorobiphenyl	104	30-130	05/28/2015 14:20

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 14:46
Acenaphthylene	ND	0.010	1	05/28/2015 14:46
Anthracene	ND	0.010	1	05/28/2015 14:46
Benzo (a) anthracene	ND	0.010	1	05/28/2015 14:46
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 14:46
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 14:46
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 14:46
Benzo (a) pyrene	ND	0.010	1	05/28/2015 14:46
Chrysene	ND	0.010	1	05/28/2015 14:46
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 14:46
Fluoranthene	ND	0.010	1	05/28/2015 14:46
Fluorene	ND	0.010	1	05/28/2015 14:46
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 14:46
1-Methylnaphthalene	ND	0.010	1	05/28/2015 14:46
2-Methylnaphthalene	ND	0.010	1	05/28/2015 14:46
Naphthalene	ND	0.010	1	05/28/2015 14:46
Phenanthrene	ND	0.010	1	05/28/2015 14:46
Pyrene	ND	0.010	1	05/28/2015 14:46

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	107	30-130	05/28/2015 14:46
2-Fluorobiphenyl	105	30-130	05/28/2015 14:46

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.20	20	05/28/2015 19:00
Acenaphthylene	ND	0.20	20	05/28/2015 19:00
Anthracene	ND	0.20	20	05/28/2015 19:00
Benzo (a) anthracene	ND	0.20	20	05/28/2015 19:00
Benzo (b) fluoranthene	ND	0.20	20	05/28/2015 19:00
Benzo (k) fluoranthene	ND	0.20	20	05/28/2015 19:00
Benzo (g,h,i) perylene	ND	0.20	20	05/28/2015 19:00
Benzo (a) pyrene	ND	0.20	20	05/28/2015 19:00
Chrysene	ND	0.20	20	05/28/2015 19:00
Dibenzo (a,h) anthracene	ND	0.20	20	05/28/2015 19:00
Fluoranthene	ND	0.20	20	05/28/2015 19:00
Fluorene	ND	0.20	20	05/28/2015 19:00
Indeno (1,2,3-cd) pyrene	ND	0.20	20	05/28/2015 19:00
1-Methylnaphthalene	ND	0.20	20	05/28/2015 19:00
2-Methylnaphthalene	ND	0.20	20	05/28/2015 19:00
Naphthalene	ND	0.20	20	05/28/2015 19:00
Phenanthrene	ND	0.20	20	05/28/2015 19:00
Pyrene	ND	0.20	20	05/28/2015 19:00

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	117	30-130	05/28/2015 19:00
2-Fluorobiphenyl	118	30-130	05/28/2015 19:00

**Analyst(s):** HK

**Analytical Comments:** a3





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/26/2015 13:25
Acenaphthylene	ND	0.010	1	05/26/2015 13:25
Anthracene	ND	0.010	1	05/26/2015 13:25
Benzo (a) anthracene	ND	0.010	1	05/26/2015 13:25
Benzo (b) fluoranthene	ND	0.010	1	05/26/2015 13:25
Benzo (k) fluoranthene	ND	0.010	1	05/26/2015 13:25
Benzo (g,h,i) perylene	ND	0.010	1	05/26/2015 13:25
Benzo (a) pyrene	ND	0.010	1	05/26/2015 13:25
Chrysene	ND	0.010	1	05/26/2015 13:25
Dibenzo (a,h) anthracene	ND	0.010	1	05/26/2015 13:25
Fluoranthene	ND	0.010	1	05/26/2015 13:25
Fluorene	ND	0.010	1	05/26/2015 13:25
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/26/2015 13:25
1-Methylnaphthalene	ND	0.010	1	05/26/2015 13:25
2-Methylnaphthalene	ND	0.010	1	05/26/2015 13:25
Naphthalene	ND	0.010	1	05/26/2015 13:25
Phenanthrene	ND	0.010	1	05/26/2015 13:25
Pyrene	ND	0.010	1	05/26/2015 13:25
Surrogates	REC (%)	Limits		
1-Fluoronaphthalene	76	30-130		05/26/2015 13:25
2-Fluorobiphenyl	72	30-130		05/26/2015 13:25

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/26/2015 13:50
Acenaphthylene	ND	0.010	1	05/26/2015 13:50
Anthracene	ND	0.010	1	05/26/2015 13:50
Benzo (a) anthracene	ND	0.010	1	05/26/2015 13:50
Benzo (b) fluoranthene	ND	0.010	1	05/26/2015 13:50
Benzo (k) fluoranthene	ND	0.010	1	05/26/2015 13:50
Benzo (g,h,i) perylene	ND	0.010	1	05/26/2015 13:50
Benzo (a) pyrene	ND	0.010	1	05/26/2015 13:50
Chrysene	ND	0.010	1	05/26/2015 13:50
Dibenzo (a,h) anthracene	ND	0.010	1	05/26/2015 13:50
Fluoranthene	ND	0.010	1	05/26/2015 13:50
Fluorene	ND	0.010	1	05/26/2015 13:50
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/26/2015 13:50
1-Methylnaphthalene	ND	0.010	1	05/26/2015 13:50
2-Methylnaphthalene	ND	0.010	1	05/26/2015 13:50
Naphthalene	ND	0.010	1	05/26/2015 13:50
Phenanthrene	ND	0.010	1	05/26/2015 13:50
Pyrene	ND	0.010	1	05/26/2015 13:50
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Fluoronaphthalene	79	30-130		05/26/2015 13:50
2-Fluorobiphenyl	77	30-130		05/26/2015 13:50

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.050	5	05/28/2015 16:27
Acenaphthylene	ND	0.050	5	05/28/2015 16:27
Anthracene	ND	0.050	5	05/28/2015 16:27
Benzo (a) anthracene	ND	0.050	5	05/28/2015 16:27
Benzo (b) fluoranthene	ND	0.050	5	05/28/2015 16:27
Benzo (k) fluoranthene	ND	0.050	5	05/28/2015 16:27
Benzo (g,h,i) perylene	ND	0.050	5	05/28/2015 16:27
Benzo (a) pyrene	ND	0.050	5	05/28/2015 16:27
Chrysene	ND	0.050	5	05/28/2015 16:27
Dibenzo (a,h) anthracene	ND	0.050	5	05/28/2015 16:27
Fluoranthene	ND	0.050	5	05/28/2015 16:27
Fluorene	ND	0.050	5	05/28/2015 16:27
Indeno (1,2,3-cd) pyrene	ND	0.050	5	05/28/2015 16:27
1-Methylnaphthalene	ND	0.050	5	05/28/2015 16:27
2-Methylnaphthalene	ND	0.050	5	05/28/2015 16:27
Naphthalene	ND	0.050	5	05/28/2015 16:27
Phenanthrene	ND	0.050	5	05/28/2015 16:27
Pyrene	ND	0.050	5	05/28/2015 16:27

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	107	30-130	05/28/2015 16:27
2-Fluorobiphenyl	104	30-130	05/28/2015 16:27

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 15:11
Acenaphthylene	ND	0.010	1	05/28/2015 15:11
Anthracene	ND	0.010	1	05/28/2015 15:11
Benzo (a) anthracene	ND	0.010	1	05/28/2015 15:11
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 15:11
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 15:11
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 15:11
Benzo (a) pyrene	ND	0.010	1	05/28/2015 15:11
Chrysene	ND	0.010	1	05/28/2015 15:11
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 15:11
Fluoranthene	ND	0.010	1	05/28/2015 15:11
Fluorene	ND	0.010	1	05/28/2015 15:11
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 15:11
1-Methylnaphthalene	ND	0.010	1	05/28/2015 15:11
2-Methylnaphthalene	ND	0.010	1	05/28/2015 15:11
Naphthalene	ND	0.010	1	05/28/2015 15:11
Phenanthrene	ND	0.010	1	05/28/2015 15:11
Pyrene	ND	0.010	1	05/28/2015 15:11

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	103	30-130	05/28/2015 15:11
2-Fluorobiphenyl	101	30-130	05/28/2015 15:11

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 15:37
Acenaphthylene	ND	0.010	1	05/28/2015 15:37
Anthracene	ND	0.010	1	05/28/2015 15:37
Benzo (a) anthracene	ND	0.010	1	05/28/2015 15:37
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 15:37
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 15:37
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 15:37
Benzo (a) pyrene	ND	0.010	1	05/28/2015 15:37
Chrysene	ND	0.010	1	05/28/2015 15:37
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 15:37
Fluoranthene	ND	0.010	1	05/28/2015 15:37
Fluorene	ND	0.010	1	05/28/2015 15:37
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 15:37
1-Methylnaphthalene	ND	0.010	1	05/28/2015 15:37
2-Methylnaphthalene	ND	0.010	1	05/28/2015 15:37
Naphthalene	ND	0.010	1	05/28/2015 15:37
Phenanthrene	ND	0.010	1	05/28/2015 15:37
Pyrene	ND	0.010	1	05/28/2015 15:37

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	103	30-130	05/28/2015 15:37
2-Fluorobiphenyl	100	30-130	05/28/2015 15:37

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC35	105275

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.050	5	05/28/2015 16:53
Acenaphthylene	ND	0.050	5	05/28/2015 16:53
Anthracene	ND	0.050	5	05/28/2015 16:53
Benzo (a) anthracene	ND	0.050	5	05/28/2015 16:53
Benzo (b) fluoranthene	ND	0.050	5	05/28/2015 16:53
Benzo (k) fluoranthene	ND	0.050	5	05/28/2015 16:53
Benzo (g,h,i) perylene	ND	0.050	5	05/28/2015 16:53
Benzo (a) pyrene	ND	0.050	5	05/28/2015 16:53
Chrysene	ND	0.050	5	05/28/2015 16:53
Dibenzo (a,h) anthracene	ND	0.050	5	05/28/2015 16:53
Fluoranthene	ND	0.050	5	05/28/2015 16:53
Fluorene	ND	0.050	5	05/28/2015 16:53
Indeno (1,2,3-cd) pyrene	ND	0.050	5	05/28/2015 16:53
1-Methylnaphthalene	ND	0.050	5	05/28/2015 16:53
2-Methylnaphthalene	ND	0.050	5	05/28/2015 16:53
Naphthalene	ND	0.050	5	05/28/2015 16:53
Phenanthrene	ND	0.050	5	05/28/2015 16:53
Pyrene	ND	0.050	5	05/28/2015 16:53

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	113	30-130	05/28/2015 16:53
2-Fluorobiphenyl	112	30-130	05/28/2015 16:53

**Analyst(s):** HK

**Analytical Comments:** a3

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC35	105276

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/27/2015 20:58
Acenaphthylene	ND	0.010	1	05/27/2015 20:58
Anthracene	ND	0.010	1	05/27/2015 20:58
Benzo (a) anthracene	ND	0.010	1	05/27/2015 20:58
Benzo (b) fluoranthene	ND	0.010	1	05/27/2015 20:58
Benzo (k) fluoranthene	ND	0.010	1	05/27/2015 20:58
Benzo (g,h,i) perylene	ND	0.010	1	05/27/2015 20:58
Benzo (a) pyrene	ND	0.010	1	05/27/2015 20:58
Chrysene	ND	0.010	1	05/27/2015 20:58
Dibenzo (a,h) anthracene	ND	0.010	1	05/27/2015 20:58
Fluoranthene	ND	0.010	1	05/27/2015 20:58
Fluorene	ND	0.010	1	05/27/2015 20:58
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/27/2015 20:58
1-Methylnaphthalene	ND	0.010	1	05/27/2015 20:58
2-Methylnaphthalene	ND	0.010	1	05/27/2015 20:58
Naphthalene	ND	0.010	1	05/27/2015 20:58
Phenanthrene	ND	0.010	1	05/27/2015 20:58
Pyrene	ND	0.010	1	05/27/2015 20:58

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	71	30-130	05/27/2015 20:58
2-Fluorobiphenyl	68	30-130	05/27/2015 20:58

**Analyst(s):** HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC35	105276

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	05/28/2015 16:02
Acenaphthylene	ND	0.010	1	05/28/2015 16:02
Anthracene	ND	0.010	1	05/28/2015 16:02
Benzo (a) anthracene	ND	0.010	1	05/28/2015 16:02
Benzo (b) fluoranthene	ND	0.010	1	05/28/2015 16:02
Benzo (k) fluoranthene	ND	0.010	1	05/28/2015 16:02
Benzo (g,h,i) perylene	ND	0.010	1	05/28/2015 16:02
Benzo (a) pyrene	ND	0.010	1	05/28/2015 16:02
Chrysene	ND	0.010	1	05/28/2015 16:02
Dibenzo (a,h) anthracene	ND	0.010	1	05/28/2015 16:02
Fluoranthene	ND	0.010	1	05/28/2015 16:02
Fluorene	ND	0.010	1	05/28/2015 16:02
Indeno (1,2,3-cd) pyrene	ND	0.010	1	05/28/2015 16:02
1-Methylnaphthalene	ND	0.010	1	05/28/2015 16:02
2-Methylnaphthalene	ND	0.010	1	05/28/2015 16:02
Naphthalene	ND	0.010	1	05/28/2015 16:02
Phenanthrene	ND	0.010	1	05/28/2015 16:02
Pyrene	ND	0.010	1	05/28/2015 16:02

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	113	30-130	05/28/2015 16:02
2-Fluorobiphenyl	110	30-130	05/28/2015 16:02

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC35	105276

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.20	20	05/28/2015 21:56
Acenaphthylene	ND	0.20	20	05/28/2015 21:56
Anthracene	ND	0.20	20	05/28/2015 21:56
Benzo (a) anthracene	ND	0.20	20	05/28/2015 21:56
Benzo (b) fluoranthene	ND	0.20	20	05/28/2015 21:56
Benzo (k) fluoranthene	ND	0.20	20	05/28/2015 21:56
Benzo (g,h,i) perylene	ND	0.20	20	05/28/2015 21:56
Benzo (a) pyrene	ND	0.20	20	05/28/2015 21:56
Chrysene	ND	0.20	20	05/28/2015 21:56
Dibenzo (a,h) anthracene	ND	0.20	20	05/28/2015 21:56
Fluoranthene	ND	0.20	20	05/28/2015 21:56
Fluorene	ND	0.20	20	05/28/2015 21:56
Indeno (1,2,3-cd) pyrene	ND	0.20	20	05/28/2015 21:56
1-Methylnaphthalene	ND	0.20	20	05/28/2015 21:56
2-Methylnaphthalene	ND	0.20	20	05/28/2015 21:56
Naphthalene	ND	0.20	20	05/28/2015 21:56
Phenanthrene	ND	0.20	20	05/28/2015 21:56
Pyrene	ND	0.20	20	05/28/2015 21:56

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	91	30-130	05/28/2015 21:56
2-Fluorobiphenyl	87	30-130	05/28/2015 21:56

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC35	105276

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.020	2	05/28/2015 21:06
Acenaphthylene	ND	0.020	2	05/28/2015 21:06
Anthracene	ND	0.020	2	05/28/2015 21:06
Benzo (a) anthracene	ND	0.020	2	05/28/2015 21:06
Benzo (b) fluoranthene	ND	0.020	2	05/28/2015 21:06
Benzo (k) fluoranthene	ND	0.020	2	05/28/2015 21:06
Benzo (g,h,i) perylene	ND	0.020	2	05/28/2015 21:06
Benzo (a) pyrene	ND	0.020	2	05/28/2015 21:06
Chrysene	ND	0.020	2	05/28/2015 21:06
Dibenzo (a,h) anthracene	ND	0.020	2	05/28/2015 21:06
Fluoranthene	ND	0.020	2	05/28/2015 21:06
Fluorene	ND	0.020	2	05/28/2015 21:06
Indeno (1,2,3-cd) pyrene	ND	0.020	2	05/28/2015 21:06
1-Methylnaphthalene	ND	0.020	2	05/28/2015 21:06
2-Methylnaphthalene	ND	0.020	2	05/28/2015 21:06
Naphthalene	ND	0.020	2	05/28/2015 21:06
Phenanthrene	ND	0.020	2	05/28/2015 21:06
Pyrene	ND	0.020	2	05/28/2015 21:06

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	83	30-130	05/28/2015 21:06
2-Fluorobiphenyl	78	30-130	05/28/2015 21:06

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.50	2	05/27/2015 22:30
Acenaphthylene	ND	0.50	2	05/27/2015 22:30
Acetochlor	ND	0.50	2	05/27/2015 22:30
Anthracene	ND	0.50	2	05/27/2015 22:30
Benzidine	ND	2.6	2	05/27/2015 22:30
Benzo (a) anthracene	ND	0.50	2	05/27/2015 22:30
Benzo (b) fluoranthene	ND	0.50	2	05/27/2015 22:30
Benzo (k) fluoranthene	ND	0.50	2	05/27/2015 22:30
Benzo (g,h,i) perylene	ND	0.50	2	05/27/2015 22:30
Benzo (a) pyrene	ND	0.50	2	05/27/2015 22:30
Benzyl Alcohol	ND	2.6	2	05/27/2015 22:30
1,1-Biphenyl	ND	0.50	2	05/27/2015 22:30
Bis (2-chloroethoxy) Methane	ND	0.50	2	05/27/2015 22:30
Bis (2-chloroethyl) Ether	ND	0.50	2	05/27/2015 22:30
Bis (2-chloroisopropyl) Ether	ND	0.50	2	05/27/2015 22:30
Bis (2-ethylhexyl) Adipate	ND	0.50	2	05/27/2015 22:30
Bis (2-ethylhexyl) Phthalate	ND	0.50	2	05/27/2015 22:30
4-Bromophenyl Phenyl Ether	ND	0.50	2	05/27/2015 22:30
Butylbenzyl Phthalate	ND	0.50	2	05/27/2015 22:30
4-Chloroaniline	ND	1.0	2	05/27/2015 22:30
4-Chloro-3-methylphenol	ND	0.50	2	05/27/2015 22:30
2-Chloronaphthalene	ND	0.50	2	05/27/2015 22:30
2-Chlorophenol	ND	0.50	2	05/27/2015 22:30
4-Chlorophenyl Phenyl Ether	ND	0.50	2	05/27/2015 22:30
Chrysene	ND	0.50	2	05/27/2015 22:30
Dibenzo (a,h) anthracene	ND	0.50	2	05/27/2015 22:30
Dibenzofuran	ND	0.50	2	05/27/2015 22:30
Di-n-butyl Phthalate	ND	0.50	2	05/27/2015 22:30
1,2-Dichlorobenzene	ND	0.50	2	05/27/2015 22:30
1,3-Dichlorobenzene	ND	0.50	2	05/27/2015 22:30
1,4-Dichlorobenzene	ND	0.50	2	05/27/2015 22:30
3,3-Dichlorobenzidine	ND	1.0	2	05/27/2015 22:30
2,4-Dichlorophenol	ND	0.50	2	05/27/2015 22:30
Diethyl Phthalate	ND	0.50	2	05/27/2015 22:30
2,4-Dimethylphenol	ND	0.50	2	05/27/2015 22:30
Dimethyl Phthalate	ND	0.50	2	05/27/2015 22:30
4,6-Dinitro-2-methylphenol	ND	2.6	2	05/27/2015 22:30
2,4-Dinitrophenol	ND	13	2	05/27/2015 22:30

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC17	105238
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrotoluene	ND	0.50	2	05/27/2015 22:30	
2,6-Dinitrotoluene	ND	0.50	2	05/27/2015 22:30	
Di-n-octyl Phthalate	ND	1.0	2	05/27/2015 22:30	
1,2-Diphenylhydrazine	ND	0.50	2	05/27/2015 22:30	
Fluoranthene	ND	0.50	2	05/27/2015 22:30	
Fluorene	ND	0.50	2	05/27/2015 22:30	
Hexachlorobenzene	ND	0.50	2	05/27/2015 22:30	
Hexachlorobutadiene	ND	0.50	2	05/27/2015 22:30	
Hexachlorocyclopentadiene	ND	2.6	2	05/27/2015 22:30	
Hexachloroethane	ND	0.50	2	05/27/2015 22:30	
Indeno (1,2,3-cd) pyrene	ND	0.50	2	05/27/2015 22:30	
Isophorone	ND	0.50	2	05/27/2015 22:30	
2-Methylnaphthalene	ND	0.50	2	05/27/2015 22:30	
2-Methylphenol (o-Cresol)	ND	0.50	2	05/27/2015 22:30	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.50	2	05/27/2015 22:30	
Naphthalene	ND	0.50	2	05/27/2015 22:30	
2-Nitroaniline	ND	2.6	2	05/27/2015 22:30	
3-Nitroaniline	ND	2.6	2	05/27/2015 22:30	
4-Nitroaniline	ND	2.6	2	05/27/2015 22:30	
Nitrobenzene	ND	0.50	2	05/27/2015 22:30	
2-Nitrophenol	ND	2.6	2	05/27/2015 22:30	
4-Nitrophenol	ND	2.6	2	05/27/2015 22:30	
N-Nitrosodiphenylamine	ND	0.50	2	05/27/2015 22:30	
N-Nitrosodi-n-propylamine	ND	0.50	2	05/27/2015 22:30	
Pentachlorophenol	ND	2.6	2	05/27/2015 22:30	
Phenanthrene	ND	0.50	2	05/27/2015 22:30	
Phenol	ND	0.50	2	05/27/2015 22:30	
Pyrene	ND	0.50	2	05/27/2015 22:30	
1,2,4-Trichlorobenzene	ND	0.50	2	05/27/2015 22:30	
2,4,5-Trichlorophenol	ND	0.50	2	05/27/2015 22:30	
2,4,6-Trichlorophenol	ND	0.50	2	05/27/2015 22:30	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	115	30-130		05/27/2015 22:30
Phenol-d5	119	30-130		05/27/2015 22:30
Nitrobenzene-d5	92	30-130		05/27/2015 22:30
2-Fluorobiphenyl	91	30-130		05/27/2015 22:30
2,4,6-Tribromophenol	67	16-130		05/27/2015 22:30
4-Terphenyl-d14	110	30-130		05/27/2015 22:30

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 16:08
Acenaphthylene	ND	0.25	1	05/27/2015 16:08
Acetochlor	ND	0.25	1	05/27/2015 16:08
Anthracene	ND	0.25	1	05/27/2015 16:08
Benzidine	ND	1.3	1	05/27/2015 16:08
Benzo (a) anthracene	ND	0.25	1	05/27/2015 16:08
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 16:08
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 16:08
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 16:08
Benzo (a) pyrene	ND	0.25	1	05/27/2015 16:08
Benzyl Alcohol	ND	1.3	1	05/27/2015 16:08
1,1-Biphenyl	ND	0.25	1	05/27/2015 16:08
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 16:08
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 16:08
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 16:08
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 16:08
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 16:08
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 16:08
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 16:08
4-Chloroaniline	ND	0.50	1	05/27/2015 16:08
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 16:08
2-Chloronaphthalene	ND	0.25	1	05/27/2015 16:08
2-Chlorophenol	ND	0.25	1	05/27/2015 16:08
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 16:08
Chrysene	ND	0.25	1	05/27/2015 16:08
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 16:08
Dibenzofuran	ND	0.25	1	05/27/2015 16:08
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 16:08
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 16:08
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 16:08
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 16:08
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 16:08
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 16:08
Diethyl Phthalate	ND	0.25	1	05/27/2015 16:08
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 16:08
Dimethyl Phthalate	ND	0.25	1	05/27/2015 16:08
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 16:08
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 16:08

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 16:08
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 16:08
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 16:08
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 16:08
Fluoranthene	ND	0.25	1	05/27/2015 16:08
Fluorene	ND	0.25	1	05/27/2015 16:08
Hexachlorobenzene	ND	0.25	1	05/27/2015 16:08
Hexachlorobutadiene	ND	0.25	1	05/27/2015 16:08
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 16:08
Hexachloroethane	ND	0.25	1	05/27/2015 16:08
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 16:08
Isophorone	ND	0.25	1	05/27/2015 16:08
2-Methylnaphthalene	ND	0.25	1	05/27/2015 16:08
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 16:08
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 16:08
Naphthalene	ND	0.25	1	05/27/2015 16:08
2-Nitroaniline	ND	1.3	1	05/27/2015 16:08
3-Nitroaniline	ND	1.3	1	05/27/2015 16:08
4-Nitroaniline	ND	1.3	1	05/27/2015 16:08
Nitrobenzene	ND	0.25	1	05/27/2015 16:08
2-Nitrophenol	ND	1.3	1	05/27/2015 16:08
4-Nitrophenol	ND	1.3	1	05/27/2015 16:08
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 16:08
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 16:08
Pentachlorophenol	ND	1.3	1	05/27/2015 16:08
Phenanthrene	ND	0.25	1	05/27/2015 16:08
Phenol	ND	0.25	1	05/27/2015 16:08
Pyrene	ND	0.25	1	05/27/2015 16:08
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 16:08
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 16:08
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 16:08

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	111	30-130		05/27/2015 16:08
Phenol-d5	114	30-130		05/27/2015 16:08
Nitrobenzene-d5	91	30-130		05/27/2015 16:08
2-Fluorobiphenyl	83	30-130		05/27/2015 16:08
2,4,6-Tribromophenol	62	16-130		05/27/2015 16:08
4-Terphenyl-d14	101	30-130		05/27/2015 16:08

Analyst(s): HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 17:50
Acenaphthylene	ND	0.25	1	05/26/2015 17:50
Acetochlor	ND	0.25	1	05/26/2015 17:50
Anthracene	ND	0.25	1	05/26/2015 17:50
Benzidine	ND	1.3	1	05/26/2015 17:50
Benzo (a) anthracene	ND	0.25	1	05/26/2015 17:50
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 17:50
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 17:50
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 17:50
Benzo (a) pyrene	ND	0.25	1	05/26/2015 17:50
Benzyl Alcohol	ND	1.3	1	05/26/2015 17:50
1,1-Biphenyl	ND	0.25	1	05/26/2015 17:50
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 17:50
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 17:50
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 17:50
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 17:50
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 17:50
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 17:50
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 17:50
4-Chloroaniline	ND	0.50	1	05/26/2015 17:50
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 17:50
2-Chloronaphthalene	ND	0.25	1	05/26/2015 17:50
2-Chlorophenol	ND	0.25	1	05/26/2015 17:50
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 17:50
Chrysene	ND	0.25	1	05/26/2015 17:50
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 17:50
Dibenzofuran	ND	0.25	1	05/26/2015 17:50
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 17:50
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 17:50
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 17:50
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 17:50
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 17:50
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 17:50
Diethyl Phthalate	ND	0.25	1	05/26/2015 17:50
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 17:50
Dimethyl Phthalate	ND	0.25	1	05/26/2015 17:50
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 17:50
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 17:50

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 17:50
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 17:50
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 17:50
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 17:50
Fluoranthene	ND	0.25	1	05/26/2015 17:50
Fluorene	ND	0.25	1	05/26/2015 17:50
Hexachlorobenzene	ND	0.25	1	05/26/2015 17:50
Hexachlorobutadiene	ND	0.25	1	05/26/2015 17:50
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 17:50
Hexachloroethane	ND	0.25	1	05/26/2015 17:50
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 17:50
Isophorone	ND	0.25	1	05/26/2015 17:50
2-Methylnaphthalene	ND	0.25	1	05/26/2015 17:50
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 17:50
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 17:50
Naphthalene	ND	0.25	1	05/26/2015 17:50
2-Nitroaniline	ND	1.3	1	05/26/2015 17:50
3-Nitroaniline	ND	1.3	1	05/26/2015 17:50
4-Nitroaniline	ND	1.3	1	05/26/2015 17:50
Nitrobenzene	ND	0.25	1	05/26/2015 17:50
2-Nitrophenol	ND	1.3	1	05/26/2015 17:50
4-Nitrophenol	ND	1.3	1	05/26/2015 17:50
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 17:50
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 17:50
Pentachlorophenol	ND	1.3	1	05/26/2015 17:50
Phenanthrene	ND	0.25	1	05/26/2015 17:50
Phenol	ND	0.25	1	05/26/2015 17:50
Pyrene	ND	0.25	1	05/26/2015 17:50
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 17:50
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 17:50
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 17:50

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	129		30-130	05/26/2015 17:50
Phenol-d5	137	S	30-130	05/26/2015 17:50
Nitrobenzene-d5	101		30-130	05/26/2015 17:50
2-Fluorobiphenyl	92		30-130	05/26/2015 17:50
2,4,6-Tribromophenol	80		16-130	05/26/2015 17:50
4-Terphenyl-d14	104		30-130	05/26/2015 17:50

**Analyst(s):** HK

**Analytical Comments:** c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 18:18
Acenaphthylene	ND	0.25	1	05/26/2015 18:18
Acetochlor	ND	0.25	1	05/26/2015 18:18
Anthracene	ND	0.25	1	05/26/2015 18:18
Benzidine	ND	1.3	1	05/26/2015 18:18
Benzo (a) anthracene	ND	0.25	1	05/26/2015 18:18
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 18:18
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 18:18
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 18:18
Benzo (a) pyrene	ND	0.25	1	05/26/2015 18:18
Benzyl Alcohol	ND	1.3	1	05/26/2015 18:18
1,1-Biphenyl	ND	0.25	1	05/26/2015 18:18
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 18:18
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 18:18
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 18:18
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 18:18
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 18:18
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 18:18
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 18:18
4-Chloroaniline	ND	0.50	1	05/26/2015 18:18
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 18:18
2-Chloronaphthalene	ND	0.25	1	05/26/2015 18:18
2-Chlorophenol	ND	0.25	1	05/26/2015 18:18
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 18:18
Chrysene	ND	0.25	1	05/26/2015 18:18
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 18:18
Dibenzofuran	ND	0.25	1	05/26/2015 18:18
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 18:18
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 18:18
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 18:18
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 18:18
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 18:18
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 18:18
Diethyl Phthalate	ND	0.25	1	05/26/2015 18:18
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 18:18
Dimethyl Phthalate	ND	0.25	1	05/26/2015 18:18
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 18:18
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 18:18

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC17	105238
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 18:18	
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 18:18	
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 18:18	
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 18:18	
Fluoranthene	ND	0.25	1	05/26/2015 18:18	
Fluorene	ND	0.25	1	05/26/2015 18:18	
Hexachlorobenzene	ND	0.25	1	05/26/2015 18:18	
Hexachlorobutadiene	ND	0.25	1	05/26/2015 18:18	
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 18:18	
Hexachloroethane	ND	0.25	1	05/26/2015 18:18	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 18:18	
Isophorone	ND	0.25	1	05/26/2015 18:18	
2-Methylnaphthalene	ND	0.25	1	05/26/2015 18:18	
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 18:18	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 18:18	
Naphthalene	ND	0.25	1	05/26/2015 18:18	
2-Nitroaniline	ND	1.3	1	05/26/2015 18:18	
3-Nitroaniline	ND	1.3	1	05/26/2015 18:18	
4-Nitroaniline	ND	1.3	1	05/26/2015 18:18	
Nitrobenzene	ND	0.25	1	05/26/2015 18:18	
2-Nitrophenol	ND	1.3	1	05/26/2015 18:18	
4-Nitrophenol	ND	1.3	1	05/26/2015 18:18	
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 18:18	
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 18:18	
Pentachlorophenol	ND	1.3	1	05/26/2015 18:18	
Phenanthrene	ND	0.25	1	05/26/2015 18:18	
Phenol	ND	0.25	1	05/26/2015 18:18	
Pyrene	ND	0.25	1	05/26/2015 18:18	
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 18:18	
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 18:18	
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 18:18	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	119	30-130		05/26/2015 18:18
Phenol-d5	123	30-130		05/26/2015 18:18
Nitrobenzene-d5	93	30-130		05/26/2015 18:18
2-Fluorobiphenyl	89	30-130		05/26/2015 18:18
2,4,6-Tribromophenol	71	16-130		05/26/2015 18:18
4-Terphenyl-d14	95	30-130		05/26/2015 18:18

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 18:47
Acenaphthylene	ND	0.25	1	05/26/2015 18:47
Acetochlor	ND	0.25	1	05/26/2015 18:47
Anthracene	ND	0.25	1	05/26/2015 18:47
Benzidine	ND	1.3	1	05/26/2015 18:47
Benzo (a) anthracene	ND	0.25	1	05/26/2015 18:47
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 18:47
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 18:47
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 18:47
Benzo (a) pyrene	ND	0.25	1	05/26/2015 18:47
Benzyl Alcohol	ND	1.3	1	05/26/2015 18:47
1,1-Biphenyl	ND	0.25	1	05/26/2015 18:47
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 18:47
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 18:47
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 18:47
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 18:47
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 18:47
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 18:47
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 18:47
4-Chloroaniline	ND	0.50	1	05/26/2015 18:47
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 18:47
2-Chloronaphthalene	ND	0.25	1	05/26/2015 18:47
2-Chlorophenol	ND	0.25	1	05/26/2015 18:47
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 18:47
Chrysene	ND	0.25	1	05/26/2015 18:47
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 18:47
Dibenzofuran	ND	0.25	1	05/26/2015 18:47
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 18:47
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 18:47
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 18:47
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 18:47
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 18:47
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 18:47
Diethyl Phthalate	ND	0.25	1	05/26/2015 18:47
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 18:47
Dimethyl Phthalate	ND	0.25	1	05/26/2015 18:47
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 18:47
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 18:47

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 18:47
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 18:47
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 18:47
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 18:47
Fluoranthene	ND	0.25	1	05/26/2015 18:47
Fluorene	ND	0.25	1	05/26/2015 18:47
Hexachlorobenzene	ND	0.25	1	05/26/2015 18:47
Hexachlorobutadiene	ND	0.25	1	05/26/2015 18:47
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 18:47
Hexachloroethane	ND	0.25	1	05/26/2015 18:47
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 18:47
Isophorone	ND	0.25	1	05/26/2015 18:47
2-Methylnaphthalene	ND	0.25	1	05/26/2015 18:47
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 18:47
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 18:47
Naphthalene	ND	0.25	1	05/26/2015 18:47
2-Nitroaniline	ND	1.3	1	05/26/2015 18:47
3-Nitroaniline	ND	1.3	1	05/26/2015 18:47
4-Nitroaniline	ND	1.3	1	05/26/2015 18:47
Nitrobenzene	ND	0.25	1	05/26/2015 18:47
2-Nitrophenol	ND	1.3	1	05/26/2015 18:47
4-Nitrophenol	ND	1.3	1	05/26/2015 18:47
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 18:47
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 18:47
Pentachlorophenol	ND	1.3	1	05/26/2015 18:47
Phenanthrene	ND	0.25	1	05/26/2015 18:47
Phenol	ND	0.25	1	05/26/2015 18:47
Pyrene	ND	0.25	1	05/26/2015 18:47
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 18:47
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 18:47
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 18:47

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	120	30-130		05/26/2015 18:47
Phenol-d5	123	30-130		05/26/2015 18:47
Nitrobenzene-d5	95	30-130		05/26/2015 18:47
2-Fluorobiphenyl	86	30-130		05/26/2015 18:47
2,4,6-Tribromophenol	61	16-130		05/26/2015 18:47
4-Terphenyl-d14	102	30-130		05/26/2015 18:47

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 19:17
Acenaphthylene	ND	0.25	1	05/26/2015 19:17
Acetochlor	ND	0.25	1	05/26/2015 19:17
Anthracene	ND	0.25	1	05/26/2015 19:17
Benzidine	ND	1.3	1	05/26/2015 19:17
Benzo (a) anthracene	ND	0.25	1	05/26/2015 19:17
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 19:17
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 19:17
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 19:17
Benzo (a) pyrene	ND	0.25	1	05/26/2015 19:17
Benzyl Alcohol	ND	1.3	1	05/26/2015 19:17
1,1-Biphenyl	ND	0.25	1	05/26/2015 19:17
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 19:17
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 19:17
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 19:17
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 19:17
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 19:17
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 19:17
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 19:17
4-Chloroaniline	ND	0.50	1	05/26/2015 19:17
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 19:17
2-Chloronaphthalene	ND	0.25	1	05/26/2015 19:17
2-Chlorophenol	ND	0.25	1	05/26/2015 19:17
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 19:17
Chrysene	ND	0.25	1	05/26/2015 19:17
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 19:17
Dibenzofuran	ND	0.25	1	05/26/2015 19:17
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 19:17
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 19:17
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 19:17
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 19:17
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 19:17
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 19:17
Diethyl Phthalate	ND	0.25	1	05/26/2015 19:17
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 19:17
Dimethyl Phthalate	ND	0.25	1	05/26/2015 19:17
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 19:17
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 19:17

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 19:17
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 19:17
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 19:17
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 19:17
Fluoranthene	ND	0.25	1	05/26/2015 19:17
Fluorene	ND	0.25	1	05/26/2015 19:17
Hexachlorobenzene	ND	0.25	1	05/26/2015 19:17
Hexachlorobutadiene	ND	0.25	1	05/26/2015 19:17
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 19:17
Hexachloroethane	ND	0.25	1	05/26/2015 19:17
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 19:17
Isophorone	ND	0.25	1	05/26/2015 19:17
2-Methylnaphthalene	ND	0.25	1	05/26/2015 19:17
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 19:17
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 19:17
Naphthalene	ND	0.25	1	05/26/2015 19:17
2-Nitroaniline	ND	1.3	1	05/26/2015 19:17
3-Nitroaniline	ND	1.3	1	05/26/2015 19:17
4-Nitroaniline	ND	1.3	1	05/26/2015 19:17
Nitrobenzene	ND	0.25	1	05/26/2015 19:17
2-Nitrophenol	ND	1.3	1	05/26/2015 19:17
4-Nitrophenol	ND	1.3	1	05/26/2015 19:17
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 19:17
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 19:17
Pentachlorophenol	ND	1.3	1	05/26/2015 19:17
Phenanthrene	ND	0.25	1	05/26/2015 19:17
Phenol	ND	0.25	1	05/26/2015 19:17
Pyrene	ND	0.25	1	05/26/2015 19:17
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 19:17
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 19:17
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 19:17

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	118	30-130		05/26/2015 19:17
Phenol-d5	123	30-130		05/26/2015 19:17
Nitrobenzene-d5	94	30-130		05/26/2015 19:17
2-Fluorobiphenyl	85	30-130		05/26/2015 19:17
2,4,6-Tribromophenol	55	16-130		05/26/2015 19:17
4-Terphenyl-d14	91	30-130		05/26/2015 19:17

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 19:46
Acenaphthylene	ND	0.25	1	05/26/2015 19:46
Acetochlor	ND	0.25	1	05/26/2015 19:46
Anthracene	ND	0.25	1	05/26/2015 19:46
Benzidine	ND	1.3	1	05/26/2015 19:46
Benzo (a) anthracene	ND	0.25	1	05/26/2015 19:46
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 19:46
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 19:46
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 19:46
Benzo (a) pyrene	ND	0.25	1	05/26/2015 19:46
Benzyl Alcohol	ND	1.3	1	05/26/2015 19:46
1,1-Biphenyl	ND	0.25	1	05/26/2015 19:46
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 19:46
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 19:46
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 19:46
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 19:46
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 19:46
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 19:46
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 19:46
4-Chloroaniline	ND	0.50	1	05/26/2015 19:46
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 19:46
2-Chloronaphthalene	ND	0.25	1	05/26/2015 19:46
2-Chlorophenol	ND	0.25	1	05/26/2015 19:46
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 19:46
Chrysene	ND	0.25	1	05/26/2015 19:46
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 19:46
Dibenzofuran	ND	0.25	1	05/26/2015 19:46
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 19:46
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 19:46
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 19:46
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 19:46
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 19:46
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 19:46
Diethyl Phthalate	ND	0.25	1	05/26/2015 19:46
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 19:46
Dimethyl Phthalate	ND	0.25	1	05/26/2015 19:46
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 19:46
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 19:46

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 19:46
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 19:46
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 19:46
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 19:46
Fluoranthene	ND	0.25	1	05/26/2015 19:46
Fluorene	ND	0.25	1	05/26/2015 19:46
Hexachlorobenzene	ND	0.25	1	05/26/2015 19:46
Hexachlorobutadiene	ND	0.25	1	05/26/2015 19:46
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 19:46
Hexachloroethane	ND	0.25	1	05/26/2015 19:46
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 19:46
Isophorone	ND	0.25	1	05/26/2015 19:46
2-Methylnaphthalene	ND	0.25	1	05/26/2015 19:46
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 19:46
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 19:46
Naphthalene	ND	0.25	1	05/26/2015 19:46
2-Nitroaniline	ND	1.3	1	05/26/2015 19:46
3-Nitroaniline	ND	1.3	1	05/26/2015 19:46
4-Nitroaniline	ND	1.3	1	05/26/2015 19:46
Nitrobenzene	ND	0.25	1	05/26/2015 19:46
2-Nitrophenol	ND	1.3	1	05/26/2015 19:46
4-Nitrophenol	ND	1.3	1	05/26/2015 19:46
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 19:46
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 19:46
Pentachlorophenol	ND	1.3	1	05/26/2015 19:46
Phenanthrene	ND	0.25	1	05/26/2015 19:46
Phenol	ND	0.25	1	05/26/2015 19:46
Pyrene	ND	0.25	1	05/26/2015 19:46
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 19:46
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 19:46
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 19:46

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	133	S	30-130	05/26/2015 19:46
Phenol-d5	140	S	30-130	05/26/2015 19:46
Nitrobenzene-d5	101		30-130	05/26/2015 19:46
2-Fluorobiphenyl	95		30-130	05/26/2015 19:46
2,4,6-Tribromophenol	57		16-130	05/26/2015 19:46
4-Terphenyl-d14	99		30-130	05/26/2015 19:46

Analyst(s): HK

Analytical Comments: c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 20:14
Acenaphthylene	ND	0.25	1	05/26/2015 20:14
Acetochlor	ND	0.25	1	05/26/2015 20:14
Anthracene	ND	0.25	1	05/26/2015 20:14
Benzidine	ND	1.3	1	05/26/2015 20:14
Benzo (a) anthracene	ND	0.25	1	05/26/2015 20:14
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 20:14
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 20:14
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 20:14
Benzo (a) pyrene	ND	0.25	1	05/26/2015 20:14
Benzyl Alcohol	ND	1.3	1	05/26/2015 20:14
1,1-Biphenyl	ND	0.25	1	05/26/2015 20:14
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 20:14
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 20:14
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 20:14
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 20:14
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 20:14
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 20:14
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 20:14
4-Chloroaniline	ND	0.50	1	05/26/2015 20:14
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 20:14
2-Chloronaphthalene	ND	0.25	1	05/26/2015 20:14
2-Chlorophenol	ND	0.25	1	05/26/2015 20:14
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 20:14
Chrysene	ND	0.25	1	05/26/2015 20:14
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 20:14
Dibenzofuran	ND	0.25	1	05/26/2015 20:14
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 20:14
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 20:14
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 20:14
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 20:14
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 20:14
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 20:14
Diethyl Phthalate	ND	0.25	1	05/26/2015 20:14
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 20:14
Dimethyl Phthalate	ND	0.25	1	05/26/2015 20:14
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 20:14
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 20:14

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 20:14
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 20:14
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 20:14
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 20:14
Fluoranthene	ND	0.25	1	05/26/2015 20:14
Fluorene	ND	0.25	1	05/26/2015 20:14
Hexachlorobenzene	ND	0.25	1	05/26/2015 20:14
Hexachlorobutadiene	ND	0.25	1	05/26/2015 20:14
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 20:14
Hexachloroethane	ND	0.25	1	05/26/2015 20:14
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 20:14
Isophorone	ND	0.25	1	05/26/2015 20:14
2-Methylnaphthalene	ND	0.25	1	05/26/2015 20:14
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 20:14
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 20:14
Naphthalene	ND	0.25	1	05/26/2015 20:14
2-Nitroaniline	ND	1.3	1	05/26/2015 20:14
3-Nitroaniline	ND	1.3	1	05/26/2015 20:14
4-Nitroaniline	ND	1.3	1	05/26/2015 20:14
Nitrobenzene	ND	0.25	1	05/26/2015 20:14
2-Nitrophenol	ND	1.3	1	05/26/2015 20:14
4-Nitrophenol	ND	1.3	1	05/26/2015 20:14
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 20:14
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 20:14
Pentachlorophenol	ND	1.3	1	05/26/2015 20:14
Phenanthrene	ND	0.25	1	05/26/2015 20:14
Phenol	ND	0.25	1	05/26/2015 20:14
Pyrene	ND	0.25	1	05/26/2015 20:14
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 20:14
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 20:14
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 20:14

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	118	30-130		05/26/2015 20:14
Phenol-d5	121	30-130		05/26/2015 20:14
Nitrobenzene-d5	94	30-130		05/26/2015 20:14
2-Fluorobiphenyl	86	30-130		05/26/2015 20:14
2,4,6-Tribromophenol	50	16-130		05/26/2015 20:14
4-Terphenyl-d14	95	30-130		05/26/2015 20:14

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 20:43
Acenaphthylene	ND	0.25	1	05/26/2015 20:43
Acetochlor	ND	0.25	1	05/26/2015 20:43
Anthracene	ND	0.25	1	05/26/2015 20:43
Benzidine	ND	1.3	1	05/26/2015 20:43
Benzo (a) anthracene	ND	0.25	1	05/26/2015 20:43
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 20:43
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 20:43
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 20:43
Benzo (a) pyrene	ND	0.25	1	05/26/2015 20:43
Benzyl Alcohol	ND	1.3	1	05/26/2015 20:43
1,1-Biphenyl	ND	0.25	1	05/26/2015 20:43
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 20:43
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 20:43
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 20:43
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 20:43
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 20:43
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 20:43
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 20:43
4-Chloroaniline	ND	0.50	1	05/26/2015 20:43
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 20:43
2-Chloronaphthalene	ND	0.25	1	05/26/2015 20:43
2-Chlorophenol	ND	0.25	1	05/26/2015 20:43
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 20:43
Chrysene	ND	0.25	1	05/26/2015 20:43
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 20:43
Dibenzofuran	ND	0.25	1	05/26/2015 20:43
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 20:43
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 20:43
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 20:43
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 20:43
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 20:43
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 20:43
Diethyl Phthalate	ND	0.25	1	05/26/2015 20:43
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 20:43
Dimethyl Phthalate	ND	0.25	1	05/26/2015 20:43
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 20:43
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 20:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 20:43
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 20:43
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 20:43
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 20:43
Fluoranthene	ND	0.25	1	05/26/2015 20:43
Fluorene	ND	0.25	1	05/26/2015 20:43
Hexachlorobenzene	ND	0.25	1	05/26/2015 20:43
Hexachlorobutadiene	ND	0.25	1	05/26/2015 20:43
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 20:43
Hexachloroethane	ND	0.25	1	05/26/2015 20:43
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 20:43
Isophorone	ND	0.25	1	05/26/2015 20:43
2-Methylnaphthalene	ND	0.25	1	05/26/2015 20:43
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 20:43
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 20:43
Naphthalene	ND	0.25	1	05/26/2015 20:43
2-Nitroaniline	ND	1.3	1	05/26/2015 20:43
3-Nitroaniline	ND	1.3	1	05/26/2015 20:43
4-Nitroaniline	ND	1.3	1	05/26/2015 20:43
Nitrobenzene	ND	0.25	1	05/26/2015 20:43
2-Nitrophenol	ND	1.3	1	05/26/2015 20:43
4-Nitrophenol	ND	1.3	1	05/26/2015 20:43
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 20:43
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 20:43
Pentachlorophenol	ND	1.3	1	05/26/2015 20:43
Phenanthrene	ND	0.25	1	05/26/2015 20:43
Phenol	ND	0.25	1	05/26/2015 20:43
Pyrene	ND	0.25	1	05/26/2015 20:43
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 20:43
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 20:43
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 20:43

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	124	30-130		05/26/2015 20:43
Phenol-d5	125	30-130		05/26/2015 20:43
Nitrobenzene-d5	98	30-130		05/26/2015 20:43
2-Fluorobiphenyl	89	30-130		05/26/2015 20:43
2,4,6-Tribromophenol	57	16-130		05/26/2015 20:43
4-Terphenyl-d14	94	30-130		05/26/2015 20:43

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC17	105238
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	0.25	1	05/26/2015 22:09	
Acenaphthylene	ND	0.25	1	05/26/2015 22:09	
Acetochlor	ND	0.25	1	05/26/2015 22:09	
Anthracene	ND	0.25	1	05/26/2015 22:09	
Benzidine	ND	1.3	1	05/26/2015 22:09	
Benzo (a) anthracene	ND	0.25	1	05/26/2015 22:09	
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 22:09	
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 22:09	
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 22:09	
Benzo (a) pyrene	ND	0.25	1	05/26/2015 22:09	
Benzyl Alcohol	ND	1.3	1	05/26/2015 22:09	
1,1-Biphenyl	ND	0.25	1	05/26/2015 22:09	
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 22:09	
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 22:09	
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 22:09	
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 22:09	
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 22:09	
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 22:09	
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 22:09	
4-Chloroaniline	ND	0.50	1	05/26/2015 22:09	
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 22:09	
2-Chloronaphthalene	ND	0.25	1	05/26/2015 22:09	
2-Chlorophenol	ND	0.25	1	05/26/2015 22:09	
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 22:09	
Chrysene	ND	0.25	1	05/26/2015 22:09	
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 22:09	
Dibenzofuran	ND	0.25	1	05/26/2015 22:09	
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 22:09	
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 22:09	
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 22:09	
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 22:09	
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 22:09	
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 22:09	
Diethyl Phthalate	ND	0.25	1	05/26/2015 22:09	
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 22:09	
Dimethyl Phthalate	ND	0.25	1	05/26/2015 22:09	
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 22:09	
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 22:09	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 22:09
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 22:09
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 22:09
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 22:09
Fluoranthene	ND	0.25	1	05/26/2015 22:09
Fluorene	ND	0.25	1	05/26/2015 22:09
Hexachlorobenzene	ND	0.25	1	05/26/2015 22:09
Hexachlorobutadiene	ND	0.25	1	05/26/2015 22:09
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 22:09
Hexachloroethane	ND	0.25	1	05/26/2015 22:09
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 22:09
Isophorone	ND	0.25	1	05/26/2015 22:09
2-Methylnaphthalene	ND	0.25	1	05/26/2015 22:09
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 22:09
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 22:09
Naphthalene	ND	0.25	1	05/26/2015 22:09
2-Nitroaniline	ND	1.3	1	05/26/2015 22:09
3-Nitroaniline	ND	1.3	1	05/26/2015 22:09
4-Nitroaniline	ND	1.3	1	05/26/2015 22:09
Nitrobenzene	ND	0.25	1	05/26/2015 22:09
2-Nitrophenol	ND	1.3	1	05/26/2015 22:09
4-Nitrophenol	ND	1.3	1	05/26/2015 22:09
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 22:09
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 22:09
Pentachlorophenol	ND	1.3	1	05/26/2015 22:09
Phenanthrene	ND	0.25	1	05/26/2015 22:09
Phenol	ND	0.25	1	05/26/2015 22:09
Pyrene	ND	0.25	1	05/26/2015 22:09
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 22:09
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 22:09
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 22:09

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	122	30-130		05/26/2015 22:09
Phenol-d5	126	30-130		05/26/2015 22:09
Nitrobenzene-d5	97	30-130		05/26/2015 22:09
2-Fluorobiphenyl	90	30-130		05/26/2015 22:09
2,4,6-Tribromophenol	64	16-130		05/26/2015 22:09
4-Terphenyl-d14	95	30-130		05/26/2015 22:09

**Analyst(s):** HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	10	5	05/27/2015 22:01
Acenaphthylene	ND	10	5	05/27/2015 22:01
Acetochlor	ND	10	5	05/27/2015 22:01
Anthracene	ND	10	5	05/27/2015 22:01
Benzidine	ND	52	5	05/27/2015 22:01
Benzo (a) anthracene	ND	10	5	05/27/2015 22:01
Benzo (b) fluoranthene	ND	10	5	05/27/2015 22:01
Benzo (k) fluoranthene	ND	10	5	05/27/2015 22:01
Benzo (g,h,i) perylene	ND	10	5	05/27/2015 22:01
Benzo (a) pyrene	ND	10	5	05/27/2015 22:01
Benzyl Alcohol	ND	52	5	05/27/2015 22:01
1,1-Biphenyl	ND	10	5	05/27/2015 22:01
Bis (2-chloroethoxy) Methane	ND	10	5	05/27/2015 22:01
Bis (2-chloroethyl) Ether	ND	10	5	05/27/2015 22:01
Bis (2-chloroisopropyl) Ether	ND	10	5	05/27/2015 22:01
Bis (2-ethylhexyl) Adipate	ND	10	5	05/27/2015 22:01
Bis (2-ethylhexyl) Phthalate	ND	10	5	05/27/2015 22:01
4-Bromophenyl Phenyl Ether	ND	10	5	05/27/2015 22:01
Butylbenzyl Phthalate	ND	10	5	05/27/2015 22:01
4-Chloroaniline	ND	20	5	05/27/2015 22:01
4-Chloro-3-methylphenol	ND	10	5	05/27/2015 22:01
2-Chloronaphthalene	ND	10	5	05/27/2015 22:01
2-Chlorophenol	ND	10	5	05/27/2015 22:01
4-Chlorophenyl Phenyl Ether	ND	10	5	05/27/2015 22:01
Chrysene	ND	10	5	05/27/2015 22:01
Dibenzo (a,h) anthracene	ND	10	5	05/27/2015 22:01
Dibenzofuran	ND	10	5	05/27/2015 22:01
Di-n-butyl Phthalate	ND	10	5	05/27/2015 22:01
1,2-Dichlorobenzene	ND	10	5	05/27/2015 22:01
1,3-Dichlorobenzene	ND	10	5	05/27/2015 22:01
1,4-Dichlorobenzene	ND	10	5	05/27/2015 22:01
3,3-Dichlorobenzidine	ND	20	5	05/27/2015 22:01
2,4-Dichlorophenol	ND	10	5	05/27/2015 22:01
Diethyl Phthalate	ND	10	5	05/27/2015 22:01
2,4-Dimethylphenol	ND	10	5	05/27/2015 22:01
Dimethyl Phthalate	ND	10	5	05/27/2015 22:01
4,6-Dinitro-2-methylphenol	ND	52	5	05/27/2015 22:01
2,4-Dinitrophenol	ND	250	5	05/27/2015 22:01

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	10	5	05/27/2015 22:01
2,6-Dinitrotoluene	ND	10	5	05/27/2015 22:01
Di-n-octyl Phthalate	ND	20	5	05/27/2015 22:01
1,2-Diphenylhydrazine	ND	10	5	05/27/2015 22:01
Fluoranthene	ND	10	5	05/27/2015 22:01
Fluorene	ND	10	5	05/27/2015 22:01
Hexachlorobenzene	ND	10	5	05/27/2015 22:01
Hexachlorobutadiene	ND	10	5	05/27/2015 22:01
Hexachlorocyclopentadiene	ND	52	5	05/27/2015 22:01
Hexachloroethane	ND	10	5	05/27/2015 22:01
Indeno (1,2,3-cd) pyrene	ND	10	5	05/27/2015 22:01
Isophorone	ND	10	5	05/27/2015 22:01
2-Methylnaphthalene	ND	10	5	05/27/2015 22:01
2-Methylphenol (o-Cresol)	ND	10	5	05/27/2015 22:01
3 & 4-Methylphenol (m,p-Cresol)	ND	10	5	05/27/2015 22:01
Naphthalene	ND	10	5	05/27/2015 22:01
2-Nitroaniline	ND	52	5	05/27/2015 22:01
3-Nitroaniline	ND	52	5	05/27/2015 22:01
4-Nitroaniline	ND	52	5	05/27/2015 22:01
Nitrobenzene	ND	10	5	05/27/2015 22:01
2-Nitrophenol	ND	52	5	05/27/2015 22:01
4-Nitrophenol	ND	52	5	05/27/2015 22:01
N-Nitrosodiphenylamine	ND	10	5	05/27/2015 22:01
N-Nitrosodi-n-propylamine	ND	10	5	05/27/2015 22:01
Pentachlorophenol	ND	52	5	05/27/2015 22:01
Phenanthrene	ND	10	5	05/27/2015 22:01
Phenol	ND	10	5	05/27/2015 22:01
Pyrene	ND	10	5	05/27/2015 22:01
1,2,4-Trichlorobenzene	ND	10	5	05/27/2015 22:01
2,4,5-Trichlorophenol	ND	10	5	05/27/2015 22:01
2,4,6-Trichlorophenol	ND	10	5	05/27/2015 22:01

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	104	30-130		05/27/2015 22:01
Phenol-d5	112	30-130		05/27/2015 22:01
Nitrobenzene-d5	93	30-130		05/27/2015 22:01
2-Fluorobiphenyl	85	30-130		05/27/2015 22:01
2,4,6-Tribromophenol	46	16-130		05/27/2015 22:01
4-Terphenyl-d14	84	30-130		05/27/2015 22:01

Analyst(s): HK

Analytical Comments: a3,a4



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/26/2015 22:38
Acenaphthylene	ND	0.25	1	05/26/2015 22:38
Acetochlor	ND	0.25	1	05/26/2015 22:38
Anthracene	ND	0.25	1	05/26/2015 22:38
Benzidine	ND	1.3	1	05/26/2015 22:38
Benzo (a) anthracene	ND	0.25	1	05/26/2015 22:38
Benzo (b) fluoranthene	ND	0.25	1	05/26/2015 22:38
Benzo (k) fluoranthene	ND	0.25	1	05/26/2015 22:38
Benzo (g,h,i) perylene	ND	0.25	1	05/26/2015 22:38
Benzo (a) pyrene	ND	0.25	1	05/26/2015 22:38
Benzyl Alcohol	ND	1.3	1	05/26/2015 22:38
1,1-Biphenyl	ND	0.25	1	05/26/2015 22:38
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/26/2015 22:38
Bis (2-chloroethyl) Ether	ND	0.25	1	05/26/2015 22:38
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/26/2015 22:38
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/26/2015 22:38
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/26/2015 22:38
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/26/2015 22:38
Butylbenzyl Phthalate	ND	0.25	1	05/26/2015 22:38
4-Chloroaniline	ND	0.50	1	05/26/2015 22:38
4-Chloro-3-methylphenol	ND	0.25	1	05/26/2015 22:38
2-Chloronaphthalene	ND	0.25	1	05/26/2015 22:38
2-Chlorophenol	ND	0.25	1	05/26/2015 22:38
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/26/2015 22:38
Chrysene	ND	0.25	1	05/26/2015 22:38
Dibenzo (a,h) anthracene	ND	0.25	1	05/26/2015 22:38
Dibenzofuran	ND	0.25	1	05/26/2015 22:38
Di-n-butyl Phthalate	ND	0.25	1	05/26/2015 22:38
1,2-Dichlorobenzene	ND	0.25	1	05/26/2015 22:38
1,3-Dichlorobenzene	ND	0.25	1	05/26/2015 22:38
1,4-Dichlorobenzene	ND	0.25	1	05/26/2015 22:38
3,3-Dichlorobenzidine	ND	0.50	1	05/26/2015 22:38
2,4-Dichlorophenol	ND	0.25	1	05/26/2015 22:38
Diethyl Phthalate	ND	0.25	1	05/26/2015 22:38
2,4-Dimethylphenol	ND	0.25	1	05/26/2015 22:38
Dimethyl Phthalate	ND	0.25	1	05/26/2015 22:38
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/26/2015 22:38
2,4-Dinitrophenol	ND	6.3	1	05/26/2015 22:38

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC17	105238
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrotoluene	ND	0.25	1	05/26/2015 22:38	
2,6-Dinitrotoluene	ND	0.25	1	05/26/2015 22:38	
Di-n-octyl Phthalate	ND	0.50	1	05/26/2015 22:38	
1,2-Diphenylhydrazine	ND	0.25	1	05/26/2015 22:38	
Fluoranthene	ND	0.25	1	05/26/2015 22:38	
Fluorene	ND	0.25	1	05/26/2015 22:38	
Hexachlorobenzene	ND	0.25	1	05/26/2015 22:38	
Hexachlorobutadiene	ND	0.25	1	05/26/2015 22:38	
Hexachlorocyclopentadiene	ND	1.3	1	05/26/2015 22:38	
Hexachloroethane	ND	0.25	1	05/26/2015 22:38	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/26/2015 22:38	
Isophorone	ND	0.25	1	05/26/2015 22:38	
2-Methylnaphthalene	ND	0.25	1	05/26/2015 22:38	
2-Methylphenol (o-Cresol)	ND	0.25	1	05/26/2015 22:38	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/26/2015 22:38	
Naphthalene	ND	0.25	1	05/26/2015 22:38	
2-Nitroaniline	ND	1.3	1	05/26/2015 22:38	
3-Nitroaniline	ND	1.3	1	05/26/2015 22:38	
4-Nitroaniline	ND	1.3	1	05/26/2015 22:38	
Nitrobenzene	ND	0.25	1	05/26/2015 22:38	
2-Nitrophenol	ND	1.3	1	05/26/2015 22:38	
4-Nitrophenol	ND	1.3	1	05/26/2015 22:38	
N-Nitrosodiphenylamine	ND	0.25	1	05/26/2015 22:38	
N-Nitrosodi-n-propylamine	ND	0.25	1	05/26/2015 22:38	
Pentachlorophenol	ND	1.3	1	05/26/2015 22:38	
Phenanthrene	ND	0.25	1	05/26/2015 22:38	
Phenol	ND	0.25	1	05/26/2015 22:38	
Pyrene	ND	0.25	1	05/26/2015 22:38	
1,2,4-Trichlorobenzene	ND	0.25	1	05/26/2015 22:38	
2,4,5-Trichlorophenol	ND	0.25	1	05/26/2015 22:38	
2,4,6-Trichlorophenol	ND	0.25	1	05/26/2015 22:38	

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC17	105238

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	117	30-130		05/26/2015 22:38
Phenol-d5	124	30-130		05/26/2015 22:38
Nitrobenzene-d5	92	30-130		05/26/2015 22:38
2-Fluorobiphenyl	86	30-130		05/26/2015 22:38
2,4,6-Tribromophenol	56	16-130		05/26/2015 22:38
4-Terphenyl-d14	89	30-130		05/26/2015 22:38

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 18:08
Acenaphthylene	ND	0.25	1	05/27/2015 18:08
Acetochlor	ND	0.25	1	05/27/2015 18:08
Anthracene	ND	0.25	1	05/27/2015 18:08
Benzidine	ND	1.3	1	05/27/2015 18:08
Benzo (a) anthracene	ND	0.25	1	05/27/2015 18:08
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 18:08
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 18:08
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 18:08
Benzo (a) pyrene	ND	0.25	1	05/27/2015 18:08
Benzyl Alcohol	ND	1.3	1	05/27/2015 18:08
1,1-Biphenyl	ND	0.25	1	05/27/2015 18:08
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 18:08
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 18:08
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 18:08
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 18:08
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 18:08
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 18:08
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 18:08
4-Chloroaniline	ND	0.50	1	05/27/2015 18:08
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 18:08
2-Chloronaphthalene	ND	0.25	1	05/27/2015 18:08
2-Chlorophenol	ND	0.25	1	05/27/2015 18:08
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 18:08
Chrysene	ND	0.25	1	05/27/2015 18:08
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 18:08
Dibenzofuran	ND	0.25	1	05/27/2015 18:08
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 18:08
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 18:08
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 18:08
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 18:08
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 18:08
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 18:08
Diethyl Phthalate	ND	0.25	1	05/27/2015 18:08
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 18:08
Dimethyl Phthalate	ND	0.25	1	05/27/2015 18:08
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 18:08
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 18:08

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 18:08
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 18:08
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 18:08
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 18:08
Fluoranthene	ND	0.25	1	05/27/2015 18:08
Fluorene	ND	0.25	1	05/27/2015 18:08
Hexachlorobenzene	ND	0.25	1	05/27/2015 18:08
Hexachlorobutadiene	ND	0.25	1	05/27/2015 18:08
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 18:08
Hexachloroethane	ND	0.25	1	05/27/2015 18:08
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 18:08
Isophorone	ND	0.25	1	05/27/2015 18:08
2-Methylnaphthalene	ND	0.25	1	05/27/2015 18:08
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 18:08
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 18:08
Naphthalene	ND	0.25	1	05/27/2015 18:08
2-Nitroaniline	ND	1.3	1	05/27/2015 18:08
3-Nitroaniline	ND	1.3	1	05/27/2015 18:08
4-Nitroaniline	ND	1.3	1	05/27/2015 18:08
Nitrobenzene	ND	0.25	1	05/27/2015 18:08
2-Nitrophenol	ND	1.3	1	05/27/2015 18:08
4-Nitrophenol	ND	1.3	1	05/27/2015 18:08
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 18:08
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 18:08
Pentachlorophenol	ND	1.3	1	05/27/2015 18:08
Phenanthrene	ND	0.25	1	05/27/2015 18:08
Phenol	ND	0.25	1	05/27/2015 18:08
Pyrene	ND	0.25	1	05/27/2015 18:08
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 18:08
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 18:08
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 18:08

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	116	30-130		05/27/2015 18:08
Phenol-d5	120	30-130		05/27/2015 18:08
Nitrobenzene-d5	94	30-130		05/27/2015 18:08
2-Fluorobiphenyl	88	30-130		05/27/2015 18:08
2,4,6-Tribromophenol	58	16-130		05/27/2015 18:08
4-Terphenyl-d14	104	30-130		05/27/2015 18:08

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC17	105277
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		40	20	05/27/2015 20:35
Acenaphthylene	ND		40	20	05/27/2015 20:35
Acetochlor	ND		40	20	05/27/2015 20:35
Anthracene	ND		40	20	05/27/2015 20:35
Benzidine	ND		210	20	05/27/2015 20:35
Benzo (a) anthracene	ND		40	20	05/27/2015 20:35
Benzo (b) fluoranthene	ND		40	20	05/27/2015 20:35
Benzo (k) fluoranthene	ND		40	20	05/27/2015 20:35
Benzo (g,h,i) perylene	ND		40	20	05/27/2015 20:35
Benzo (a) pyrene	ND		40	20	05/27/2015 20:35
Benzyl Alcohol	ND		210	20	05/27/2015 20:35
1,1-Biphenyl	ND		40	20	05/27/2015 20:35
Bis (2-chloroethoxy) Methane	ND		40	20	05/27/2015 20:35
Bis (2-chloroethyl) Ether	ND		40	20	05/27/2015 20:35
Bis (2-chloroisopropyl) Ether	ND		40	20	05/27/2015 20:35
Bis (2-ethylhexyl) Adipate	ND		40	20	05/27/2015 20:35
Bis (2-ethylhexyl) Phthalate	ND		40	20	05/27/2015 20:35
4-Bromophenyl Phenyl Ether	ND		40	20	05/27/2015 20:35
Butylbenzyl Phthalate	ND		40	20	05/27/2015 20:35
4-Chloroaniline	ND		80	20	05/27/2015 20:35
4-Chloro-3-methylphenol	ND		40	20	05/27/2015 20:35
2-Chloronaphthalene	ND		40	20	05/27/2015 20:35
2-Chlorophenol	ND		40	20	05/27/2015 20:35
4-Chlorophenyl Phenyl Ether	ND		40	20	05/27/2015 20:35
Chrysene	ND		40	20	05/27/2015 20:35
Dibenzo (a,h) anthracene	ND		40	20	05/27/2015 20:35
Dibenzofuran	ND		40	20	05/27/2015 20:35
Di-n-butyl Phthalate	ND		40	20	05/27/2015 20:35
1,2-Dichlorobenzene	ND		40	20	05/27/2015 20:35
1,3-Dichlorobenzene	ND		40	20	05/27/2015 20:35
1,4-Dichlorobenzene	ND		40	20	05/27/2015 20:35
3,3-Dichlorobenzidine	ND		80	20	05/27/2015 20:35
2,4-Dichlorophenol	ND		40	20	05/27/2015 20:35
Diethyl Phthalate	ND		40	20	05/27/2015 20:35
2,4-Dimethylphenol	ND		40	20	05/27/2015 20:35
Dimethyl Phthalate	ND		40	20	05/27/2015 20:35
4,6-Dinitro-2-methylphenol	ND		210	20	05/27/2015 20:35
2,4-Dinitrophenol	ND		1000	20	05/27/2015 20:35

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	40	20	05/27/2015 20:35
2,6-Dinitrotoluene	ND	40	20	05/27/2015 20:35
Di-n-octyl Phthalate	ND	80	20	05/27/2015 20:35
1,2-Diphenylhydrazine	ND	40	20	05/27/2015 20:35
Fluoranthene	ND	40	20	05/27/2015 20:35
Fluorene	ND	40	20	05/27/2015 20:35
Hexachlorobenzene	ND	40	20	05/27/2015 20:35
Hexachlorobutadiene	ND	40	20	05/27/2015 20:35
Hexachlorocyclopentadiene	ND	210	20	05/27/2015 20:35
Hexachloroethane	ND	40	20	05/27/2015 20:35
Indeno (1,2,3-cd) pyrene	ND	40	20	05/27/2015 20:35
Isophorone	ND	40	20	05/27/2015 20:35
2-Methylnaphthalene	ND	40	20	05/27/2015 20:35
2-Methylphenol (o-Cresol)	ND	40	20	05/27/2015 20:35
3 & 4-Methylphenol (m,p-Cresol)	ND	40	20	05/27/2015 20:35
Naphthalene	ND	40	20	05/27/2015 20:35
2-Nitroaniline	ND	210	20	05/27/2015 20:35
3-Nitroaniline	ND	210	20	05/27/2015 20:35
4-Nitroaniline	ND	210	20	05/27/2015 20:35
Nitrobenzene	ND	40	20	05/27/2015 20:35
2-Nitrophenol	ND	210	20	05/27/2015 20:35
4-Nitrophenol	ND	210	20	05/27/2015 20:35
N-Nitrosodiphenylamine	ND	40	20	05/27/2015 20:35
N-Nitrosodi-n-propylamine	ND	40	20	05/27/2015 20:35
Pentachlorophenol	ND	210	20	05/27/2015 20:35
Phenanthrene	ND	40	20	05/27/2015 20:35
Phenol	ND	40	20	05/27/2015 20:35
Pyrene	ND	40	20	05/27/2015 20:35
1,2,4-Trichlorobenzene	ND	40	20	05/27/2015 20:35
2,4,5-Trichlorophenol	ND	40	20	05/27/2015 20:35
2,4,6-Trichlorophenol	ND	40	20	05/27/2015 20:35

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	125	30-130		05/27/2015 20:35
Phenol-d5	128	30-130		05/27/2015 20:35
Nitrobenzene-d5	96	30-130		05/27/2015 20:35
2-Fluorobiphenyl	92	30-130		05/27/2015 20:35
2,4,6-Tribromophenol	51	16-130		05/27/2015 20:35
4-Terphenyl-d14	88	30-130		05/27/2015 20:35

Analyst(s): HK

Analytical Comments: a3,a4



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 17:38
Acenaphthylene	ND	0.25	1	05/27/2015 17:38
Acetochlor	ND	0.25	1	05/27/2015 17:38
Anthracene	ND	0.25	1	05/27/2015 17:38
Benzidine	ND	1.3	1	05/27/2015 17:38
Benzo (a) anthracene	ND	0.25	1	05/27/2015 17:38
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 17:38
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 17:38
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 17:38
Benzo (a) pyrene	ND	0.25	1	05/27/2015 17:38
Benzyl Alcohol	ND	1.3	1	05/27/2015 17:38
1,1-Biphenyl	ND	0.25	1	05/27/2015 17:38
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 17:38
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 17:38
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 17:38
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 17:38
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 17:38
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 17:38
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 17:38
4-Chloroaniline	ND	0.50	1	05/27/2015 17:38
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 17:38
2-Chloronaphthalene	ND	0.25	1	05/27/2015 17:38
2-Chlorophenol	ND	0.25	1	05/27/2015 17:38
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 17:38
Chrysene	ND	0.25	1	05/27/2015 17:38
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 17:38
Dibenzofuran	ND	0.25	1	05/27/2015 17:38
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 17:38
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 17:38
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 17:38
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 17:38
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 17:38
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 17:38
Diethyl Phthalate	ND	0.25	1	05/27/2015 17:38
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 17:38
Dimethyl Phthalate	ND	0.25	1	05/27/2015 17:38
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 17:38
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 17:38

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 17:38
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 17:38
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 17:38
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 17:38
Fluoranthene	ND	0.25	1	05/27/2015 17:38
Fluorene	ND	0.25	1	05/27/2015 17:38
Hexachlorobenzene	ND	0.25	1	05/27/2015 17:38
Hexachlorobutadiene	ND	0.25	1	05/27/2015 17:38
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 17:38
Hexachloroethane	ND	0.25	1	05/27/2015 17:38
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 17:38
Isophorone	ND	0.25	1	05/27/2015 17:38
2-Methylnaphthalene	ND	0.25	1	05/27/2015 17:38
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 17:38
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 17:38
Naphthalene	ND	0.25	1	05/27/2015 17:38
2-Nitroaniline	ND	1.3	1	05/27/2015 17:38
3-Nitroaniline	ND	1.3	1	05/27/2015 17:38
4-Nitroaniline	ND	1.3	1	05/27/2015 17:38
Nitrobenzene	ND	0.25	1	05/27/2015 17:38
2-Nitrophenol	ND	1.3	1	05/27/2015 17:38
4-Nitrophenol	ND	1.3	1	05/27/2015 17:38
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 17:38
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 17:38
Pentachlorophenol	ND	1.3	1	05/27/2015 17:38
Phenanthrene	ND	0.25	1	05/27/2015 17:38
Phenol	ND	0.25	1	05/27/2015 17:38
Pyrene	ND	0.25	1	05/27/2015 17:38
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 17:38
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 17:38
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 17:38

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	137	S	30-130	05/27/2015 17:38
Phenol-d5	141	S	30-130	05/27/2015 17:38
Nitrobenzene-d5	110		30-130	05/27/2015 17:38
2-Fluorobiphenyl	106		30-130	05/27/2015 17:38
2,4,6-Tribromophenol	68		16-130	05/27/2015 17:38
4-Terphenyl-d14	134	S	30-130	05/27/2015 17:38

Analyst(s): HK

Analytical Comments: c11



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 12:39
Acenaphthylene	ND	0.25	1	05/27/2015 12:39
Acetochlor	ND	0.25	1	05/27/2015 12:39
Anthracene	ND	0.25	1	05/27/2015 12:39
Benzidine	ND	1.3	1	05/27/2015 12:39
Benzo (a) anthracene	ND	0.25	1	05/27/2015 12:39
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 12:39
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 12:39
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 12:39
Benzo (a) pyrene	ND	0.25	1	05/27/2015 12:39
Benzyl Alcohol	ND	1.3	1	05/27/2015 12:39
1,1-Biphenyl	ND	0.25	1	05/27/2015 12:39
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 12:39
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 12:39
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 12:39
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 12:39
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 12:39
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 12:39
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 12:39
4-Chloroaniline	ND	0.50	1	05/27/2015 12:39
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 12:39
2-Chloronaphthalene	ND	0.25	1	05/27/2015 12:39
2-Chlorophenol	ND	0.25	1	05/27/2015 12:39
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 12:39
Chrysene	ND	0.25	1	05/27/2015 12:39
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 12:39
Dibenzofuran	ND	0.25	1	05/27/2015 12:39
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 12:39
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 12:39
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 12:39
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 12:39
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 12:39
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 12:39
Diethyl Phthalate	ND	0.25	1	05/27/2015 12:39
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 12:39
Dimethyl Phthalate	ND	0.25	1	05/27/2015 12:39
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 12:39
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 12:39

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 12:39
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 12:39
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 12:39
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 12:39
Fluoranthene	ND	0.25	1	05/27/2015 12:39
Fluorene	ND	0.25	1	05/27/2015 12:39
Hexachlorobenzene	ND	0.25	1	05/27/2015 12:39
Hexachlorobutadiene	ND	0.25	1	05/27/2015 12:39
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 12:39
Hexachloroethane	ND	0.25	1	05/27/2015 12:39
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 12:39
Isophorone	ND	0.25	1	05/27/2015 12:39
2-Methylnaphthalene	ND	0.25	1	05/27/2015 12:39
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 12:39
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 12:39
Naphthalene	ND	0.25	1	05/27/2015 12:39
2-Nitroaniline	ND	1.3	1	05/27/2015 12:39
3-Nitroaniline	ND	1.3	1	05/27/2015 12:39
4-Nitroaniline	ND	1.3	1	05/27/2015 12:39
Nitrobenzene	ND	0.25	1	05/27/2015 12:39
2-Nitrophenol	ND	1.3	1	05/27/2015 12:39
4-Nitrophenol	ND	1.3	1	05/27/2015 12:39
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 12:39
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 12:39
Pentachlorophenol	ND	1.3	1	05/27/2015 12:39
Phenanthrene	ND	0.25	1	05/27/2015 12:39
Phenol	ND	0.25	1	05/27/2015 12:39
Pyrene	ND	0.25	1	05/27/2015 12:39
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 12:39
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 12:39
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 12:39

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	110	30-130		05/27/2015 12:39
Phenol-d5	113	30-130		05/27/2015 12:39
Nitrobenzene-d5	91	30-130		05/27/2015 12:39
2-Fluorobiphenyl	88	30-130		05/27/2015 12:39
2,4,6-Tribromophenol	64	16-130		05/27/2015 12:39
4-Terphenyl-d14	103	30-130		05/27/2015 12:39

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	2.0	1	05/27/2015 21:32
Acenaphthylene	ND	2.0	1	05/27/2015 21:32
Acetochlor	ND	2.0	1	05/27/2015 21:32
Anthracene	ND	2.0	1	05/27/2015 21:32
Benzidine	ND	10	1	05/27/2015 21:32
Benzo (a) anthracene	ND	2.0	1	05/27/2015 21:32
Benzo (b) fluoranthene	ND	2.0	1	05/27/2015 21:32
Benzo (k) fluoranthene	ND	2.0	1	05/27/2015 21:32
Benzo (g,h,i) perylene	ND	2.0	1	05/27/2015 21:32
Benzo (a) pyrene	ND	2.0	1	05/27/2015 21:32
Benzyl Alcohol	ND	10	1	05/27/2015 21:32
1,1-Biphenyl	ND	2.0	1	05/27/2015 21:32
Bis (2-chloroethoxy) Methane	ND	2.0	1	05/27/2015 21:32
Bis (2-chloroethyl) Ether	ND	2.0	1	05/27/2015 21:32
Bis (2-chloroisopropyl) Ether	ND	2.0	1	05/27/2015 21:32
Bis (2-ethylhexyl) Adipate	ND	2.0	1	05/27/2015 21:32
Bis (2-ethylhexyl) Phthalate	ND	2.0	1	05/27/2015 21:32
4-Bromophenyl Phenyl Ether	ND	2.0	1	05/27/2015 21:32
Butylbenzyl Phthalate	ND	2.0	1	05/27/2015 21:32
4-Chloroaniline	ND	4.0	1	05/27/2015 21:32
4-Chloro-3-methylphenol	ND	2.0	1	05/27/2015 21:32
2-Chloronaphthalene	ND	2.0	1	05/27/2015 21:32
2-Chlorophenol	ND	2.0	1	05/27/2015 21:32
4-Chlorophenyl Phenyl Ether	ND	2.0	1	05/27/2015 21:32
Chrysene	ND	2.0	1	05/27/2015 21:32
Dibenzo (a,h) anthracene	ND	2.0	1	05/27/2015 21:32
Dibenzofuran	ND	2.0	1	05/27/2015 21:32
Di-n-butyl Phthalate	ND	2.0	1	05/27/2015 21:32
1,2-Dichlorobenzene	ND	2.0	1	05/27/2015 21:32
1,3-Dichlorobenzene	ND	2.0	1	05/27/2015 21:32
1,4-Dichlorobenzene	ND	2.0	1	05/27/2015 21:32
3,3-Dichlorobenzidine	ND	4.0	1	05/27/2015 21:32
2,4-Dichlorophenol	ND	2.0	1	05/27/2015 21:32
Diethyl Phthalate	ND	2.0	1	05/27/2015 21:32
2,4-Dimethylphenol	ND	2.0	1	05/27/2015 21:32
Dimethyl Phthalate	ND	2.0	1	05/27/2015 21:32
4,6-Dinitro-2-methylphenol	ND	10	1	05/27/2015 21:32
2,4-Dinitrophenol	ND	50	1	05/27/2015 21:32

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	2.0	1	05/27/2015 21:32
2,6-Dinitrotoluene	ND	2.0	1	05/27/2015 21:32
Di-n-octyl Phthalate	ND	4.0	1	05/27/2015 21:32
1,2-Diphenylhydrazine	ND	2.0	1	05/27/2015 21:32
Fluoranthene	ND	2.0	1	05/27/2015 21:32
Fluorene	ND	2.0	1	05/27/2015 21:32
Hexachlorobenzene	ND	2.0	1	05/27/2015 21:32
Hexachlorobutadiene	ND	2.0	1	05/27/2015 21:32
Hexachlorocyclopentadiene	ND	10	1	05/27/2015 21:32
Hexachloroethane	ND	2.0	1	05/27/2015 21:32
Indeno (1,2,3-cd) pyrene	ND	2.0	1	05/27/2015 21:32
Isophorone	ND	2.0	1	05/27/2015 21:32
2-Methylnaphthalene	ND	2.0	1	05/27/2015 21:32
2-Methylphenol (o-Cresol)	ND	2.0	1	05/27/2015 21:32
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	05/27/2015 21:32
Naphthalene	ND	2.0	1	05/27/2015 21:32
2-Nitroaniline	ND	10	1	05/27/2015 21:32
3-Nitroaniline	ND	10	1	05/27/2015 21:32
4-Nitroaniline	ND	10	1	05/27/2015 21:32
Nitrobenzene	ND	2.0	1	05/27/2015 21:32
2-Nitrophenol	ND	10	1	05/27/2015 21:32
4-Nitrophenol	ND	10	1	05/27/2015 21:32
N-Nitrosodiphenylamine	ND	2.0	1	05/27/2015 21:32
N-Nitrosodi-n-propylamine	ND	2.0	1	05/27/2015 21:32
Pentachlorophenol	ND	10	1	05/27/2015 21:32
Phenanthrene	ND	2.0	1	05/27/2015 21:32
Phenol	ND	2.0	1	05/27/2015 21:32
Pyrene	ND	2.0	1	05/27/2015 21:32
1,2,4-Trichlorobenzene	ND	2.0	1	05/27/2015 21:32
2,4,5-Trichlorophenol	ND	2.0	1	05/27/2015 21:32
2,4,6-Trichlorophenol	ND	2.0	1	05/27/2015 21:32

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	123		30-130	05/27/2015 21:32
Phenol-d5	125		30-130	05/27/2015 21:32
Nitrobenzene-d5	101		30-130	05/27/2015 21:32
2-Fluorobiphenyl	95		30-130	05/27/2015 21:32
2,4,6-Tribromophenol	57		16-130	05/27/2015 21:32
4-Terphenyl-d14	95		30-130	05/27/2015 21:32

**Analyst(s):** HK

**Analytical Comments:** a4



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 13:09
Acenaphthylene	ND	0.25	1	05/27/2015 13:09
Acetochlor	ND	0.25	1	05/27/2015 13:09
Anthracene	ND	0.25	1	05/27/2015 13:09
Benzidine	ND	1.3	1	05/27/2015 13:09
Benzo (a) anthracene	ND	0.25	1	05/27/2015 13:09
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 13:09
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 13:09
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 13:09
Benzo (a) pyrene	ND	0.25	1	05/27/2015 13:09
Benzyl Alcohol	ND	1.3	1	05/27/2015 13:09
1,1-Biphenyl	ND	0.25	1	05/27/2015 13:09
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 13:09
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 13:09
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 13:09
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 13:09
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 13:09
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 13:09
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 13:09
4-Chloroaniline	ND	0.50	1	05/27/2015 13:09
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 13:09
2-Chloronaphthalene	ND	0.25	1	05/27/2015 13:09
2-Chlorophenol	ND	0.25	1	05/27/2015 13:09
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 13:09
Chrysene	ND	0.25	1	05/27/2015 13:09
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 13:09
Dibenzofuran	ND	0.25	1	05/27/2015 13:09
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 13:09
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 13:09
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 13:09
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 13:09
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 13:09
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 13:09
Diethyl Phthalate	ND	0.25	1	05/27/2015 13:09
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 13:09
Dimethyl Phthalate	ND	0.25	1	05/27/2015 13:09
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 13:09
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 13:09

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 13:09
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 13:09
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 13:09
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 13:09
Fluoranthene	ND	0.25	1	05/27/2015 13:09
Fluorene	ND	0.25	1	05/27/2015 13:09
Hexachlorobenzene	ND	0.25	1	05/27/2015 13:09
Hexachlorobutadiene	ND	0.25	1	05/27/2015 13:09
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 13:09
Hexachloroethane	ND	0.25	1	05/27/2015 13:09
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 13:09
Isophorone	ND	0.25	1	05/27/2015 13:09
2-Methylnaphthalene	ND	0.25	1	05/27/2015 13:09
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 13:09
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 13:09
Naphthalene	ND	0.25	1	05/27/2015 13:09
2-Nitroaniline	ND	1.3	1	05/27/2015 13:09
3-Nitroaniline	ND	1.3	1	05/27/2015 13:09
4-Nitroaniline	ND	1.3	1	05/27/2015 13:09
Nitrobenzene	ND	0.25	1	05/27/2015 13:09
2-Nitrophenol	ND	1.3	1	05/27/2015 13:09
4-Nitrophenol	ND	1.3	1	05/27/2015 13:09
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 13:09
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 13:09
Pentachlorophenol	ND	1.3	1	05/27/2015 13:09
Phenanthrene	ND	0.25	1	05/27/2015 13:09
Phenol	ND	0.25	1	05/27/2015 13:09
Pyrene	ND	0.25	1	05/27/2015 13:09
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 13:09
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 13:09
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 13:09

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	112	30-130		05/27/2015 13:09
Phenol-d5	114	30-130		05/27/2015 13:09
Nitrobenzene-d5	92	30-130		05/27/2015 13:09
2-Fluorobiphenyl	87	30-130		05/27/2015 13:09
2,4,6-Tribromophenol	63	16-130		05/27/2015 13:09
4-Terphenyl-d14	106	30-130		05/27/2015 13:09

Analyst(s): HK





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 13:39
Acenaphthylene	ND	0.25	1	05/27/2015 13:39
Acetochlor	ND	0.25	1	05/27/2015 13:39
Anthracene	ND	0.25	1	05/27/2015 13:39
Benzidine	ND	1.3	1	05/27/2015 13:39
Benzo (a) anthracene	ND	0.25	1	05/27/2015 13:39
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 13:39
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 13:39
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 13:39
Benzo (a) pyrene	ND	0.25	1	05/27/2015 13:39
Benzyl Alcohol	ND	1.3	1	05/27/2015 13:39
1,1-Biphenyl	ND	0.25	1	05/27/2015 13:39
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 13:39
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 13:39
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 13:39
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 13:39
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 13:39
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 13:39
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 13:39
4-Chloroaniline	ND	0.50	1	05/27/2015 13:39
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 13:39
2-Chloronaphthalene	ND	0.25	1	05/27/2015 13:39
2-Chlorophenol	ND	0.25	1	05/27/2015 13:39
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 13:39
Chrysene	ND	0.25	1	05/27/2015 13:39
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 13:39
Dibenzofuran	ND	0.25	1	05/27/2015 13:39
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 13:39
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 13:39
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 13:39
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 13:39
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 13:39
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 13:39
Diethyl Phthalate	ND	0.25	1	05/27/2015 13:39
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 13:39
Dimethyl Phthalate	ND	0.25	1	05/27/2015 13:39
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 13:39
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 13:39

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 13:39
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 13:39
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 13:39
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 13:39
Fluoranthene	ND	0.25	1	05/27/2015 13:39
Fluorene	ND	0.25	1	05/27/2015 13:39
Hexachlorobenzene	ND	0.25	1	05/27/2015 13:39
Hexachlorobutadiene	ND	0.25	1	05/27/2015 13:39
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 13:39
Hexachloroethane	ND	0.25	1	05/27/2015 13:39
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 13:39
Isophorone	ND	0.25	1	05/27/2015 13:39
2-Methylnaphthalene	ND	0.25	1	05/27/2015 13:39
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 13:39
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 13:39
Naphthalene	ND	0.25	1	05/27/2015 13:39
2-Nitroaniline	ND	1.3	1	05/27/2015 13:39
3-Nitroaniline	ND	1.3	1	05/27/2015 13:39
4-Nitroaniline	ND	1.3	1	05/27/2015 13:39
Nitrobenzene	ND	0.25	1	05/27/2015 13:39
2-Nitrophenol	ND	1.3	1	05/27/2015 13:39
4-Nitrophenol	ND	1.3	1	05/27/2015 13:39
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 13:39
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 13:39
Pentachlorophenol	ND	1.3	1	05/27/2015 13:39
Phenanthrene	ND	0.25	1	05/27/2015 13:39
Phenol	ND	0.25	1	05/27/2015 13:39
Pyrene	ND	0.25	1	05/27/2015 13:39
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 13:39
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 13:39
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 13:39

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	117	30-130		05/27/2015 13:39
Phenol-d5	121	30-130		05/27/2015 13:39
Nitrobenzene-d5	97	30-130		05/27/2015 13:39
2-Fluorobiphenyl	94	30-130		05/27/2015 13:39
2,4,6-Tribromophenol	62	16-130		05/27/2015 13:39
4-Terphenyl-d14	112	30-130		05/27/2015 13:39

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	2.0	1	05/27/2015 22:58
Acenaphthylene	ND	2.0	1	05/27/2015 22:58
Acetochlor	ND	2.0	1	05/27/2015 22:58
Anthracene	ND	2.0	1	05/27/2015 22:58
Benzidine	ND	10	1	05/27/2015 22:58
Benzo (a) anthracene	ND	2.0	1	05/27/2015 22:58
Benzo (b) fluoranthene	ND	2.0	1	05/27/2015 22:58
Benzo (k) fluoranthene	ND	2.0	1	05/27/2015 22:58
Benzo (g,h,i) perylene	ND	2.0	1	05/27/2015 22:58
Benzo (a) pyrene	ND	2.0	1	05/27/2015 22:58
Benzyl Alcohol	ND	10	1	05/27/2015 22:58
1,1-Biphenyl	ND	2.0	1	05/27/2015 22:58
Bis (2-chloroethoxy) Methane	ND	2.0	1	05/27/2015 22:58
Bis (2-chloroethyl) Ether	ND	2.0	1	05/27/2015 22:58
Bis (2-chloroisopropyl) Ether	ND	2.0	1	05/27/2015 22:58
Bis (2-ethylhexyl) Adipate	ND	2.0	1	05/27/2015 22:58
Bis (2-ethylhexyl) Phthalate	ND	2.0	1	05/27/2015 22:58
4-Bromophenyl Phenyl Ether	ND	2.0	1	05/27/2015 22:58
Butylbenzyl Phthalate	ND	2.0	1	05/27/2015 22:58
4-Chloroaniline	ND	4.0	1	05/27/2015 22:58
4-Chloro-3-methylphenol	ND	2.0	1	05/27/2015 22:58
2-Chloronaphthalene	ND	2.0	1	05/27/2015 22:58
2-Chlorophenol	ND	2.0	1	05/27/2015 22:58
4-Chlorophenyl Phenyl Ether	ND	2.0	1	05/27/2015 22:58
Chrysene	ND	2.0	1	05/27/2015 22:58
Dibenzo (a,h) anthracene	ND	2.0	1	05/27/2015 22:58
Dibenzofuran	ND	2.0	1	05/27/2015 22:58
Di-n-butyl Phthalate	ND	2.0	1	05/27/2015 22:58
1,2-Dichlorobenzene	ND	2.0	1	05/27/2015 22:58
1,3-Dichlorobenzene	ND	2.0	1	05/27/2015 22:58
1,4-Dichlorobenzene	ND	2.0	1	05/27/2015 22:58
3,3-Dichlorobenzidine	ND	4.0	1	05/27/2015 22:58
2,4-Dichlorophenol	ND	2.0	1	05/27/2015 22:58
Diethyl Phthalate	ND	2.0	1	05/27/2015 22:58
2,4-Dimethylphenol	ND	2.0	1	05/27/2015 22:58
Dimethyl Phthalate	ND	2.0	1	05/27/2015 22:58
4,6-Dinitro-2-methylphenol	ND	10	1	05/27/2015 22:58
2,4-Dinitrophenol	ND	50	1	05/27/2015 22:58

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	2.0	1	05/27/2015 22:58
2,6-Dinitrotoluene	ND	2.0	1	05/27/2015 22:58
Di-n-octyl Phthalate	ND	4.0	1	05/27/2015 22:58
1,2-Diphenylhydrazine	ND	2.0	1	05/27/2015 22:58
Fluoranthene	ND	2.0	1	05/27/2015 22:58
Fluorene	ND	2.0	1	05/27/2015 22:58
Hexachlorobenzene	ND	2.0	1	05/27/2015 22:58
Hexachlorobutadiene	ND	2.0	1	05/27/2015 22:58
Hexachlorocyclopentadiene	ND	10	1	05/27/2015 22:58
Hexachloroethane	ND	2.0	1	05/27/2015 22:58
Indeno (1,2,3-cd) pyrene	ND	2.0	1	05/27/2015 22:58
Isophorone	ND	2.0	1	05/27/2015 22:58
2-Methylnaphthalene	ND	2.0	1	05/27/2015 22:58
2-Methylphenol (o-Cresol)	ND	2.0	1	05/27/2015 22:58
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	05/27/2015 22:58
Naphthalene	ND	2.0	1	05/27/2015 22:58
2-Nitroaniline	ND	10	1	05/27/2015 22:58
3-Nitroaniline	ND	10	1	05/27/2015 22:58
4-Nitroaniline	ND	10	1	05/27/2015 22:58
Nitrobenzene	ND	2.0	1	05/27/2015 22:58
2-Nitrophenol	ND	10	1	05/27/2015 22:58
4-Nitrophenol	ND	10	1	05/27/2015 22:58
N-Nitrosodiphenylamine	ND	2.0	1	05/27/2015 22:58
N-Nitrosodi-n-propylamine	ND	2.0	1	05/27/2015 22:58
Pentachlorophenol	ND	10	1	05/27/2015 22:58
Phenanthrene	ND	2.0	1	05/27/2015 22:58
Phenol	ND	2.0	1	05/27/2015 22:58
Pyrene	ND	2.0	1	05/27/2015 22:58
1,2,4-Trichlorobenzene	ND	2.0	1	05/27/2015 22:58
2,4,5-Trichlorophenol	ND	2.0	1	05/27/2015 22:58
2,4,6-Trichlorophenol	ND	2.0	1	05/27/2015 22:58

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	129	30-130		05/27/2015 22:58
Phenol-d5	129	30-130		05/27/2015 22:58
Nitrobenzene-d5	103	30-130		05/27/2015 22:58
2-Fluorobiphenyl	99	30-130		05/27/2015 22:58
2,4,6-Tribromophenol	66	16-130		05/27/2015 22:58
4-Terphenyl-d14	107	30-130		05/27/2015 22:58

**Analyst(s):** HK

**Analytical Comments:** a4



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 14:08
Acenaphthylene	ND	0.25	1	05/27/2015 14:08
Acetochlor	ND	0.25	1	05/27/2015 14:08
Anthracene	ND	0.25	1	05/27/2015 14:08
Benzidine	ND	1.3	1	05/27/2015 14:08
Benzo (a) anthracene	ND	0.25	1	05/27/2015 14:08
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 14:08
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 14:08
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 14:08
Benzo (a) pyrene	ND	0.25	1	05/27/2015 14:08
Benzyl Alcohol	ND	1.3	1	05/27/2015 14:08
1,1-Biphenyl	ND	0.25	1	05/27/2015 14:08
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 14:08
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 14:08
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 14:08
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 14:08
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 14:08
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 14:08
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 14:08
4-Chloroaniline	ND	0.50	1	05/27/2015 14:08
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 14:08
2-Chloronaphthalene	ND	0.25	1	05/27/2015 14:08
2-Chlorophenol	ND	0.25	1	05/27/2015 14:08
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 14:08
Chrysene	ND	0.25	1	05/27/2015 14:08
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 14:08
Dibenzofuran	ND	0.25	1	05/27/2015 14:08
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 14:08
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 14:08
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 14:08
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 14:08
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 14:08
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 14:08
Diethyl Phthalate	ND	0.25	1	05/27/2015 14:08
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 14:08
Dimethyl Phthalate	ND	0.25	1	05/27/2015 14:08
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 14:08
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 14:08

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 14:08
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 14:08
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 14:08
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 14:08
Fluoranthene	ND	0.25	1	05/27/2015 14:08
Fluorene	ND	0.25	1	05/27/2015 14:08
Hexachlorobenzene	ND	0.25	1	05/27/2015 14:08
Hexachlorobutadiene	ND	0.25	1	05/27/2015 14:08
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 14:08
Hexachloroethane	ND	0.25	1	05/27/2015 14:08
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 14:08
Isophorone	ND	0.25	1	05/27/2015 14:08
2-Methylnaphthalene	ND	0.25	1	05/27/2015 14:08
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 14:08
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 14:08
Naphthalene	ND	0.25	1	05/27/2015 14:08
2-Nitroaniline	ND	1.3	1	05/27/2015 14:08
3-Nitroaniline	ND	1.3	1	05/27/2015 14:08
4-Nitroaniline	ND	1.3	1	05/27/2015 14:08
Nitrobenzene	ND	0.25	1	05/27/2015 14:08
2-Nitrophenol	ND	1.3	1	05/27/2015 14:08
4-Nitrophenol	ND	1.3	1	05/27/2015 14:08
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 14:08
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 14:08
Pentachlorophenol	ND	1.3	1	05/27/2015 14:08
Phenanthrene	ND	0.25	1	05/27/2015 14:08
Phenol	ND	0.25	1	05/27/2015 14:08
Pyrene	ND	0.25	1	05/27/2015 14:08
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 14:08
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 14:08
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 14:08

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	114	30-130		05/27/2015 14:08
Phenol-d5	118	30-130		05/27/2015 14:08
Nitrobenzene-d5	95	30-130		05/27/2015 14:08
2-Fluorobiphenyl	90	30-130		05/27/2015 14:08
2,4,6-Tribromophenol	60	16-130		05/27/2015 14:08
4-Terphenyl-d14	105	30-130		05/27/2015 14:08

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/27/2015 16:38
Acenaphthylene	ND	0.25	1	05/27/2015 16:38
Acetochlor	ND	0.25	1	05/27/2015 16:38
Anthracene	ND	0.25	1	05/27/2015 16:38
Benzidine	ND	1.3	1	05/27/2015 16:38
Benzo (a) anthracene	ND	0.25	1	05/27/2015 16:38
Benzo (b) fluoranthene	ND	0.25	1	05/27/2015 16:38
Benzo (k) fluoranthene	ND	0.25	1	05/27/2015 16:38
Benzo (g,h,i) perylene	ND	0.25	1	05/27/2015 16:38
Benzo (a) pyrene	ND	0.25	1	05/27/2015 16:38
Benzyl Alcohol	ND	1.3	1	05/27/2015 16:38
1,1-Biphenyl	ND	0.25	1	05/27/2015 16:38
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/27/2015 16:38
Bis (2-chloroethyl) Ether	ND	0.25	1	05/27/2015 16:38
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/27/2015 16:38
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/27/2015 16:38
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/27/2015 16:38
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/27/2015 16:38
Butylbenzyl Phthalate	ND	0.25	1	05/27/2015 16:38
4-Chloroaniline	ND	0.50	1	05/27/2015 16:38
4-Chloro-3-methylphenol	ND	0.25	1	05/27/2015 16:38
2-Chloronaphthalene	ND	0.25	1	05/27/2015 16:38
2-Chlorophenol	ND	0.25	1	05/27/2015 16:38
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/27/2015 16:38
Chrysene	ND	0.25	1	05/27/2015 16:38
Dibenzo (a,h) anthracene	ND	0.25	1	05/27/2015 16:38
Dibenzofuran	ND	0.25	1	05/27/2015 16:38
Di-n-butyl Phthalate	ND	0.25	1	05/27/2015 16:38
1,2-Dichlorobenzene	ND	0.25	1	05/27/2015 16:38
1,3-Dichlorobenzene	ND	0.25	1	05/27/2015 16:38
1,4-Dichlorobenzene	ND	0.25	1	05/27/2015 16:38
3,3-Dichlorobenzidine	ND	0.50	1	05/27/2015 16:38
2,4-Dichlorophenol	ND	0.25	1	05/27/2015 16:38
Diethyl Phthalate	ND	0.25	1	05/27/2015 16:38
2,4-Dimethylphenol	ND	0.25	1	05/27/2015 16:38
Dimethyl Phthalate	ND	0.25	1	05/27/2015 16:38
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/27/2015 16:38
2,4-Dinitrophenol	ND	6.3	1	05/27/2015 16:38

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/27/2015 16:38
2,6-Dinitrotoluene	ND	0.25	1	05/27/2015 16:38
Di-n-octyl Phthalate	ND	0.50	1	05/27/2015 16:38
1,2-Diphenylhydrazine	ND	0.25	1	05/27/2015 16:38
Fluoranthene	ND	0.25	1	05/27/2015 16:38
Fluorene	ND	0.25	1	05/27/2015 16:38
Hexachlorobenzene	ND	0.25	1	05/27/2015 16:38
Hexachlorobutadiene	ND	0.25	1	05/27/2015 16:38
Hexachlorocyclopentadiene	ND	1.3	1	05/27/2015 16:38
Hexachloroethane	ND	0.25	1	05/27/2015 16:38
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/27/2015 16:38
Isophorone	ND	0.25	1	05/27/2015 16:38
2-Methylnaphthalene	ND	0.25	1	05/27/2015 16:38
2-Methylphenol (o-Cresol)	ND	0.25	1	05/27/2015 16:38
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/27/2015 16:38
Naphthalene	ND	0.25	1	05/27/2015 16:38
2-Nitroaniline	ND	1.3	1	05/27/2015 16:38
3-Nitroaniline	ND	1.3	1	05/27/2015 16:38
4-Nitroaniline	ND	1.3	1	05/27/2015 16:38
Nitrobenzene	ND	0.25	1	05/27/2015 16:38
2-Nitrophenol	ND	1.3	1	05/27/2015 16:38
4-Nitrophenol	ND	1.3	1	05/27/2015 16:38
N-Nitrosodiphenylamine	ND	0.25	1	05/27/2015 16:38
N-Nitrosodi-n-propylamine	ND	0.25	1	05/27/2015 16:38
Pentachlorophenol	ND	1.3	1	05/27/2015 16:38
Phenanthrene	ND	0.25	1	05/27/2015 16:38
Phenol	ND	0.25	1	05/27/2015 16:38
Pyrene	ND	0.25	1	05/27/2015 16:38
1,2,4-Trichlorobenzene	ND	0.25	1	05/27/2015 16:38
2,4,5-Trichlorophenol	ND	0.25	1	05/27/2015 16:38
2,4,6-Trichlorophenol	ND	0.25	1	05/27/2015 16:38

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	88	30-130		05/27/2015 16:38
Phenol-d5	91	30-130		05/27/2015 16:38
Nitrobenzene-d5	75	30-130		05/27/2015 16:38
2-Fluorobiphenyl	68	30-130		05/27/2015 16:38
2,4,6-Tribromophenol	45	16-130		05/27/2015 16:38
4-Terphenyl-d14	79	30-130		05/27/2015 16:38

Analyst(s): HK



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	40	20	05/27/2015 20:05
Acenaphthylene	ND	40	20	05/27/2015 20:05
Acetochlor	ND	40	20	05/27/2015 20:05
Anthracene	ND	40	20	05/27/2015 20:05
Benzidine	ND	210	20	05/27/2015 20:05
Benzo (a) anthracene	ND	40	20	05/27/2015 20:05
Benzo (b) fluoranthene	ND	40	20	05/27/2015 20:05
Benzo (k) fluoranthene	ND	40	20	05/27/2015 20:05
Benzo (g,h,i) perylene	ND	40	20	05/27/2015 20:05
Benzo (a) pyrene	ND	40	20	05/27/2015 20:05
Benzyl Alcohol	ND	210	20	05/27/2015 20:05
1,1-Biphenyl	ND	40	20	05/27/2015 20:05
Bis (2-chloroethoxy) Methane	ND	40	20	05/27/2015 20:05
Bis (2-chloroethyl) Ether	ND	40	20	05/27/2015 20:05
Bis (2-chloroisopropyl) Ether	ND	40	20	05/27/2015 20:05
Bis (2-ethylhexyl) Adipate	ND	40	20	05/27/2015 20:05
Bis (2-ethylhexyl) Phthalate	ND	40	20	05/27/2015 20:05
4-Bromophenyl Phenyl Ether	ND	40	20	05/27/2015 20:05
Butylbenzyl Phthalate	ND	40	20	05/27/2015 20:05
4-Chloroaniline	ND	80	20	05/27/2015 20:05
4-Chloro-3-methylphenol	ND	40	20	05/27/2015 20:05
2-Chloronaphthalene	ND	40	20	05/27/2015 20:05
2-Chlorophenol	ND	40	20	05/27/2015 20:05
4-Chlorophenyl Phenyl Ether	ND	40	20	05/27/2015 20:05
Chrysene	ND	40	20	05/27/2015 20:05
Dibenzo (a,h) anthracene	ND	40	20	05/27/2015 20:05
Dibenzofuran	ND	40	20	05/27/2015 20:05
Di-n-butyl Phthalate	ND	40	20	05/27/2015 20:05
1,2-Dichlorobenzene	ND	40	20	05/27/2015 20:05
1,3-Dichlorobenzene	ND	40	20	05/27/2015 20:05
1,4-Dichlorobenzene	ND	40	20	05/27/2015 20:05
3,3-Dichlorobenzidine	ND	80	20	05/27/2015 20:05
2,4-Dichlorophenol	ND	40	20	05/27/2015 20:05
Diethyl Phthalate	ND	40	20	05/27/2015 20:05
2,4-Dimethylphenol	ND	40	20	05/27/2015 20:05
Dimethyl Phthalate	ND	40	20	05/27/2015 20:05
4,6-Dinitro-2-methylphenol	ND	210	20	05/27/2015 20:05
2,4-Dinitrophenol	ND	1000	20	05/27/2015 20:05

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC17	105277
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
2,4-Dinitrotoluene	ND		40	20	05/27/2015 20:05
2,6-Dinitrotoluene	ND		40	20	05/27/2015 20:05
Di-n-octyl Phthalate	ND		80	20	05/27/2015 20:05
1,2-Diphenylhydrazine	ND		40	20	05/27/2015 20:05
Fluoranthene	ND		40	20	05/27/2015 20:05
Fluorene	ND		40	20	05/27/2015 20:05
Hexachlorobenzene	ND		40	20	05/27/2015 20:05
Hexachlorobutadiene	ND		40	20	05/27/2015 20:05
Hexachlorocyclopentadiene	ND		210	20	05/27/2015 20:05
Hexachloroethane	ND		40	20	05/27/2015 20:05
Indeno (1,2,3-cd) pyrene	ND		40	20	05/27/2015 20:05
Isophorone	ND		40	20	05/27/2015 20:05
2-Methylnaphthalene	ND		40	20	05/27/2015 20:05
2-Methylphenol (o-Cresol)	ND		40	20	05/27/2015 20:05
3 & 4-Methylphenol (m,p-Cresol)	ND		40	20	05/27/2015 20:05
Naphthalene	ND		40	20	05/27/2015 20:05
2-Nitroaniline	ND		210	20	05/27/2015 20:05
3-Nitroaniline	ND		210	20	05/27/2015 20:05
4-Nitroaniline	ND		210	20	05/27/2015 20:05
Nitrobenzene	ND		40	20	05/27/2015 20:05
2-Nitrophenol	ND		210	20	05/27/2015 20:05
4-Nitrophenol	ND		210	20	05/27/2015 20:05
N-Nitrosodiphenylamine	ND		40	20	05/27/2015 20:05
N-Nitrosodi-n-propylamine	ND		40	20	05/27/2015 20:05
Pentachlorophenol	ND		210	20	05/27/2015 20:05
Phenanthrene	ND		40	20	05/27/2015 20:05
Phenol	ND		40	20	05/27/2015 20:05
Pyrene	ND		40	20	05/27/2015 20:05
1,2,4-Trichlorobenzene	ND		40	20	05/27/2015 20:05
2,4,5-Trichlorophenol	ND		40	20	05/27/2015 20:05
2,4,6-Trichlorophenol	ND		40	20	05/27/2015 20:05

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	130		30-130	05/27/2015 20:05
Phenol-d5	122		30-130	05/27/2015 20:05
Nitrobenzene-d5	98		30-130	05/27/2015 20:05
2-Fluorobiphenyl	91		30-130	05/27/2015 20:05
2,4,6-Tribromophenol	80		16-130	05/27/2015 20:05
4-Terphenyl-d14	538	S	30-130	05/27/2015 20:05

**Analyst(s):** HK

**Analytical Comments:** a3,a4,c1



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.50	2	05/27/2015 21:03
Acenaphthylene	ND	0.50	2	05/27/2015 21:03
Acetochlor	ND	0.50	2	05/27/2015 21:03
Anthracene	ND	0.50	2	05/27/2015 21:03
Benzidine	ND	2.6	2	05/27/2015 21:03
Benzo (a) anthracene	ND	0.50	2	05/27/2015 21:03
Benzo (b) fluoranthene	ND	0.50	2	05/27/2015 21:03
Benzo (k) fluoranthene	ND	0.50	2	05/27/2015 21:03
Benzo (g,h,i) perylene	ND	0.50	2	05/27/2015 21:03
Benzo (a) pyrene	ND	0.50	2	05/27/2015 21:03
Benzyl Alcohol	ND	2.6	2	05/27/2015 21:03
1,1-Biphenyl	ND	0.50	2	05/27/2015 21:03
Bis (2-chloroethoxy) Methane	ND	0.50	2	05/27/2015 21:03
Bis (2-chloroethyl) Ether	ND	0.50	2	05/27/2015 21:03
Bis (2-chloroisopropyl) Ether	ND	0.50	2	05/27/2015 21:03
Bis (2-ethylhexyl) Adipate	ND	0.50	2	05/27/2015 21:03
Bis (2-ethylhexyl) Phthalate	ND	0.50	2	05/27/2015 21:03
4-Bromophenyl Phenyl Ether	ND	0.50	2	05/27/2015 21:03
Butylbenzyl Phthalate	ND	0.50	2	05/27/2015 21:03
4-Chloroaniline	ND	1.0	2	05/27/2015 21:03
4-Chloro-3-methylphenol	ND	0.50	2	05/27/2015 21:03
2-Chloronaphthalene	ND	0.50	2	05/27/2015 21:03
2-Chlorophenol	ND	0.50	2	05/27/2015 21:03
4-Chlorophenyl Phenyl Ether	ND	0.50	2	05/27/2015 21:03
Chrysene	ND	0.50	2	05/27/2015 21:03
Dibenzo (a,h) anthracene	ND	0.50	2	05/27/2015 21:03
Dibenzofuran	ND	0.50	2	05/27/2015 21:03
Di-n-butyl Phthalate	ND	0.50	2	05/27/2015 21:03
1,2-Dichlorobenzene	ND	0.50	2	05/27/2015 21:03
1,3-Dichlorobenzene	ND	0.50	2	05/27/2015 21:03
1,4-Dichlorobenzene	ND	0.50	2	05/27/2015 21:03
3,3-Dichlorobenzidine	ND	1.0	2	05/27/2015 21:03
2,4-Dichlorophenol	ND	0.50	2	05/27/2015 21:03
Diethyl Phthalate	ND	0.50	2	05/27/2015 21:03
2,4-Dimethylphenol	ND	0.50	2	05/27/2015 21:03
Dimethyl Phthalate	ND	0.50	2	05/27/2015 21:03
4,6-Dinitro-2-methylphenol	ND	2.6	2	05/27/2015 21:03
2,4-Dinitrophenol	ND	13	2	05/27/2015 21:03

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC17	105277
<b>Analytes</b>	<b>Result</b>		<b>RL</b>	<b>DF</b>	<b>Date Analyzed</b>
2,4-Dinitrotoluene	ND		0.50	2	05/27/2015 21:03
2,6-Dinitrotoluene	ND		0.50	2	05/27/2015 21:03
Di-n-octyl Phthalate	ND		1.0	2	05/27/2015 21:03
1,2-Diphenylhydrazine	ND		0.50	2	05/27/2015 21:03
Fluoranthene	ND		0.50	2	05/27/2015 21:03
Fluorene	ND		0.50	2	05/27/2015 21:03
Hexachlorobenzene	ND		0.50	2	05/27/2015 21:03
Hexachlorobutadiene	ND		0.50	2	05/27/2015 21:03
Hexachlorocyclopentadiene	ND		2.6	2	05/27/2015 21:03
Hexachloroethane	ND		0.50	2	05/27/2015 21:03
Indeno (1,2,3-cd) pyrene	ND		0.50	2	05/27/2015 21:03
Isophorone	ND		0.50	2	05/27/2015 21:03
2-Methylnaphthalene	ND		0.50	2	05/27/2015 21:03
2-Methylphenol (o-Cresol)	ND		0.50	2	05/27/2015 21:03
3 & 4-Methylphenol (m,p-Cresol)	ND		0.50	2	05/27/2015 21:03
Naphthalene	ND		0.50	2	05/27/2015 21:03
2-Nitroaniline	ND		2.6	2	05/27/2015 21:03
3-Nitroaniline	ND		2.6	2	05/27/2015 21:03
4-Nitroaniline	ND		2.6	2	05/27/2015 21:03
Nitrobenzene	ND		0.50	2	05/27/2015 21:03
2-Nitrophenol	ND		2.6	2	05/27/2015 21:03
4-Nitrophenol	ND		2.6	2	05/27/2015 21:03
N-Nitrosodiphenylamine	ND		0.50	2	05/27/2015 21:03
N-Nitrosodi-n-propylamine	ND		0.50	2	05/27/2015 21:03
Pentachlorophenol	ND		2.6	2	05/27/2015 21:03
Phenanthrene	ND		0.50	2	05/27/2015 21:03
Phenol	ND		0.50	2	05/27/2015 21:03
Pyrene	ND		0.50	2	05/27/2015 21:03
1,2,4-Trichlorobenzene	ND		0.50	2	05/27/2015 21:03
2,4,5-Trichlorophenol	ND		0.50	2	05/27/2015 21:03
2,4,6-Trichlorophenol	ND		0.50	2	05/27/2015 21:03

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC17	105277

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	79	30-130		05/27/2015 21:03
Phenol-d5	82	30-130		05/27/2015 21:03
Nitrobenzene-d5	66	30-130		05/27/2015 21:03
2-Fluorobiphenyl	65	30-130		05/27/2015 21:03
2,4,6-Tribromophenol	43	16-130		05/27/2015 21:03
4-Terphenyl-d14	75	30-130		05/27/2015 21:03

**Analyst(s):** HK

**Analytical Comments:** a3



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	ICP-MS2	105190

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.54	0.50	1	05/22/2015 19:26
Arsenic	3.9	0.50	1	05/22/2015 19:26
Barium	200	5.0	1	05/22/2015 19:26
Beryllium	0.51	0.50	1	05/22/2015 19:26
Cadmium	ND	0.25	1	05/22/2015 19:26
Chromium	41	0.50	1	05/22/2015 19:26
Cobalt	8.4	0.50	1	05/22/2015 19:26
Copper	20	0.50	1	05/22/2015 19:26
Lead	40	0.50	1	05/22/2015 19:26
Mercury	0.25	0.050	1	05/22/2015 19:26
Molybdenum	ND	0.50	1	05/22/2015 19:26
Nickel	36	0.50	1	05/22/2015 19:26
Selenium	ND	0.50	1	05/22/2015 19:26
Silver	ND	0.50	1	05/22/2015 19:26
Thallium	ND	0.50	1	05/22/2015 19:26
Vanadium	39	0.50	1	05/22/2015 19:26
Zinc	61	5.0	1	05/22/2015 19:26
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	95	70-130		05/22/2015 19:26

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	ICP-MS2	105190

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.68	0.50	1	05/22/2015 19:32
Arsenic	17	0.50	1	05/22/2015 19:32
Barium	110	5.0	1	05/22/2015 19:32
Beryllium	0.68	0.50	1	05/22/2015 19:32
Cadmium	ND	0.25	1	05/22/2015 19:32
Chromium	130	0.50	1	05/22/2015 19:32
Cobalt	6.8	0.50	1	05/22/2015 19:32
Copper	22	0.50	1	05/22/2015 19:32
Lead	7.5	0.50	1	05/22/2015 19:32
Mercury	0.10	0.050	1	05/22/2015 19:32
Molybdenum	0.57	0.50	1	05/22/2015 19:32
Nickel	49	0.50	1	05/22/2015 19:32
Selenium	ND	0.50	1	05/22/2015 19:32
Silver	ND	0.50	1	05/22/2015 19:32
Thallium	ND	0.50	1	05/22/2015 19:32
Vanadium	68	0.50	1	05/22/2015 19:32
Zinc	44	5.0	1	05/22/2015 19:32
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	99	70-130		05/22/2015 19:32

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	ICP-MS2	105190

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 19:38
Arsenic	6.7	0.50	1	05/22/2015 19:38
Barium	150	5.0	1	05/22/2015 19:38
Beryllium	0.70	0.50	1	05/22/2015 19:38
Cadmium	ND	0.25	1	05/22/2015 19:38
Chromium	57	0.50	1	05/22/2015 19:38
Cobalt	9.2	0.50	1	05/22/2015 19:38
Copper	26	0.50	1	05/22/2015 19:38
Lead	8.6	0.50	1	05/22/2015 19:38
Mercury	0.11	0.050	1	05/22/2015 19:38
Molybdenum	ND	0.50	1	05/22/2015 19:38
Nickel	66	0.50	1	05/22/2015 19:38
Selenium	ND	0.50	1	05/22/2015 19:38
Silver	ND	0.50	1	05/22/2015 19:38
Thallium	ND	0.50	1	05/22/2015 19:38
Vanadium	55	0.50	1	05/22/2015 19:38
Zinc	58	5.0	1	05/22/2015 19:38
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	100	70-130		05/22/2015 19:38

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	ICP-MS2	105190

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 19:56
Arsenic	6.6	0.50	1	05/22/2015 19:56
Barium	200	5.0	1	05/22/2015 19:56
Beryllium	ND	0.50	1	05/22/2015 19:56
Cadmium	0.28	0.25	1	05/22/2015 19:56
Chromium	87	0.50	1	05/22/2015 19:56
Cobalt	8.0	0.50	1	05/22/2015 19:56
Copper	20	0.50	1	05/22/2015 19:56
Lead	4.2	0.50	1	05/22/2015 19:56
Mercury	0.090	0.050	1	05/22/2015 19:56
Molybdenum	0.71	0.50	1	05/22/2015 19:56
Nickel	58	0.50	1	05/22/2015 19:56
Selenium	ND	0.50	1	05/22/2015 19:56
Silver	ND	0.50	1	05/22/2015 19:56
Thallium	ND	0.50	1	05/22/2015 19:56
Vanadium	47	0.50	1	05/22/2015 19:56
Zinc	44	5.0	1	05/22/2015 19:56

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	98	70-130	05/22/2015 19:56

Analyst(s): DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	ICP-MS2	105190

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:02
Arsenic	5.4	0.50	1	05/22/2015 20:02
Barium	170	5.0	1	05/22/2015 20:02
Beryllium	0.71	0.50	1	05/22/2015 20:02
Cadmium	ND	0.25	1	05/22/2015 20:02
Chromium	50	0.50	1	05/22/2015 20:02
Cobalt	7.2	0.50	1	05/22/2015 20:02
Copper	32	0.50	1	05/22/2015 20:02
Lead	5.0	0.50	1	05/22/2015 20:02
Mercury	0.15	0.050	1	05/22/2015 20:02
Molybdenum	ND	0.50	1	05/22/2015 20:02
Nickel	57	0.50	1	05/22/2015 20:02
Selenium	ND	0.50	1	05/22/2015 20:02
Silver	ND	0.50	1	05/22/2015 20:02
Thallium	ND	0.50	1	05/22/2015 20:02
Vanadium	45	0.50	1	05/22/2015 20:02
Zinc	76	5.0	1	05/22/2015 20:02
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	100	70-130		05/22/2015 20:02

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.58	0.50	1	05/22/2015 16:23
Arsenic	9.2	0.50	1	05/22/2015 16:23
Barium	88	5.0	1	05/22/2015 16:23
Beryllium	ND	0.50	1	05/22/2015 16:23
Cadmium	ND	0.25	1	05/22/2015 16:23
Chromium	69	0.50	1	05/22/2015 16:23
Cobalt	8.3	0.50	1	05/22/2015 16:23
Copper	18	0.50	1	05/22/2015 16:23
Lead	5.5	0.50	1	05/22/2015 16:23
Mercury	0.094	0.050	1	05/22/2015 16:23
Molybdenum	0.68	0.50	1	05/22/2015 16:23
Nickel	46	0.50	1	05/22/2015 16:23
Selenium	ND	0.50	1	05/22/2015 16:23
Silver	ND	0.50	1	05/22/2015 16:23
Thallium	ND	0.50	1	05/22/2015 16:23
Vanadium	51	0.50	1	05/22/2015 16:23
Zinc	29	5.0	1	05/22/2015 16:23
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	102	70-130		05/22/2015 16:23

**Analyst(s):** DVH





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.76	0.50	1	05/22/2015 20:08
Arsenic	6.3	0.50	1	05/22/2015 20:08
Barium	120	5.0	1	05/22/2015 20:08
Beryllium	0.64	0.50	1	05/22/2015 20:08
Cadmium	0.25	0.25	1	05/22/2015 20:08
Chromium	130	0.50	1	05/22/2015 20:08
Cobalt	9.2	0.50	1	05/22/2015 20:08
Copper	24	0.50	1	05/22/2015 20:08
Lead	21	0.50	1	05/22/2015 20:08
Mercury	0.14	0.050	1	05/22/2015 20:08
Molybdenum	0.99	0.50	1	05/22/2015 20:08
Nickel	56	0.50	1	05/22/2015 20:08
Selenium	ND	0.50	1	05/22/2015 20:08
Silver	ND	0.50	1	05/22/2015 20:08
Thallium	ND	0.50	1	05/22/2015 20:08
Vanadium	61	0.50	1	05/22/2015 20:08
Zinc	110	5.0	1	05/22/2015 20:08
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	97	70-130		05/22/2015 20:08

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:14
Arsenic	1.7	0.50	1	05/22/2015 20:14
Barium	120	5.0	1	05/22/2015 20:14
Beryllium	ND	0.50	1	05/22/2015 20:14
Cadmium	ND	0.25	1	05/22/2015 20:14
Chromium	52	0.50	1	05/22/2015 20:14
Cobalt	4.7	0.50	1	05/22/2015 20:14
Copper	18	0.50	1	05/22/2015 20:14
Lead	2.7	0.50	1	05/22/2015 20:14
Mercury	0.061	0.050	1	05/22/2015 20:14
Molybdenum	ND	0.50	1	05/22/2015 20:14
Nickel	54	0.50	1	05/22/2015 20:14
Selenium	ND	0.50	1	05/22/2015 20:14
Silver	ND	0.50	1	05/22/2015 20:14
Thallium	ND	0.50	1	05/22/2015 20:14
Vanadium	33	0.50	1	05/22/2015 20:14
Zinc	53	5.0	1	05/22/2015 20:14
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	93	70-130		05/22/2015 20:14

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:21
Arsenic	3.4	0.50	1	05/22/2015 20:21
Barium	160	5.0	1	05/22/2015 20:21
Beryllium	0.53	0.50	1	05/22/2015 20:21
Cadmium	ND	0.25	1	05/22/2015 20:21
Chromium	50	0.50	1	05/22/2015 20:21
Cobalt	5.6	0.50	1	05/22/2015 20:21
Copper	21	0.50	1	05/22/2015 20:21
Lead	4.2	0.50	1	05/22/2015 20:21
Mercury	0.10	0.050	1	05/22/2015 20:21
Molybdenum	ND	0.50	1	05/22/2015 20:21
Nickel	60	0.50	1	05/22/2015 20:21
Selenium	ND	0.50	1	05/22/2015 20:21
Silver	ND	0.50	1	05/22/2015 20:21
Thallium	ND	0.50	1	05/22/2015 20:21
Vanadium	38	0.50	1	05/22/2015 20:21
Zinc	65	5.0	1	05/22/2015 20:21
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	98	70-130		05/22/2015 20:21

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:27
Arsenic	4.7	0.50	1	05/22/2015 20:27
Barium	190	5.0	1	05/22/2015 20:27
Beryllium	0.52	0.50	1	05/22/2015 20:27
Cadmium	ND	0.25	1	05/22/2015 20:27
Chromium	42	0.50	1	05/22/2015 20:27
Cobalt	8.0	0.50	1	05/22/2015 20:27
Copper	21	0.50	1	05/22/2015 20:27
Lead	5.3	0.50	1	05/22/2015 20:27
Mercury	0.086	0.050	1	05/22/2015 20:27
Molybdenum	ND	0.50	1	05/22/2015 20:27
Nickel	60	0.50	1	05/22/2015 20:27
Selenium	ND	0.50	1	05/22/2015 20:27
Silver	ND	0.50	1	05/22/2015 20:27
Thallium	ND	0.50	1	05/22/2015 20:27
Vanadium	38	0.50	1	05/22/2015 20:27
Zinc	52	5.0	1	05/22/2015 20:27
Surrogates	REC (%)	Limits		
Terbium	94	70-130		05/22/2015 20:27

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:33
Arsenic	3.7	0.50	1	05/22/2015 20:33
Barium	150	5.0	1	05/22/2015 20:33
Beryllium	0.51	0.50	1	05/22/2015 20:33
Cadmium	ND	0.25	1	05/22/2015 20:33
Chromium	49	0.50	1	05/22/2015 20:33
Cobalt	9.5	0.50	1	05/22/2015 20:33
Copper	13	0.50	1	05/22/2015 20:33
Lead	8.8	0.50	1	05/22/2015 20:33
Mercury	ND	0.050	1	05/22/2015 20:33
Molybdenum	ND	0.50	1	05/22/2015 20:33
Nickel	32	0.50	1	05/22/2015 20:33
Selenium	ND	0.50	1	05/22/2015 20:33
Silver	ND	0.50	1	05/22/2015 20:33
Thallium	ND	0.50	1	05/22/2015 20:33
Vanadium	44	0.50	1	05/22/2015 20:33
Zinc	27	5.0	1	05/22/2015 20:33
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	92	70-130		05/22/2015 20:33

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:39
Arsenic	<b>3.3</b>	0.50	1	05/22/2015 20:39
Barium	<b>94</b>	5.0	1	05/22/2015 20:39
Beryllium	ND	0.50	1	05/22/2015 20:39
Cadmium	ND	0.25	1	05/22/2015 20:39
Chromium	<b>37</b>	0.50	1	05/22/2015 20:39
Cobalt	<b>5.3</b>	0.50	1	05/22/2015 20:39
Copper	<b>12</b>	0.50	1	05/22/2015 20:39
Lead	<b>3.9</b>	0.50	1	05/22/2015 20:39
Mercury	<b>0.063</b>	0.050	1	05/22/2015 20:39
Molybdenum	ND	0.50	1	05/22/2015 20:39
Nickel	<b>47</b>	0.50	1	05/22/2015 20:39
Selenium	ND	0.50	1	05/22/2015 20:39
Silver	ND	0.50	1	05/22/2015 20:39
Thallium	ND	0.50	1	05/22/2015 20:39
Vanadium	<b>33</b>	0.50	1	05/22/2015 20:39
Zinc	<b>26</b>	5.0	1	05/22/2015 20:39

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	90	70-130	05/22/2015 20:39

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 20:45
Arsenic	8.4	0.50	1	05/22/2015 20:45
Barium	150	5.0	1	05/22/2015 20:45
Beryllium	0.84	0.50	1	05/22/2015 20:45
Cadmium	ND	0.25	1	05/22/2015 20:45
Chromium	68	0.50	1	05/22/2015 20:45
Cobalt	27	0.50	1	05/22/2015 20:45
Copper	18	0.50	1	05/22/2015 20:45
Lead	9.1	0.50	1	05/22/2015 20:45
Mercury	ND	0.050	1	05/22/2015 20:45
Molybdenum	0.66	0.50	1	05/22/2015 20:45
Nickel	60	0.50	1	05/22/2015 20:45
Selenium	ND	0.50	1	05/22/2015 20:45
Silver	ND	0.50	1	05/22/2015 20:45
Thallium	ND	0.50	1	05/22/2015 20:45
Vanadium	56	0.50	1	05/22/2015 20:45
Zinc	30	5.0	1	05/22/2015 20:45
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	90	70-130		05/22/2015 20:45

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/28/2015 16:11
Arsenic	4.1	0.50	1	05/28/2015 16:11
Barium	72	5.0	1	05/28/2015 16:11
Beryllium	ND	0.50	1	05/28/2015 16:11
Cadmium	ND	0.25	1	05/28/2015 16:11
Chromium	21	0.50	1	05/28/2015 16:11
Cobalt	4.9	0.50	1	05/28/2015 16:11
Copper	15	0.50	1	05/28/2015 16:11
Lead	19	0.50	1	05/28/2015 16:11
Mercury	0.081	0.050	1	05/28/2015 16:11
Molybdenum	ND	0.50	1	05/28/2015 16:11
Nickel	14	0.50	1	05/28/2015 16:11
Selenium	ND	0.50	1	05/28/2015 16:11
Silver	ND	0.50	1	05/28/2015 16:11
Thallium	ND	0.50	1	05/28/2015 16:11
Vanadium	40	0.50	1	05/28/2015 16:11
Zinc	58	5.0	1	05/28/2015 16:11
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	70	70-130		05/28/2015 16:11

**Analyst(s):** DVH





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:09
Arsenic	<b>4.0</b>	0.50	1	05/22/2015 21:09
Barium	<b>100</b>	5.0	1	05/22/2015 21:09
Beryllium	ND	0.50	1	05/22/2015 21:09
Cadmium	ND	0.25	1	05/22/2015 21:09
Chromium	<b>41</b>	0.50	1	05/22/2015 21:09
Cobalt	<b>11</b>	0.50	1	05/22/2015 21:09
Copper	<b>12</b>	0.50	1	05/22/2015 21:09
Lead	<b>4.2</b>	0.50	1	05/22/2015 21:09
Mercury	<b>0.056</b>	0.050	1	05/22/2015 21:09
Molybdenum	ND	0.50	1	05/22/2015 21:09
Nickel	<b>37</b>	0.50	1	05/22/2015 21:09
Selenium	ND	0.50	1	05/22/2015 21:09
Silver	ND	0.50	1	05/22/2015 21:09
Thallium	ND	0.50	1	05/22/2015 21:09
Vanadium	<b>36</b>	0.50	1	05/22/2015 21:09
Zinc	<b>18</b>	5.0	1	05/22/2015 21:09
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	93	70-130		05/22/2015 21:09

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:15
Arsenic	5.8	0.50	1	05/22/2015 21:15
Barium	320	5.0	1	05/22/2015 21:15
Beryllium	0.62	0.50	1	05/22/2015 21:15
Cadmium	0.27	0.25	1	05/22/2015 21:15
Chromium	50	0.50	1	05/22/2015 21:15
Cobalt	18	0.50	1	05/22/2015 21:15
Copper	24	0.50	1	05/22/2015 21:15
Lead	12	0.50	1	05/22/2015 21:15
Mercury	0.13	0.050	1	05/22/2015 21:15
Molybdenum	0.69	0.50	1	05/22/2015 21:15
Nickel	88	0.50	1	05/22/2015 21:15
Selenium	ND	0.50	1	05/22/2015 21:15
Silver	ND	0.50	1	05/22/2015 21:15
Thallium	ND	0.50	1	05/22/2015 21:15
Vanadium	46	0.50	1	05/22/2015 21:15
Zinc	59	5.0	1	05/22/2015 21:15
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	90	70-130		05/22/2015 21:15

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:21
Arsenic	5.8	0.50	1	05/22/2015 21:21
Barium	100	5.0	1	05/22/2015 21:21
Beryllium	0.62	0.50	1	05/22/2015 21:21
Cadmium	ND	0.25	1	05/22/2015 21:21
Chromium	79	0.50	1	05/22/2015 21:21
Cobalt	5.3	0.50	1	05/22/2015 21:21
Copper	22	0.50	1	05/22/2015 21:21
Lead	10	0.50	1	05/22/2015 21:21
Mercury	0.10	0.050	1	05/22/2015 21:21
Molybdenum	0.78	0.50	1	05/22/2015 21:21
Nickel	48	0.50	1	05/22/2015 21:21
Selenium	ND	0.50	1	05/22/2015 21:21
Silver	ND	0.50	1	05/22/2015 21:21
Thallium	ND	0.50	1	05/22/2015 21:21
Vanadium	62	0.50	1	05/22/2015 21:21
Zinc	36	5.0	1	05/22/2015 21:21
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	91	70-130		05/22/2015 21:21

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:28
Arsenic	8.6	0.50	1	05/22/2015 21:28
Barium	170	5.0	1	05/22/2015 21:28
Beryllium	0.95	0.50	1	05/22/2015 21:28
Cadmium	ND	0.25	1	05/22/2015 21:28
Chromium	47	0.50	1	05/22/2015 21:28
Cobalt	26	0.50	1	05/22/2015 21:28
Copper	21	0.50	1	05/22/2015 21:28
Lead	9.2	0.50	1	05/22/2015 21:28
Mercury	ND	0.050	1	05/22/2015 21:28
Molybdenum	0.71	0.50	1	05/22/2015 21:28
Nickel	79	0.50	1	05/22/2015 21:28
Selenium	ND	0.50	1	05/22/2015 21:28
Silver	ND	0.50	1	05/22/2015 21:28
Thallium	ND	0.50	1	05/22/2015 21:28
Vanadium	62	0.50	1	05/22/2015 21:28
Zinc	35	5.0	1	05/22/2015 21:28
Surrogates	REC (%)	Limits		
Terbium	91	70-130		05/22/2015 21:28

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:34
Arsenic	6.4	0.50	1	05/22/2015 21:34
Barium	340	5.0	1	05/22/2015 21:34
Beryllium	0.51	0.50	1	05/22/2015 21:34
Cadmium	0.41	0.25	1	05/22/2015 21:34
Chromium	58	0.50	1	05/22/2015 21:34
Cobalt	12	0.50	1	05/22/2015 21:34
Copper	22	0.50	1	05/22/2015 21:34
Lead	5.5	0.50	1	05/22/2015 21:34
Mercury	0.051	0.050	1	05/22/2015 21:34
Molybdenum	1.5	0.50	1	05/22/2015 21:34
Nickel	92	0.50	1	05/22/2015 21:34
Selenium	ND	0.50	1	05/22/2015 21:34
Silver	ND	0.50	1	05/22/2015 21:34
Thallium	ND	0.50	1	05/22/2015 21:34
Vanadium	46	0.50	1	05/22/2015 21:34
Zinc	44	5.0	1	05/22/2015 21:34
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	94	70-130		05/22/2015 21:34

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:40
Arsenic	<b>4.8</b>	0.50	1	05/22/2015 21:40
Barium	<b>170</b>	5.0	1	05/22/2015 21:40
Beryllium	ND	0.50	1	05/22/2015 21:40
Cadmium	ND	0.25	1	05/22/2015 21:40
Chromium	<b>46</b>	0.50	1	05/22/2015 21:40
Cobalt	<b>18</b>	0.50	1	05/22/2015 21:40
Copper	<b>14</b>	0.50	1	05/22/2015 21:40
Lead	<b>21</b>	0.50	1	05/22/2015 21:40
Mercury	<b>0.084</b>	0.050	1	05/22/2015 21:40
Molybdenum	ND	0.50	1	05/22/2015 21:40
Nickel	<b>36</b>	0.50	1	05/22/2015 21:40
Selenium	ND	0.50	1	05/22/2015 21:40
Silver	ND	0.50	1	05/22/2015 21:40
Thallium	ND	0.50	1	05/22/2015 21:40
Vanadium	<b>41</b>	0.50	1	05/22/2015 21:40
Zinc	<b>37</b>	5.0	1	05/22/2015 21:40
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	94	70-130		05/22/2015 21:40

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:46
Arsenic	1.6	0.50	1	05/22/2015 21:46
Barium	55	5.0	1	05/22/2015 21:46
Beryllium	ND	0.50	1	05/22/2015 21:46
Cadmium	ND	0.25	1	05/22/2015 21:46
Chromium	8.6	0.50	1	05/22/2015 21:46
Cobalt	3.1	0.50	1	05/22/2015 21:46
Copper	5.5	0.50	1	05/22/2015 21:46
Lead	2.3	0.50	1	05/22/2015 21:46
Mercury	ND	0.050	1	05/22/2015 21:46
Molybdenum	ND	0.50	1	05/22/2015 21:46
Nickel	12	0.50	1	05/22/2015 21:46
Selenium	ND	0.50	1	05/22/2015 21:46
Silver	ND	0.50	1	05/22/2015 21:46
Thallium	ND	0.50	1	05/22/2015 21:46
Vanadium	8.8	0.50	1	05/22/2015 21:46
Zinc	7.0	5.0	1	05/22/2015 21:46
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	94	70-130		05/22/2015 21:46

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:52
Arsenic	5.5	0.50	1	05/22/2015 21:52
Barium	160	5.0	1	05/22/2015 21:52
Beryllium	0.66	0.50	1	05/22/2015 21:52
Cadmium	ND	0.25	1	05/22/2015 21:52
Chromium	70	0.50	1	05/22/2015 21:52
Cobalt	13	0.50	1	05/22/2015 21:52
Copper	24	0.50	1	05/22/2015 21:52
Lead	8.9	0.50	1	05/22/2015 21:52
Mercury	0.055	0.050	1	05/22/2015 21:52
Molybdenum	0.53	0.50	1	05/22/2015 21:52
Nickel	89	0.50	1	05/22/2015 21:52
Selenium	ND	0.50	1	05/22/2015 21:52
Silver	ND	0.50	1	05/22/2015 21:52
Thallium	ND	0.50	1	05/22/2015 21:52
Vanadium	55	0.50	1	05/22/2015 21:52
Zinc	51	5.0	1	05/22/2015 21:52
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	95	70-130		05/22/2015 21:52

**Analyst(s):** DVH





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 21:58
Arsenic	<b>3.8</b>	0.50	1	05/22/2015 21:58
Barium	<b>78</b>	5.0	1	05/22/2015 21:58
Beryllium	ND	0.50	1	05/22/2015 21:58
Cadmium	ND	0.25	1	05/22/2015 21:58
Chromium	<b>17</b>	0.50	1	05/22/2015 21:58
Cobalt	<b>7.7</b>	0.50	1	05/22/2015 21:58
Copper	<b>28</b>	0.50	1	05/22/2015 21:58
Lead	<b>40</b>	0.50	1	05/22/2015 21:58
Mercury	<b>0.16</b>	0.050	1	05/22/2015 21:58
Molybdenum	ND	0.50	1	05/22/2015 21:58
Nickel	<b>21</b>	0.50	1	05/22/2015 21:58
Selenium	ND	0.50	1	05/22/2015 21:58
Silver	ND	0.50	1	05/22/2015 21:58
Thallium	ND	0.50	1	05/22/2015 21:58
Vanadium	<b>53</b>	0.50	1	05/22/2015 21:58
Zinc	<b>130</b>	5.0	1	05/22/2015 21:58
Surrogates	REC (%)	Limits		
Terbium	97	70-130		05/22/2015 21:58

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	ICP-MS2	105225

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	05/22/2015 22:04
Arsenic	8.0	0.50	1	05/22/2015 22:04
Barium	1600	5.0	1	05/22/2015 22:04
Beryllium	0.94	0.50	1	05/22/2015 22:04
Cadmium	3.2	0.25	1	05/22/2015 22:04
Chromium	54	0.50	1	05/22/2015 22:04
Cobalt	27	0.50	1	05/22/2015 22:04
Copper	46	0.50	1	05/22/2015 22:04
Lead	17	0.50	1	05/22/2015 22:04
Mercury	0.34	0.050	1	05/22/2015 22:04
Molybdenum	2.1	0.50	1	05/22/2015 22:04
Nickel	410	0.50	1	05/22/2015 22:04
Selenium	0.61	0.50	1	05/22/2015 22:04
Silver	ND	0.50	1	05/22/2015 22:04
Thallium	1.6	0.50	1	05/22/2015 22:04
Vanadium	64	0.50	1	05/22/2015 22:04
Zinc	59	5.0	1	05/22/2015 22:04
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	92	70-130		05/22/2015 22:04

**Analyst(s):** DVH



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC7	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 08:29
MTBE	---	0.050	1	05/23/2015 08:29
Benzene	---	0.0050	1	05/23/2015 08:29
Toluene	---	0.0050	1	05/23/2015 08:29
Ethylbenzene	---	0.0050	1	05/23/2015 08:29
Xylenes	---	0.0050	1	05/23/2015 08:29

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 17:59
MTBE	---	0.050	1	05/23/2015 17:59
Benzene	---	0.0050	1	05/23/2015 17:59
Toluene	---	0.0050	1	05/23/2015 17:59
Ethylbenzene	---	0.0050	1	05/23/2015 17:59
Xylenes	---	0.0050	1	05/23/2015 17:59

Surrogates	REC (%)	Limits
2-Fluorotoluene	97	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 18:59
MTBE	---	0.050	1	05/23/2015 18:59
Benzene	---	0.0050	1	05/23/2015 18:59
Toluene	---	0.0050	1	05/23/2015 18:59
Ethylbenzene	---	0.0050	1	05/23/2015 18:59
Xylenes	---	0.0050	1	05/23/2015 18:59

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 20:29
MTBE	---	0.050	1	05/23/2015 20:29
Benzene	---	0.0050	1	05/23/2015 20:29
Toluene	---	0.0050	1	05/23/2015 20:29
Ethylbenzene	---	0.0050	1	05/23/2015 20:29
Xylenes	---	0.0050	1	05/23/2015 20:29

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 21:59
MTBE	---	0.050	1	05/23/2015 21:59
Benzene	---	0.0050	1	05/23/2015 21:59
Toluene	---	0.0050	1	05/23/2015 21:59
Ethylbenzene	---	0.0050	1	05/23/2015 21:59
Xylenes	---	0.0050	1	05/23/2015 21:59

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 22:29
MTBE	---	0.050	1	05/23/2015 22:29
Benzene	---	0.0050	1	05/23/2015 22:29
Toluene	---	0.0050	1	05/23/2015 22:29
Ethylbenzene	---	0.0050	1	05/23/2015 22:29
Xylenes	---	0.0050	1	05/23/2015 22:29

Surrogates	REC (%)	Limits
2-Fluorotoluene	98	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 22:58
MTBE	---	0.050	1	05/23/2015 22:58
Benzene	---	0.0050	1	05/23/2015 22:58
Toluene	---	0.0050	1	05/23/2015 22:58
Ethylbenzene	---	0.0050	1	05/23/2015 22:58
Xylenes	---	0.0050	1	05/23/2015 22:58

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	85	70-130	05/23/2015 22:58

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 23:28
MTBE	---	0.050	1	05/23/2015 23:28
Benzene	---	0.0050	1	05/23/2015 23:28
Toluene	---	0.0050	1	05/23/2015 23:28
Ethylbenzene	---	0.0050	1	05/23/2015 23:28
Xylenes	---	0.0050	1	05/23/2015 23:28

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	70-130	05/23/2015 23:28

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 23:58
MTBE	---	0.050	1	05/23/2015 23:58
Benzene	---	0.0050	1	05/23/2015 23:58
Toluene	---	0.0050	1	05/23/2015 23:58
Ethylbenzene	---	0.0050	1	05/23/2015 23:58
Xylenes	---	0.0050	1	05/23/2015 23:58

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 00:28
MTBE	---	0.050	1	05/24/2015 00:28
Benzene	---	0.0050	1	05/24/2015 00:28
Toluene	---	0.0050	1	05/24/2015 00:28
Ethylbenzene	---	0.0050	1	05/24/2015 00:28
Xylenes	---	0.0050	1	05/24/2015 00:28

Surrogates	REC (%)	Limits
2-Fluorotoluene	89	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 00:57
MTBE	---	0.050	1	05/24/2015 00:57
Benzene	---	0.0050	1	05/24/2015 00:57
Toluene	---	0.0050	1	05/24/2015 00:57
Ethylbenzene	---	0.0050	1	05/24/2015 00:57
Xylenes	---	0.0050	1	05/24/2015 00:57

Surrogates	REC (%)	Limits
2-Fluorotoluene	96	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 01:27
MTBE	---	0.050	1	05/24/2015 01:27
Benzene	---	0.0050	1	05/24/2015 01:27
Toluene	---	0.0050	1	05/24/2015 01:27
Ethylbenzene	---	0.0050	1	05/24/2015 01:27
Xylenes	---	0.0050	1	05/24/2015 01:27

Surrogates	REC (%)	Limits
2-Fluorotoluene	96	70-130

Analyst(s): SS

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 01:57
MTBE	---	0.050	1	05/24/2015 01:57
Benzene	---	0.0050	1	05/24/2015 01:57
Toluene	---	0.0050	1	05/24/2015 01:57
Ethylbenzene	---	0.0050	1	05/24/2015 01:57
Xylenes	---	0.0050	1	05/24/2015 01:57

Surrogates	REC (%)	Limits
2-Fluorotoluene	94	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 02:26
MTBE	---	0.050	1	05/24/2015 02:26
Benzene	---	0.0050	1	05/24/2015 02:26
Toluene	---	0.0050	1	05/24/2015 02:26
Ethylbenzene	---	0.0050	1	05/24/2015 02:26
Xylenes	---	0.0050	1	05/24/2015 02:26

Surrogates	REC (%)	Limits
2-Fluorotoluene	94	70-130

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 02:56
MTBE	---	0.050	1	05/24/2015 02:56
Benzene	---	0.0050	1	05/24/2015 02:56
Toluene	---	0.0050	1	05/24/2015 02:56
Ethylbenzene	---	0.0050	1	05/24/2015 02:56
Xylenes	---	0.0050	1	05/24/2015 02:56

Surrogates	REC (%)	Limits
2-Fluorotoluene	95	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC3	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/24/2015 03:26
MTBE	---	0.050	1	05/24/2015 03:26
Benzene	---	0.0050	1	05/24/2015 03:26
Toluene	---	0.0050	1	05/24/2015 03:26
Ethylbenzene	---	0.0050	1	05/24/2015 03:26
Xylenes	---	0.0050	1	05/24/2015 03:26

Surrogates	REC (%)	Limits
2-Fluorotoluene	88	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC7	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 13:34
MTBE	---	0.050	1	05/23/2015 13:34
Benzene	---	0.0050	1	05/23/2015 13:34
Toluene	---	0.0050	1	05/23/2015 13:34
Ethylbenzene	---	0.0050	1	05/23/2015 13:34
Xylenes	---	0.0050	1	05/23/2015 13:34

Surrogates	REC (%)	Limits
2-Fluorotoluene	100	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC7	105221

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 14:35
MTBE	---	0.050	1	05/23/2015 14:35
Benzene	---	0.0050	1	05/23/2015 14:35
Toluene	---	0.0050	1	05/23/2015 14:35
Ethylbenzene	---	0.0050	1	05/23/2015 14:35
Xylenes	---	0.0050	1	05/23/2015 14:35

Surrogates	REC (%)	Limits
2-Fluorotoluene	90	70-130

Analyst(s): SS

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/22/2015 12:47
MTBE	---	0.050	1	05/22/2015 12:47
Benzene	---	0.0050	1	05/22/2015 12:47
Toluene	---	0.0050	1	05/22/2015 12:47
Ethylbenzene	---	0.0050	1	05/22/2015 12:47
Xylenes	---	0.0050	1	05/22/2015 12:47

Surrogates	REC (%)	Limits
2-Fluorotoluene	95	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 15:06
MTBE	---	0.050	1	05/23/2015 15:06
Benzene	---	0.0050	1	05/23/2015 15:06
Toluene	---	0.0050	1	05/23/2015 15:06
Ethylbenzene	---	0.0050	1	05/23/2015 15:06
Xylenes	---	0.0050	1	05/23/2015 15:06

Surrogates	REC (%)	Limits
2-Fluorotoluene	96	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 15:37
MTBE	---	0.050	1	05/23/2015 15:37
Benzene	---	0.0050	1	05/23/2015 15:37
Toluene	---	0.0050	1	05/23/2015 15:37
Ethylbenzene	---	0.0050	1	05/23/2015 15:37
Xylenes	---	0.0050	1	05/23/2015 15:37

Surrogates	REC (%)	Limits
2-Fluorotoluene	98	70-130

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 16:38
MTBE	---	0.050	1	05/23/2015 16:38
Benzene	---	0.0050	1	05/23/2015 16:38
Toluene	---	0.0050	1	05/23/2015 16:38
Ethylbenzene	---	0.0050	1	05/23/2015 16:38
Xylenes	---	0.0050	1	05/23/2015 16:38

Surrogates	REC (%)	Limits
2-Fluorotoluene	90	70-130

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 17:09
MTBE	---	0.050	1	05/23/2015 17:09
Benzene	---	0.0050	1	05/23/2015 17:09
Toluene	---	0.0050	1	05/23/2015 17:09
Ethylbenzene	---	0.0050	1	05/23/2015 17:09
Xylenes	---	0.0050	1	05/23/2015 17:09

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	89	70-130	05/23/2015 17:09

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC7	105223

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/23/2015 19:31
MTBE	---	0.050	1	05/23/2015 19:31
Benzene	---	0.0050	1	05/23/2015 19:31
Toluene	---	0.0050	1	05/23/2015 19:31
Ethylbenzene	---	0.0050	1	05/23/2015 19:31
Xylenes	---	0.0050	1	05/23/2015 19:31

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	70-130	05/23/2015 19:31

Analyst(s): SS



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.27	0.1	1	05/22/2015 13:48

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.01	0.1	1	05/22/2015 13:54

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.77	0.1	1	05/22/2015 13:57

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.82	0.1	1	05/22/2015 14:00

Analyst(s): RB

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.24	0.1	1	05/22/2015 14:03

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	9.21	0.1	1	05/22/2015 14:06

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	9.51	0.1	1	05/22/2015 14:09

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.86	0.1	1	05/22/2015 14:12

Analyst(s): RB

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.37	0.1	1	05/22/2015 14:15

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	WetChem	105279

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.11	0.1	1	05/22/2015 14:18

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.75	0.1	1	05/22/2015 14:21

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.83	0.1	1	05/22/2015 14:27

Analyst(s): RB

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.88	0.1	1	05/22/2015 14:30

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.12	0.1	1	05/22/2015 14:33

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.70	0.1	1	05/22/2015 14:36

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.58	0.1	1	05/22/2015 14:39

Analyst(s): RB

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.97	0.1	1	05/22/2015 14:42

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.93	0.1	1	05/22/2015 14:45

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.85	0.1	1	05/22/2015 14:48

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	WetChem	105280

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.83	0.1	1	05/22/2015 14:51

Analyst(s): RB

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/22/15

**WorkOrder:** 1505867  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### pH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	WetChem	105281

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.98	0.1	1	05/22/2015 14:54

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	WetChem	105281

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.11	0.1	1	05/22/2015 15:02

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	WetChem	105281

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.18	0.1	1	05/22/2015 15:05

Analyst(s): RB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	WetChem	105281

Analytes	Result	Accuracy	DF	Date Analyzed
pH	7.19	0.1	1	05/22/2015 15:08

Analyst(s): RB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-2.5	1505867-001A	Soil	05/20/2015 07:50	GC9a	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	3.1	1.0	1	05/23/2015 20:22
TPH-Motor Oil (C18-C36)	32	5.0	1	05/23/2015 20:22

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 20:22

**Analyst(s):** HD **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	GC2A	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 23:42
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 23:42

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 23:42

**Analyst(s):** HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	GC2A	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 02:12
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 02:12

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/24/2015 02:12

**Analyst(s):** HD

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-17.5	1505867-004A	Soil	05/20/2015 08:25	GC9a	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 17:58
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 17:58

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 17:58

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-22.5	1505867-005A	Soil	05/20/2015 08:35	GC2A	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 05:57
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 05:57

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/24/2015 05:57

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	GC2A	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 00:57
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 00:57

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 00:57

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	GC2A	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/24/2015 03:27
TPH-Motor Oil (C18-C36)	5.2	5.0	1	05/24/2015 03:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 03:27

Analyst(s): HD Analytical Comments: e7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	GC2A	105206

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 22:27
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 22:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 22:27

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-17.5	1505867-009A	Soil	05/20/2015 09:45	GC9a	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/22/2015 20:31
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/22/2015 20:31

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/22/2015 20:31

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-22.5	1505867-010A	Soil	05/20/2015 09:50	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.1	1.0	1	05/24/2015 04:42
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/24/2015 04:42

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/24/2015 04:42

Analyst(s): HD Analytical Comments: e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-2.5	1505867-011A	Soil	05/20/2015 10:15	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	24	5.0	5	05/28/2015 10:20
TPH-Motor Oil (C18-C36)	170	25	5	05/28/2015 10:20

Surrogates	REC (%)	Limits	Date Analyzed
C9	121	70-130	05/28/2015 10:20

Analyst(s): HD Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-7.5	1505867-012A	Soil	05/20/2015 10:30	GC9a	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 12:00
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 12:00

Surrogates	REC (%)	Limits	Date Analyzed
C9	113	70-130	05/23/2015 12:00

Analyst(s): HD

(Cont.)





## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-39-12.5	1505867-013A	Soil	05/20/2015 10:35	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 11:09
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 11:09

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 11:09

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-2.5	1505867-014A	Soil	05/20/2015 10:54	GC31B	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	65	50	5	05/26/2015 22:59
TPH-Motor Oil (C18-C36)	610	250	5	05/26/2015 22:59

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	05/26/2015 22:59

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-7.5	1505867-015A	Soil	05/20/2015 11:10	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 16:11
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 16:11

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 16:11

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-38-12.5	1505867-016A	Soil	05/20/2015 11:15	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 13:40
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 13:40

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 13:40

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	GC11B	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	3.1	1.0	1	05/25/2015 15:24
TPH-Motor Oil (C18-C36)	84	5.0	1	05/25/2015 15:24

Surrogates	REC (%)	Limits	Date Analyzed
C9	108	70-130	05/25/2015 15:24

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-7.5	1505867-018A	Soil	05/20/2015 13:00	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 09:54
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 09:54

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 09:54

Analyst(s): HD

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-12.5	1505867-019A	Soil	05/20/2015 13:05	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 14:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 14:56

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 14:56

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-2.5	1505867-020A	Soil	05/20/2015 13:20	GC31A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	15	10	1	05/29/2015 15:11
TPH-Motor Oil (C18-C36)	93	50	1	05/29/2015 15:11

Surrogates	REC (%)	Limits	Date Analyzed
C9	102	70-130	05/29/2015 15:11

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-7.5	1505867-021A	Soil	05/20/2015 13:30	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 12:25
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 12:25

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	05/23/2015 12:25

Analyst(s): HD

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 5/21/15

**WorkOrder:** 1505867  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-42-12.5	1505867-022A	Soil	05/20/2015 13:35	GC2A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/23/2015 18:42
TPH-Motor Oil (C18-C36)	ND	5.0	1	05/23/2015 18:42

Surrogates	REC (%)	Limits	Date Analyzed
C9	111	70-130	05/23/2015 18:42

Analyst(s): HD

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-2.5	1505867-023A	Soil	05/20/2015 13:46	GC6B	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	40	20	20	05/25/2015 17:45
TPH-Motor Oil (C18-C36)	410	100	20	05/25/2015 17:45

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	05/25/2015 17:45

Analyst(s): HD

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-43-7.5	1505867-024A	Soil	05/20/2015 13:50	GC11A	105222

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	5.2	2.0	2	05/26/2015 21:27
TPH-Motor Oil (C18-C36)	31	10	2	05/26/2015 21:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	96	70-130	05/26/2015 21:27

Analyst(s): HD

Analytical Comments: e7,e2



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC22  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105157  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105157  
 1505805-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0439	0.0010	0.050	-	88	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0490	0.0010	0.050	-	98	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0540	0.0010	0.050	-	108	70-130
Dieldrin	ND	0.0562	0.0010	0.050	-	112	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0488	0.0010	0.050	-	98	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0438	0.0010	0.050	-	88	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-

**Surrogate Recovery**

Decachlorobiphenyl	0.0505	0.0546		0.050	101	109	70-130
--------------------	--------	--------	--	-------	-----	-----	--------

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/21/15  
**Instrument:** GC22  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105157  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105157  
 1505805-001AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0447	0.0457	0.050	ND	89	91	70-130	2.23	30
g-BHC	0.0505	0.0506	0.050	ND	101	101	70-130	0	30
p,p-DDT	0.0560	0.0562	0.050	ND	112	112	70-130	0	30
Dieldrin	0.0586	0.0586	0.050	0.001012	115	115	70-130	0	30
Endrin	0.0519	0.0519	0.050	ND	104	104	70-130	0	30
Heptachlor	0.0484	0.0481	0.050	ND	97	96	70-130	0.698	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0538	0.0596	0.050		107	119	70-130	10.4	30



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105224  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105224  
 1505867-005AMS/MSD

## QC Summary Report for SW8081A/8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0534	0.0010	0.050	-	107	70-130
a-BHC	ND	-	0.0010	-	-	-	-
b-BHC	ND	-	0.0010	-	-	-	-
d-BHC	ND	-	0.0010	-	-	-	-
g-BHC	ND	0.0541	0.0010	0.050	-	108	70-130
Chlordane (Technical)	ND	-	0.025	-	-	-	-
a-Chlordane	ND	-	0.0010	-	-	-	-
g-Chlordane	ND	-	0.0010	-	-	-	-
p,p-DDD	ND	-	0.0010	-	-	-	-
p,p-DDE	ND	-	0.0010	-	-	-	-
p,p-DDT	ND	0.0380	0.0010	0.050	-	76	70-130
Dieldrin	ND	0.0624	0.0010	0.050	-	125	70-130
Endosulfan I	ND	-	0.0010	-	-	-	-
Endosulfan II	ND	-	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.0010	-	-	-	-
Endrin	ND	0.0572	0.0010	0.050	-	114	70-130
Endrin aldehyde	ND	-	0.0010	-	-	-	-
Endrin ketone	ND	-	0.0010	-	-	-	-
Heptachlor	ND	0.0486	0.0010	0.050	-	97	70-130
Heptachlor epoxide	ND	-	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.020	-	-	-	-
Methoxychlor	ND	-	0.0010	-	-	-	-
Toxaphene	ND	-	0.050	-	-	-	-
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	-	0.050	-	-	-	-
PCBs, total	ND	-	0.050	-	-	-	-

**Surrogate Recovery**

Decachlorobiphenyl	0.0396	0.0398		0.050	79	80	70-130
--------------------	--------	--------	--	-------	----	----	--------

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC23  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105224  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8081A/8082  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105224  
 1505867-005AMS/MSD

### QC Summary Report for SW8081A/8082

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	0.0541	0.0546	0.050	ND	108	109	70-130	0.953	30
g-BHC	0.0530	0.0549	0.050	ND	106	110	70-130	3.67	30
p,p-DDT	0.0410	0.0396	0.050	ND	82	79	70-130	3.49	30
Dieldrin	0.0648	0.0633	0.050	ND	130	127	70-130	2.38	30
Endrin	0.0598	0.0581	0.050	ND	120	116	70-130	2.83	30
Heptachlor	0.0492	0.0503	0.050	ND	98	101	70-130	2.14	30
<b>Surrogate Recovery</b>									
Decachlorobiphenyl	0.0392	0.0397	0.050		78	79	70-130	1.31	30





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105172  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105172

### QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0772	0.010	0.10	-	77	70-130
Benzene	ND	0.0858	0.010	0.10	-	86	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.310	0.10	0.40	-	77	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0947	0.010	0.10	-	95	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0832	0.0080	0.10	-	83	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0816	0.010	0.10	-	82	70-130
1,1-Dichloroethene	ND	0.0747	0.010	0.10	-	75	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/20/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105172  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105172

### QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0821	0.010	0.10	-	82	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0808	0.010	0.10	-	81	70-130
Freon 113	ND	-	0.010	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0770	0.010	0.10	-	77	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.100	0.010	0.10	-	100	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0957	0.010	0.10	-	96	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

#### Surrogate Recovery

Dibromofluoromethane	0.204	0.206		0.25	82	83	70-130
Toluene-d8	0.232	0.231		0.25	93	92	70-130
4-BFB	0.0228	0.0221		0.025	91	89	70-130
Benzene-d6	0.170	0.165		0.20	85	83	60-140
Ethylbenzene-d10	0.202	0.215		0.20	101	108	60-140
1,2-DCB-d4	0.149	0.166		0.20	75	83	60-140

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/23/15 - 5/27/15  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105226  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105226

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0775	0.010	0.10	-	78	70-130
Benzene	ND	0.0917	0.010	0.10	-	92	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.342	0.10	0.40	-	85	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0857	0.010	0.10	-	86	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0786	0.0080	0.10	-	79	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0941	0.010	0.10	-	94	70-130
1,1-Dichloroethene	ND	0.0881	0.010	0.10	-	88	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/23/15 - 5/27/15  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105226  
**Extraction Method:** SW5035  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105226

## QC Summary Report for SW8260B (Encore)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0893	0.010	0.10	-	89	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0885	0.010	0.10	-	89	70-130
Freon 113	ND	-	0.010	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0882	0.010	0.10	-	88	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.0940	0.010	0.10	-	94	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0893	0.010	0.10	-	89	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.229	0.266		0.25	92	106	70-130
Toluene-d8	0.232	0.242		0.25	93	97	70-130
4-BFB	0.0250	0.0229		0.025	100	92	70-130
Benzene-d6	0.172	0.169		0.20	86	85	60-140
Ethylbenzene-d10	0.214	0.202		0.20	107	101	60-140
1,2-DCB-d4	0.180	0.161		0.20	90	80	60-140



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/22/15  
**Date Analyzed:** 5/26/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105275  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105275  
 1505867-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.171	0.010	0.20	-	85	30-130
Chrysene	ND	0.151	0.010	0.20	-	75	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.170	0.010	0.20	-	85	30-130
2-Methylnaphthalene	ND	0.171	0.010	0.20	-	85	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.160	0.010	0.20	-	80	30-130
Pyrene	ND	0.139	0.010	0.20	-	70	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.290	0.352		0.50	58	70	30-130
2-Fluorobiphenyl	0.258	0.321		0.50	52	64	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		ND<0.05	NR	NR	-	NR	
Chrysene	NR	NR		ND<0.05	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.05	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.05	NR	NR	-	NR	
Phenanthrene	NR	NR		ND<0.05	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.05	NR	NR	-	NR	

### Surrogate Recovery

1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/22/15  
**Date Analyzed:** 5/26/15  
**Instrument:** GC35  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105276  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-105276  
 1505867-024AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.152	0.010	0.20	-	76	30-130
Chrysene	ND	0.128	0.010	0.20	-	64	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.142	0.010	0.20	-	71	30-130
2-Methylnaphthalene	ND	0.144	0.010	0.20	-	72	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.133	0.010	0.20	-	67	30-130
Pyrene	ND	0.120	0.010	0.20	-	60	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.350	0.341		0.50	70	68	30-130
2-Fluorobiphenyl	0.325	0.317		0.50	65	63	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		ND<0.02	NR	NR	-	NR	
Chrysene	NR	NR		ND<0.02	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.02	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.02	NR	NR	-	NR	
Phenanthrene	NR	NR		ND<0.02	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.02	NR	NR	-	NR	

### Surrogate Recovery

1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105221  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105221  
 1505863-001AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.585	0.40	0.60	-	97	70-130
MTBE	ND	0.0922	0.050	0.10	-	87	70-130
Benzene	ND	0.100	0.0050	0.10	-	100	70-130
Toluene	ND	0.0971	0.0050	0.10	-	97	70-130
Ethylbenzene	ND	0.104	0.0050	0.10	-	104	70-130
Xylenes	ND	0.322	0.0050	0.30	-	107	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.106	0.107		0.10	106	107	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.475	0.510	0.60	ND	79	85	70-130	7.05	20
MTBE	0.0858	0.0780	0.10	ND	86	78	70-130	9.53	20
Benzene	0.0906	0.0888	0.10	ND	91	89	70-130	2.03	20
Toluene	0.0901	0.0886	0.10	ND	89	87	70-130	1.77	20
Ethylbenzene	0.0967	0.0942	0.10	ND	97	94	70-130	2.62	20
Xylenes	0.307	0.299	0.30	ND	102	100	70-130	2.59	20

**Surrogate Recovery**

2-Fluorotoluene	0.0988	0.0966	0.10		99	97	70-130	2.24	20
-----------------	--------	--------	------	--	----	----	--------	------	----

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC19, GC7  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105223  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105223  
 1505867-019AMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.569	0.40	0.60	-	95	70-130
MTBE	ND	0.0947	0.050	0.10	-	95	70-130
Benzene	ND	0.0975	0.0050	0.10	-	97	70-130
Toluene	ND	0.0955	0.0050	0.10	-	96	70-130
Ethylbenzene	ND	0.102	0.0050	0.10	-	102	70-130
Xylenes	ND	0.317	0.0050	0.30	-	105	70-130

**Surrogate Recovery**

2-Fluorotoluene	0.107	0.105		0.10	107	105	70-130
-----------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.521	0.520	0.60	ND	87	87	70-130	0	20
MTBE	0.0792	0.0841	0.10	ND	79	84	70-130	5.90	20
Benzene	0.0780	0.0862	0.10	ND	78	86	70-130	10.0	20
Toluene	0.0776	0.0856	0.10	ND	78	86	70-130	9.88	20
Ethylbenzene	0.0841	0.0925	0.10	ND	84	93	70-130	9.51	20
Xylenes	0.266	0.286	0.30	ND	89	95	70-130	7.06	20

**Surrogate Recovery**

2-Fluorotoluene	0.0856	0.0948	0.10		86	95	70-130	10.2	20
-----------------	--------	--------	------	--	----	----	--------	------	----

(Cont.)





# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105238  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105238  
 1505864-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.85	0.25	5	-	97	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	4.65	0.25	5	-	93	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.37	0.25	5	-	107	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.71	0.25	5	-	94	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	5.25	0.25	5	-	105	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105238  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105238  
 1505864-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	4.15	1.3	5	-	83	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.47	0.25	5	-	89	30-130
Pentachlorophenol	ND	4.16	1.3	5	-	83	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.70	0.25	5	-	94	30-130
Pyrene	ND	5.47	0.25	5	-	109	30-130
1,2,4-Trichlorobenzene	ND	5.00	0.25	5	-	100	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

#### Surrogate Recovery

2-Fluorophenol	4.69	4.62		5	94	92	30-130
Phenol-d5	4.89	4.82		5	98	96	30-130
Nitrobenzene-d5	4.40	4.51		5	88	90	30-130
2-Fluorobiphenyl	4.31	4.37		5	86	87	30-130
2,4,6-Tribromophenol	3.02	3.60		5	60	72	16-130
4-Terphenyl-d14	4.80	4.67		5	96	93	30-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105238  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105238  
 1505864-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<40	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<40	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<40	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<40	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<40	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<210	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<40	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<210	NR	NR	-	NR	
Phenol	NR	NR		ND<40	NR	NR	-	NR	
Pyrene	NR	NR		ND<40	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<40	NR	NR	-	NR	

**Surrogate Recovery**

2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/22/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105277  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105277  
 1505879-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	5.34	0.25	5	-	107	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	5.67	0.25	5	-	113	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.36	0.25	5	-	107	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.70	0.25	5	-	94	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	4.97	0.25	5	-	99	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/22/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105277  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105277  
 1505879-001AMS/MSD

## QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	4.47	1.3	5	-	89	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.99	0.25	5	-	100	30-130
Pentachlorophenol	ND	4.31	1.3	5	-	86	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	5.16	0.25	5	-	103	30-130
Pyrene	ND	5.38	0.25	5	-	108	30-130
1,2,4-Trichlorobenzene	ND	5.00	0.25	5	-	100	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

### Surrogate Recovery

2-Fluorophenol	5.81	5.11		5	116	102	30-130
Phenol-d5	6.08	5.38		5	122	108	30-130
Nitrobenzene-d5	4.96	4.75		5	99	95	30-130
2-Fluorobiphenyl	4.50	4.47		5	90	89	30-130
2,4,6-Tribromophenol	3.71	3.76		5	74	75	16-130
4-Terphenyl-d14	4.98	4.90		5	100	98	30-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/22/15  
**Date Analyzed:** 5/22/15  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105277  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105277  
 1505879-001AMS/MSD

### QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<100	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<100	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<100	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<100	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<100	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<520	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<100	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<520	NR	NR	-	NR	
Phenol	NR	NR		ND<100	NR	NR	-	NR	
Pyrene	NR	NR		ND<100	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<100	NR	NR	-	NR	

**Surrogate Recovery**

2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105190  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105190  
 1505828-001AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	52.1	0.50	50	-	104	75-125
Arsenic	ND	49.8	0.50	50	-	100	75-125
Barium	ND	489	5.0	500	-	98	75-125
Beryllium	ND	54.0	0.50	50	-	108	75-125
Cadmium	ND	51.4	0.25	50	-	103	75-125
Chromium	ND	49.8	0.50	50	-	100	75-125
Cobalt	ND	50.6	0.50	50	-	101	75-125
Copper	ND	50.3	0.50	50	-	100	75-125
Lead	ND	51.4	0.50	50	-	103	75-125
Mercury	ND	1.16	0.050	1.25	-	91	75-125
Molybdenum	ND	50.7	0.50	50	-	101	75-125
Nickel	ND	50.3	0.50	50	-	101	75-125
Selenium	ND	51.9	0.50	50	-	104	75-125
Silver	ND	52.9	0.50	50	-	106	75-125
Thallium	ND	49.6	0.50	50	-	99	75-125
Vanadium	ND	50.3	0.50	50	-	101	75-125
Zinc	ND	511	5.0	500	-	102	75-125
<b>Surrogate Recovery</b>							
Terbium	520	525		500	104	105	70-130

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105190  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105190  
 1505828-001AMS/MSD

### QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	58.9	107	50	1.777	114	210,F1	75-125	57.9,F1	20
Arsenic	54.8	54.1	50	5.869	98	96	75-125	1.38	20
Barium	699	722	500	178.7	104	109	75-125	3.27	20
Beryllium	53.7	51.8	50	ND	107	103	75-125	3.54	20
Cadmium	53.0	51.3	50	0.7678	104	101	75-125	3.18	20
Chromium	NR	NR	50	153.4	NR	NR	75-125	NR	20
Cobalt	59.6	55.6	50	9.989	99	91	75-125	6.98	20
Copper	NR	NR	50	292.1	NR	NR	75-125	NR	20
Lead	NR	NR	50	159.5	NR	NR	75-125	NR	20
Mercury	NR	NR	1.25	3.880	NR	NR	75-125	NR	20
Molybdenum	54.9	59.2	50	6.156	97	106	75-125	7.64	20
Nickel	NR	NR	50	124.6	NR	NR	75-125	NR	20
Selenium	54.3	47.7	50	0.8419	107	94	75-125	12.8	20
Silver	81.1	69.4	50	9.275	144,F1	120	75-125	15.6	20
Thallium	47.0	47.3	50	ND	94	94	75-125	0	20
Vanadium	86.3	83.3	50	32.03	108	102	75-125	3.56	20
Zinc	NR	NR	500	692.3	NR	NR	75-125	NR	20
<b>Surrogate Recovery</b>									
Terbium	545	526	500		109	105	70-130	3.51	20

(Cont.)





## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105225  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105225  
 1505867-006AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	48.8	0.50	50	-	98	75-125
Arsenic	ND	50.5	0.50	50	-	101	75-125
Barium	ND	483	5.0	500	-	97	75-125
Beryllium	ND	52.7	0.50	50	-	105	75-125
Cadmium	ND	50.4	0.25	50	-	101	75-125
Chromium	ND	51.2	0.50	50	-	102	75-125
Cobalt	ND	50.5	0.50	50	-	101	75-125
Copper	ND	52.7	0.50	50	-	105	75-125
Lead	ND	52.2	0.50	50	-	104	75-125
Mercury	ND	1.18	0.050	1.25	-	95	75-125
Molybdenum	ND	48.3	0.50	50	-	97	75-125
Nickel	ND	51.6	0.50	50	-	103	75-125
Selenium	ND	51.0	0.50	50	-	102	75-125
Silver	ND	52.9	0.50	50	-	106	75-125
Thallium	ND	50.4	0.50	50	-	101	75-125
Vanadium	ND	50.9	0.50	50	-	102	75-125
Zinc	ND	516	5.0	500	-	103	75-125
<b>Surrogate Recovery</b>							
Terbium	495	503		500	99	101	70-130



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/22/15  
**Instrument:** ICP-MS2  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105225  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105225  
 1505867-006AMS/MSD

### QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	52.6	52.1	50	0.5774	104	103	75-125	0.955	20
Arsenic	57.7	58.9	50	9.248	97	99	75-125	2.01	20
Barium	615	619	500	88.13	105	106	75-125	0.632	20
Beryllium	53.2	53.0	50	ND	105	105	75-125	0	20
Cadmium	50.4	49.6	50	ND	101	99	75-125	1.66	20
Chromium	NR	NR	50	68.98	NR	NR	75-125	NR	20
Cobalt	56.5	55.6	50	8.343	96	95	75-125	1.48	20
Copper	71.2	71.3	50	17.87	107	107	75-125	0	20
Lead	56.8	57.2	50	5.536	102	103	75-125	0.790	20
Mercury	1.32	1.28	1.25	0.09380	98	94	75-125	3.32	20
Molybdenum	51.3	51.4	50	0.6798	101	102	75-125	0.234	20
Nickel	92.3	90.4	50	46.00	93	89	75-125	2.16	20
Selenium	54.7	49.4	50	ND	109	98	75-125	10.2	20
Silver	52.3	51.6	50	ND	105	103	75-125	1.35	20
Thallium	49.8	49.5	50	ND	99	99	75-125	0	20
Vanadium	NR	NR	50	51.14	NR	NR	75-125	NR	20
Zinc	545	538	500	28.78	103	102	75-125	1.33	20
<b>Surrogate Recovery</b>									
Terbium	519	505	500		104	101	70-130	2.79	20



## Quality Control Report

<b>Client:</b>	Treadwell & Rollo	<b>WorkOrder:</b>	1505867
<b>Date Prepared:</b>	5/22/15	<b>BatchID:</b>	105279
<b>Date Analyzed:</b>	5/22/15	<b>Extraction Method:</b>	SW9045D
<b>Instrument:</b>	WetChem	<b>Analytical Method:</b>	SW9045D
<b>Matrix:</b>	Soil	<b>Unit:</b>	±, pH units @ 25°C
<b>Project:</b>	#731637001; 3093 Broadway		

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505867-001A	7.27	1	7.29	1	0.02	0.1

<b>Client:</b>	Treadwell & Rollo	<b>WorkOrder:</b>	1505867
<b>Date Prepared:</b>	5/22/15	<b>BatchID:</b>	105280
<b>Date Analyzed:</b>	5/22/15	<b>Extraction Method:</b>	SW9045D
<b>Instrument:</b>	WetChem	<b>Analytical Method:</b>	SW9045D
<b>Matrix:</b>	Soil	<b>Unit:</b>	±, pH units @ 25°C
<b>Project:</b>	#731637001; 3093 Broadway		

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505867-011A	7.75	1	7.76	1	0.01	0.1

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/22/15  
**Date Analyzed:** 5/22/15  
**Instrument:** WetChem  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105281  
**Extraction Method:** SW9045D  
**Analytical Method:** SW9045D  
**Unit:** ±, pH units @ 25°C

### QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1505867-021A	7.98	1	7.98	1	0	0.1



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/21/15 - 5/22/15  
**Instrument:** GC11A  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105206  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105206  
 1505858-001AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	38.6	1.0	40	-	96	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	24.4	24.4		25	97	97	70-130
----	------	------	--	----	----	----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	68.2	69.3	40	10.73	144,F1	146,F1	70-130	1.59	30

**Surrogate Recovery**

C9	26.8	27.1	25		107	108	70-130	1.18	30
----	------	------	----	--	-----	-----	--------	------	----

(Cont.)



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 5/21/15  
**Date Analyzed:** 5/24/15 - 5/28/15  
**Instrument:** GC2A, GC2B  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105222  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-105222  
 1505867-009AMS/MSD

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

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	44.0	1.0	40	-	110	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

**Surrogate Recovery**

C9	27.1	27.2		25	108	109	70-130
----	------	------	--	----	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	46.0	46.7	40	ND	115	117	70-130	1.61	30
<b>Surrogate Recovery</b>									
C9	27.7	27.9	25		111	112	70-130	0.875	30

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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505867

ClientCode: TWRK

WaterTrax    WriteOn    EDF    Excel    EQUIS    Email    HardCopy    ThirdParty    J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500   FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concur.solutio

**Requested TAT:**

**5 days**

**Date Received: 05/21/2015**

**Date Printed: 05/21/2015**

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	
1505867-001	B-36-2.5	Soil	5/20/2015 7:50	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-002	B-36-7.5	Soil	5/20/2015 8:05	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-003	B-36-12.5	Soil	5/20/2015 8:10	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-004	B-36-17.5	Soil	5/20/2015 8:25	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-005	B-36-22.5	Soil	5/20/2015 8:35	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-006	B-37-2.5	Soil	5/20/2015 9:25	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-007	B-37-7.5	Soil	5/20/2015 9:30	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-008	B-37-12.5	Soil	5/20/2015 9:35	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-009	B-37-17.5	Soil	5/20/2015 9:45	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-010	B-37-22.5	Soil	5/20/2015 9:50	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-011	B-39-2.5	Soil	5/20/2015 10:15	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-012	B-39-7.5	Soil	5/20/2015 10:30	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-013	B-39-12.5	Soil	5/20/2015 10:35	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-014	B-38-2.5	Soil	5/20/2015 10:54	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-015	B-38-7.5	Soil	5/20/2015 11:10	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

The following SamplIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 021A, 022A, 023A, 024A contain testgroup.

**Prepared by: Jena Alfaro**

**Comments:**

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



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505867

ClientCode: TWRK

WaterTrax     WriteOn     EDF     Excel     EQUIS     Email     HardCopy     ThirdParty     J-flag

**Report to:**

Christina Rain  
Treadwell & Rollo  
501 14th Street, 3rd Floor  
Oakland, CA 94612  
(510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
cc/3rd Party: ekimbrel@langan.com;  
PO:  
ProjectNo: #731637001; 3093 Broadway

**Bill to:**

Accounts Payable  
Treadwell & Rollo  
555 Montgomery St., Suite 1300  
San Francisco, CA 94111  
Langan\_InvoiceCapture@concursoft.com

**Requested TAT: 5 days**

**Date Received: 05/21/2015**

**Date Printed: 05/21/2015**

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	
1505867-016	B-38-12.5	Soil	5/20/2015 11:15	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-017	B-41-2.5	Soil	5/20/2015 11:50	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-018	B-41-7.5	Soil	5/20/2015 13:00	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-019	B-41-12.5	Soil	5/20/2015 13:05	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-020	B-42-2.5	Soil	5/20/2015 13:20	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-021	B-42-7.5	Soil	5/20/2015 13:30	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-022	B-42-12.5	Soil	5/20/2015 13:35	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-023	B-43-2.5	Soil	5/20/2015 13:46	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				
1505867-024	B-43-7.5	Soil	5/20/2015 13:50	<input type="checkbox"/>	A	B	A	A	A	A	A	A	A				

**Test Legend:**

1	8081PCB_S	2	8260B_E	3	8270_PNA_S	4	8270_S	5	CAM17MS_S
6	G-MBTEX_S	7	PH_S	8	TPH(DMO)_S	9		10	
11		12							

The following SamplIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 021A, 022A, 023A, 024A contain testgroup.

**Prepared by: Jena Alfaro**

**Comments:**

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





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-001A	B-36-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 7:50	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-001B	B-36-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 7:50	5 days		<input type="checkbox"/>	
1505867-002A	B-36-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 8:05	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-002B	B-36-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 8:05	5 days		<input type="checkbox"/>	
1505867-003A	B-36-12.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 8:10	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-003A	B-36-12.5	Soil	SW6020 (CAM 17)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 8:10	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-003B	B-36-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 8:10	5 days		<input type="checkbox"/>	
1505867-004A	B-36-17.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 8:25	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-004B	B-36-17.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 8:25	5 days		<input type="checkbox"/>	
1505867-005A	B-36-22.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 8:35	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1505867-005A	B-36-22.5	Soil	SW8270C (PAHs/PNAs)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 8:35	5 days		<input type="checkbox"/>			
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505867-005B	B-36-22.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 8:35	5 days		<input type="checkbox"/>			
1505867-006A	B-37-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 9:25	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
SW8081A/8082 (OC Pesticides+PCBs)	<input type="checkbox"/>	5 days	<input type="checkbox"/>										
1505867-006B	B-37-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 9:25	5 days		<input type="checkbox"/>			
1505867-007A	B-37-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 9:30	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
SW8081A/8082 (OC Pesticides+PCBs)	<input type="checkbox"/>	5 days	<input type="checkbox"/>										

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-007B	B-37-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 9:30	5 days		<input type="checkbox"/>	
1505867-008A	B-37-12.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 9:35	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505867-008B	B-37-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 9:35	5 days		<input type="checkbox"/>	
1505867-009A	B-37-17.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 9:45	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505867-009B	B-37-17.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 9:45	5 days		<input type="checkbox"/>	
1505867-010A	B-37-22.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 9:50	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1505867-010A	B-37-22.5	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 9:50	5 days		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505867-010B	B-37-22.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 9:50	5 days		<input type="checkbox"/>			
1505867-011A	B-39-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 10:15	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
SW8081A/8082 (OC Pesticides+PCBs)	<input type="checkbox"/>	5 days	<input type="checkbox"/>										
1505867-011B	B-39-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 10:15	5 days		<input type="checkbox"/>			
1505867-012A	B-39-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 10:30	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1505867-012A	B-39-7.5	Soil	SW8270C (SVOCs)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 10:30	5 days		<input type="checkbox"/>			
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505867-012B	B-39-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 10:30	5 days		<input type="checkbox"/>			
1505867-013A	B-39-12.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 10:35	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
SW8081A/8082 (OC Pesticides+PCBs)	<input type="checkbox"/>	5 days	<input type="checkbox"/>										
1505867-013B	B-39-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 10:35	5 days		<input type="checkbox"/>			
1505867-014A	B-38-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 10:54	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>

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

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-014A	B-38-2.5	Soil	SW8081A/8082 (OC Pesticides+PCBs)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 10:54	5 days		<input type="checkbox"/>	
1505867-014B	B-38-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 10:54	5 days		<input type="checkbox"/>	
1505867-015A	B-38-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 11:10	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-015B	B-38-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 11:10	5 days		<input type="checkbox"/>	
1505867-016A	B-38-12.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 11:15	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-016B	B-38-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 11:15	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-017A	B-41-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 11:50	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-017B	B-41-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 11:50	5 days		<input type="checkbox"/>	
1505867-018A	B-41-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:00	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (SVOCs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1505867-018B	B-41-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:00	5 days		<input type="checkbox"/>	
1505867-019A	B-41-12.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:05	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		

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

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





## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1505867-019A	B-41-12.5	Soil	SW6020 (CAM 17)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:05	5 days		<input type="checkbox"/>			
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1505867-019B	B-41-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:05	5 days		<input type="checkbox"/>			
1505867-020A	B-42-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 13:20	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
SW8081A/8082 (OC Pesticides+PCBs)	<input type="checkbox"/>	5 days	<input type="checkbox"/>										
1505867-020B	B-42-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:20	5 days		<input type="checkbox"/>			
1505867-021A	B-42-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:30	5 days		<input type="checkbox"/>			
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						5 days	<input type="checkbox"/>

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-021A	B-42-7.5	Soil	SW8270C (PAHs/PNAs)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:30	5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505867-021B	B-42-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:30	5 days		<input type="checkbox"/>	
1505867-022A	B-42-12.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:35	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505867-022B	B-42-12.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:35	5 days		<input type="checkbox"/>	
1505867-023A	B-43-2.5	Soil	SW9045D (pH)	1	Stainless Steel tube 2"x6"	<input type="checkbox"/>	5/20/2015 13:46	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-023B	B-43-2.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:46	5 days		<input type="checkbox"/>	
1505867-024A	B-43-7.5	Soil	SW9045D (pH)	1	Acetate Liner	<input type="checkbox"/>	5/20/2015 13:50	5 days		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1505867-024B	B-43-7.5	Soil	SW8260B (VOCs) (Encore)	1	Encore Sampler	<input type="checkbox"/>	5/20/2015 13:50	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

105 867 Please send copies of work order summaries to:  
1) Liz Kimbrel = ekimbrel@langan.com  
2) Christina Rain: crain@langan.com

009074

**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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3043 Broadway  
Job Number: 731037001  
Project Manager/Contact: Christina Rain 415-955-5247  
Samplers: Elyse K  
Recorder (Signature Required): Liz Kimbrel

Turnaround  
Time  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TRHgd, mo	PNAC by 0270C	VOCs by 0260B	SVOCs by 0270C	PCBs & Pesticides	OCAM 17	pH by 9045d									
B-36-2.5	5/20/15	0750		X									X	X	X	X	X	X	X	X	X	X	X	X	X		Hold for further metals analyses
B-36-7.5		0805		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-36-12.5		0810		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-36-17.5		0825		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-36-22.5		0835		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-2.5		0925		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-7.5		0930		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-12.5		0935		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-17.5		0945		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-22.5		0950		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-2.5		1015		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-7.5		1030		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-12.5		1035		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-38-2.5		1054		X									X	X	X	X	X	X	X	X	X	X	X	X	X		

Relinquished by: (Signature) <u>Elyse K</u>	Date <u>5/20/2015</u>	Time <u>1630</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1205</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1650</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/21/15</u>	Time <u>1650</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical  
Laboratory Comments/Notes:

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)

Please send copies of work order summaries to:  
 1) Liz Kimbrell: ekimbrell@langan.com  
 2) Christina Rain: Crain@langan.com

009075

# Treadwell & Rollo

Environmental and Geotechnical Consultant

## CHAIN OF CUSTODY RECORD

Page 2 of 2

- 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731037001  
 Project Manager/Contact: Christina Rain #15-955-5247  
 Samplers: Liz Kimbrell, Zubair Trabzadd  
 Recorder (Signature Required): [Signature]

Turnaround Time Std
---------------------------

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, G, MO	PVAs by G270C	VOCs by G2100B	SVOCs by G270C	CAM 17	pH by 9015D											
B-38-7.5	5/20/15	1110		X									X	X	X	X	X	X	X								X	hold metals for further metals analyses
B-38-12.5		1115		X									X	X	X	X	X	X	X								X	
B-41-2.5		1150		X									X	X	X	X	X	X	X								X	
B-41-7.5		1300		X									X	X	X	X	X	X	X								X	
B-41-12.5		1305		X									X	X	X	X	X	X	X								X	
B-42-2.5		1320		X									X	X	X	X	X	X	X								X	
<del>B-43-2.5</del> B-42-7.5		1330		X									X	X	X	X	X	X	X								X	
B-42-12.5		1335		X									X	X	X	X	X	X	X								X	
B-43-2.5		1346		X									X	X	X	X	X	X	X								X	
B-43-7.5		1350		X									X	X	X	X	X	X	X								X	

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/20/2015</u>	Time <u>1630</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1205</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1650</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/21/15</u>	Time <u>1650</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical  
 Laboratory Comments/Notes:  
 Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)



### Sample Receipt Checklist

Client Name: **Treadwell & Rollo** Date and Time Received: **5/21/2015 5:46:32 PM**  
 Project Name: **#731637001; 3093 Broadway** LogIn Reviewed by: **Jena Alfaro**  
 WorkOrder No: **1505867** Matrix: Soil Carrier: Bernie Cummins (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   
 Sample/Temp Blank temperature Temp: 3°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

**UCMR3 Samples:**

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

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

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1505867 A

**Report Created for:** Treadwell & Rollo

501 14th Street, 3rd Floor  
Oakland, CA 94612

**Project Contact:** Christina Rain

**Project P.O.:**

**Project Name:** #731637001; 3093 Broadway

**Project Received:** 05/21/2015

Analytical Report reviewed & approved for release on 06/12/2015 by:

Angela Rydelius,  
Laboratory Manager

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





## Glossary of Terms & Qualifier Definitions

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505867

### Glossary Abbreviation

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

### Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight
c1	surrogate recovery outside of the control limits due to the dilution of the sample.
c11	The surrogate recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data has been reported.
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant





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

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**WorkOrder:** 1505867

### **Quality Control Qualifiers**

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



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 6/6/15

**WorkOrder:** 1505867  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### STLC Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.14	0.050	1	06/08/2015 23:06

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/08/2015 23:16

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.094	0.050	1	06/08/2015 22:29

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.14	0.050	1	06/08/2015 22:14

Analyst(s): DB

(Cont.)



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 6/6/15

**WorkOrder:** 1505867  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### STLC Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/08/2015 22:36

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	ICP-JY	105958

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.061	0.050	1	06/08/2015 22:56

Analyst(s): DB



## Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 6/8/15-6/10/15

**WorkOrder:** 1505867  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L

### TCLP Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-7.5	1505867-002A	Soil	05/20/2015 08:05	ICP-JY	106020

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/09/2015 19:25

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-36-12.5	1505867-003A	Soil	05/20/2015 08:10	ICP-JY	106020

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/09/2015 19:28

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-2.5	1505867-006A	Soil	05/20/2015 09:25	ICP-JY	106138

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/12/2015 10:13

Analyst(s): BBO

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-7.5	1505867-007A	Soil	05/20/2015 09:30	ICP-JY	106020

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/09/2015 19:30

Analyst(s): DB

(Cont.)



# Analytical Report

**Client:** Treadwell & Rollo  
**Project:** #731637001; 3093 Broadway  
**Date Received:** 5/21/15 17:46  
**Date Prepared:** 6/8/15-6/10/15

**WorkOrder:** 1505867  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L

## TCLP Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-37-12.5	1505867-008A	Soil	05/20/2015 09:35	ICP-JY	106020

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.050	1	06/09/2015 19:33

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B-41-2.5	1505867-017A	Soil	05/20/2015 11:50	ICP-JY	106020

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.064	0.050	1	06/09/2015 19:36

Analyst(s): DB



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/6/15  
**Date Analyzed:** 6/8/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 105958  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-105958  
 1506155-001AMS/MSD

### QC Summary Report for Metals (STLC)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.908	0.050	1	-	91	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.10	1.10	1	0.1510	95	95	70-130	0	30



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/8/15  
**Date Analyzed:** 6/9/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 106020  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-106020

---

### QC Summary Report for Metals (TCLP)

---

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	1.00	0.050	1	-	100	75-125

---



## Quality Control Report

**Client:** Treadwell & Rollo  
**Date Prepared:** 6/10/15  
**Date Analyzed:** 6/12/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** #731637001; 3093 Broadway

**WorkOrder:** 1505867  
**BatchID:** 106138  
**Extraction Method:** SW1311/SW3010  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-106138  
 1506298-004AMS/MSD

### QC Summary Report for Metals (TCLP)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	0.981	0.050	1	-	98	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.01	0.935	1	ND	101	94	70-130	7.97	30





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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1505867 **A** ClientCode: TWRK

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**  
 Christina Rain  
 Treadwell & Rollo  
 501 14th Street, 3rd Floor  
 Oakland, CA 94612  
 (510) 874-4500    FAX: (510) 874-4507

Email: crain@langan.com  
 cc/3rd Party: ekimbrel@langan.com;  
 PO:  
 ProjectNo: #731637001; 3093 Broadway

**Bill to:**  
 Accounts Payable  
 Treadwell & Rollo  
 555 Montgomery St., Suite 1300  
 San Francisco, CA 94111  
 Langan\_InvoiceCapture@concursoft.com

**Requested TAT: 5 days**  
**Date Received: 05/21/2015**  
**Date Add-On: 06/04/2015**  
**Date Printed: 06/04/2015**

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	
1505867-002	B-36-7.5	Soil	5/20/2015 8:05	<input type="checkbox"/>	A	A											
1505867-003	B-36-12.5	Soil	5/20/2015 8:10	<input type="checkbox"/>	A	A											
1505867-006	B-37-2.5	Soil	5/20/2015 9:25	<input type="checkbox"/>	A	A											
1505867-007	B-37-7.5	Soil	5/20/2015 9:30	<input type="checkbox"/>	A	A											
1505867-008	B-37-12.5	Soil	5/20/2015 9:35	<input type="checkbox"/>	A	A											
1505867-017	B-41-2.5	Soil	5/20/2015 11:50	<input type="checkbox"/>	A	A											

**Test Legend:**

1	STLC_METALS_S	2	TCLP_METALS_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Jena Alfaro

Add-On Prepared By: Maria Venegas

Comments: STLC's & TCLP's added 6/4/15 STAT.

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



## WORK ORDER SUMMARY

**Client Name:** TREADWELL & ROLLO  
**Project:** #731637001; 3093 Broadway  
**Comments:** STLC's & TCLP's added 6/4/15 STAT.

**QC Level:** LEVEL 2  
**Client Contact:** Christina Rain  
**Contact's Email:** crain@langan.com

**Work Order:** 1505867  
**Date Received:** 5/21/2015  
**Date Add-On:** 6/4/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1505867-002A	B-36-7.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Acetate Liner	5/20/2015 8:05	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			
1505867-003A	B-36-12.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Acetate Liner	5/20/2015 8:10	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			
1505867-006A	B-37-2.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Stainless Steel tube 2"x6"	5/20/2015 9:25	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			
1505867-007A	B-37-7.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Acetate Liner	5/20/2015 9:30	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			
1505867-008A	B-37-12.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Acetate Liner	5/20/2015 9:35	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			
1505867-017A	B-41-2.5	Soil	SW6010B (Metals) (TCLP) <Chromium>	1	Stainless Steel tube 2"x6"	5/20/2015 11:50	5 days*		<input type="checkbox"/>	
			SW6010B (Metals) (STLC) <Chromium>				5 days*			

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).  
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

105 867 Please send copies of work order summaries to:  
 1) Liz Kimbrel = ekimbrel@langan.com  
 2) Christina Rain: crain@langan.com

009074

## 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3043 Broadway  
 Job Number: 731037001  
 Project Manager/Contact: Christina Rain 415-955-5247  
 Samplers: Elyse K  
 Recorder (Signature Required): Liz Kimbrel

Turnaround  
Time  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPH, d, m, o	PNAs by BZFC	VOCS by BZFC	SVOCs by BZFC	PCBs & Pesticides	DM 17	pH by 4015d	STLCLV	TUCLV							
B-36-2.5	5/20/15	0750		X									X	X	X	X	X	X	X	X	X	X	X	X	X		hold for further metals analyses
B-36-7.5		0805		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-36-12.5		0810		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-36-17.5		0825		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-36-22.5		0835		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-2.5		0925		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-7.5		0930		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-12.5		0935		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-17.5		0945		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-37-22.5		0950		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-2.5		1015		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-7.5		1030		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-12.5		1035		X									X	X	X	X	X	X	X	X	X	X	X	X	X		
B-39-2.5		1054		X									X	X	X	X	X	X	X	X	X	X	X	X	X		

Relinquished by: (Signature) <u>Elyse K</u>	Date <u>5/20/2015</u>	Time <u>1630</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1205</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1650</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/21/15</u>	Time <u>1650</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical  
 Laboratory Comments/Notes: added 6/4/15 STAT

Method of Shipment  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)

White Copy - Original

Yellow Copy - Laboratory

Pink Copy

GOOD CONDITION HEAD SPACE ABSENT DESCRIBED IN LAB PRESERVATION  
 APPROPRIATE CONTAINERS CO-ORDERED IN LAB  
 VOAS O & G METALS OTHER

Please send copies of work order summaries to:  
 1) Liz Kimbrel: ekimbrel@langan.com  
 2) Christina Rain: Orain@langan.com

009075



### 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 Road, Suite 200, Sacramento, CA 95825 Ph: 916.565.7412/Fax: 916.565.7413
- 50 Airport Parkway, Suite 175, San Jose, CA 95110 Ph: 408.437.7708/Fax: 408.437.7709

Site Name: 3093 Broadway  
 Job Number: 731637001  
 Project Manager/Contact: Christina Rain 415-955-5247  
 Samplers: Liz Kimbrel, Zubair Trabzadd  
 Recorder (Signature Required): [Signature]

Turnaround  
Time  
Std

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested												Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	Ice	TPHA, G, MO	PNAS by 0270C	VOCs by 02100B	SVOCs by 0270C	CAM 17	pH by 9015D	STLCY	TUPEY										
B-38-7.5	5/20/15	1110		X										X	X	X	X	X										X	hold metals for further metals analyses
B-38-12.5		1115		X										X	X	X	X	X										X	
B-41-2.5		1150		X										X	X	X	X	X	X	X								X	
B-41-7.5		1300		X										X	X	X	X	X	X	X								X	
B-41-12.5		1305		X										X	X	X	X	X	X	X								X	
B-42-2.5		1320		X										X	X	X	X	X	X	X								X	
<del>B-42-7.5</del> B-42-7.5		1330		X										X	X	X	X	X	X	X								X	
B-42-12.5		1335		X										X	X	X	X	X	X	X								X	
B-43-2.5		1340		X										X	X	X	X	X	X	X								X	
B-43-7.5		1350		X										X	X	X	X	X	X	X								X	

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5/20/2015</u>	Time <u>1630</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1205</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>5-21-15</u>	Time <u>1650</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>5/21/15</u>	Time <u>1650</u>
Relinquished by: (Signature)	Date	Time	Received by Lab: (Signature)	Date	Time

Sent to Laboratory (Name): McCampbell Analytical

Laboratory Comments/Notes:

Method of Shipment:  Lab courier  Fed Ex  Airborne  UPS  
 Hand Carried  Private Courier (Co. Name)