

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

for the

TIRE FIRE PROPERTY

YUROK TRIBE ASSIGNMENT NUMBER 530-053-010-73
(APN: 530-053-010-000)
HIGHWAY 96, NEAR WEITCHPEC, CALIFORNIA

November 13, 2013

Prepared for:
Yurok Tribe Environmental Program
190 Klamath Boulevard
Klamath, California 95548

Prepared by:
Stan Thiesen and Orrin Plocher

of



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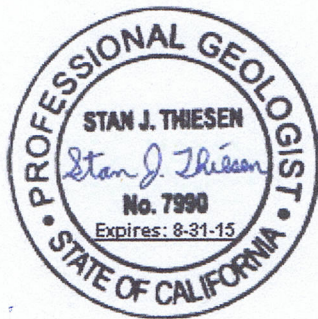
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ACRONYMS AND ABBREVIATIONS

ASTM	ASTM International (formerly American Society for Testing and Materials)
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Cleanup, and Liability Act
CFR	Code of Federal Regulations
CHHSL	California Human Health Screening Levels
CLP	Contract Laboratory Program
CWA	Clean Water Act
DQA	Data Quality Assessment
DQI	Data Quality Indicators
DQO	Data Quality Objectives
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Levels
FEMA	Federal Emergency Management Agency
FSP	Field Sampling Plan
GPS	Global Positioning System
GIS	Geographic Information System
GC/MS	Gas Chromatography and Mass Spectrometry
IDW	Investigation-Derived Waste
IRIS	Integrated Risk Information System (USEPA)
LCS/LCSD	Laboratory Control Sample and Laboratory Control Sample Duplicates
MDL	Method Detection Limit
MPC	Measurement Performance Criteria
MQO	Measurement Quality Objective
MS/MSD	Matrix Spike and Matrix Spike Duplicate
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
NRCS	Natural Resource Conservation Service
PARCCS	Precision, Accuracy, Representativeness, Completeness, Comparability, and Sensitivity
PDS	Post digestion spike
PE	Performance Evaluation
PRG	Preliminary Remediation Goal
PRQL	Project-Required Quantitation Limit
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QC	Quality Control
QL	Quantitation Limit
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
RSIs	Residential Screening Levels
%R	Percent Recovery
SAP	Sampling and Analysis Plan (an integrated FSP and QAPP)

SOP	Standard Operating Procedures
SOW	Statement of Work
SVOC	Semi-Volatile Organic Compound
USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
USGS	United States Geological Survey
VOC	Volatile Organic Compound
YTEP	Yurok Tribe Environmental Program

1.0 INTRODUCTION

Freshwater Environmental Services (FES) has prepared this report of findings for the Phase II Environmental Site Assessment (ESA) of a rural property formerly used as a residence (the Subject Property). A Phase I ESA conducted by the Yurok Tribe Environmental Program (YTEP) dated September 17, 2012 (YTEP, 2012) was completed for the Subject Property.

This report conforms to the process and principles recommended in the *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, E-1903-11, (ASTM, 2011). This report documents the soil sampling activities performed at the Subject Property. The location of the Subject Property is shown on Figure 1, Figure 2, and Figure 3.

The primary objectives of this Phase II ESA were to assess and evaluate the recognized environmental conditions identified in the Phase I ESA conducted by the Yurok Tribe Environmental Program (YTEP, 2012), and to provide sufficient information regarding the presence or absence of contamination at the Site (ASTM, 2002). The scope of work developed by FES for this assessment was based on the conclusions of the Phase I ESA. Section 10.0 of the Phase I ESA (YTEP, 2012) listed the following as Recognized Environmental Conditions (quoted directly from the report).

- *Evidence of a large tire fire that occurred on the property that resulted in a large area of ashen rubber, melted metal and burned plastic.*
- *The burning of a former dwelling that has possibly contaminated the soils on the Subject Property*

The principal study questions are whether the Subject Property contains contaminated soils from the unauthorized burning of tires and a former residence above concentrations regarded as safe for use of the Subject Property?

The alternative actions that could result from resolution of the principal study questions include:

- If contamination is not identified over allowable levels the Subject Property can be cleaned up and the Yurok Tribe can proceed with redevelopment of the Subject Property; and
- If contamination is identified over allowable levels, additional assessment and/or cleanup may be necessary prior to redevelopment and use of the Subject Property.

This Phase II ESA is a Tribal Response Program project being funded by a CERCLA Section 128(a), Tribal Response Program grant that includes hazardous substances and petroleum products.

1.1 Subject Property Name

The Subject Property is a former residential property on Yurok Tribe Assignment Number 530-053-010-73 which is a portion of Assessors Parcel Number (APN) 530-053-010-000. The Subject Property is known as the Tire Fire Property.

1.2 Subject Property Location

The Subject Property is located south of State Highway 96 and north of the Klamath River approximately one mile east of Weitchpec, California. The location of the Subject Property is shown on Figures 1 through 3. The Subject Property is located within Section 11, Township 9 North, Range 4 East of the Humboldt Base and Meridian. The Subject Property is located within the boundaries of APN 530-053-010-000 in Humboldt County, California.

2.0 BACKGROUND

The Subject Property is located approximately one mile east of Weitchpec, Humboldt County, California. The parcel which contains the Subject Property (APN 530-053-010-000) includes an area of approximately 722 acres and is much larger than the approximate one acre of the Subject Property. The parcel is owned by the Yurok Trust.

Section 8.0 of the Phase I ESA (YTEP, 2012) listed the following as environmental findings (quoted directly from the report).

- *Two large areas show evidence of recent burning of multiple tires on the Subject Property.*
- *A former dwelling that has been burned to the ground on the Subject Property.*
- *Multiple areas of solid waste and debris throughout the Site.*
- *A gold mining operation adjacent to the Subject Property was in operation in the late 1800's.*

Section 10.0 of the Phase I ESA (YTEP, 2012) listed the following as Recognized Environmental Conditions (quoted directly from the report).

- *Evidence of a large tire fire that occurred on the property that resulted in a large area of ashen rubber, melted metal and burned plastic.*
- *The burning of a former dwelling that has possibly contaminated the soils on the Subject Property*

2.1 Sampling Area Description

The Subject Property occupies approximately one acre that is mostly flat and located approximately one mile east of Weitchpec between State Highway 96 and the Klamath River. The central portion of the Subject Property has been cleared of most vegetation. The area surrounding the Subject Property is mostly vegetated with scattered trees, brush, and grass. The Subject Property has not been cleared of the burned tires or other debris.

The Phase I ESA, (YTEP, 2012) indicated that the oldest historic documentation is a 1925 Historical Topographic Map that does not indicate the presence of any structures in the vicinity of the Subject Property. No structures were shown on the other Historical Topographic Maps dated 1952, 1979, and 1997. Historical aerial photographs from 1947, 1954, 1973, 1983 and 1993 do not indicate the presence of structures on the Subject Property. Aerial photographs from 1998 and 2005 show the mobile home on the Subject Property.

2.2 Previous Investigations/Regulatory Involvement

The only investigation of the Subject Property has been a Phase I ESA, (YTEP, 2012) performed for the CERCLA 128a Tribal Response Program. The Yurok Tribe Environmental Program is not aware of any previous sampling efforts at the Subject Property.

3.0 SITE GEOLOGY AND HYDROLOGY

The Subject Property has an elevation of approximately 275 feet above mean sea level based on the United States Geological Survey (USGS) 10-meter Digital Elevation Model. The topography in the area of the Subject Property is relatively flat with a slight slope towards the Klamath River which at its closest point is approximately 220 feet to the southeast. Based on data obtained from the Natural Resource Conservation Service (NRCS), the average annual precipitation at the Subject Property is approximately 55 inches.

The Subject Property is shown on the “Geologic Map of the Weed Quadrangle, California” (Wagner and Saucedo, 1987) as being within an area of Franciscan Formation metasedimentary rock. The nearest fault zoned as active (within the last 11,000 years) under the Alquist-Priolo Earthquake Fault Zoning Act, is approximately 25 miles to the west-southwest of the Subject Property.

The following information on soils at the Subject Property is based on Natural Resource Conservation Service (NRCS) maps and data. The depth to bedrock ranges from approximately 20 inches to greater than 39 inches. The depth to water is listed as greater than 80 inches. The soil texture ranges from clay loams to extremely gravelly loams.

There are stream channels along the east and west perimeter of the Subject Property. The nearest surface water is the Klamath River which at its closest point is approximately 220 feet to the southeast of the Subject Property.

4.0 SAMPLING METHODS AND ANALYSIS

4.1 Field Methods

The Yurok Tribe Environmental Program was responsible for determining whether subsurface utilities were present at the Subject Property in the areas where the proposed soil sampling would take place. YTEP also has an approved Cultural Resources Management Permit Application (Appendix F) to ensure that the project would have no impact to cultural resources. Soil samples were collected at a maximum depth of approximately 1.5 feet below ground surface (bgs). Most of the soil samples were collected using a rock bar and shovel. A jackhammer was used to loosen soil for some of the deeper samples. Boring logs were prepared for each sample location and are included in Appendix A.

4.2 Soil Sampling – April 9, 2013

A total of ten soil samples (including one field duplicate) were collected at the Subject Property. One of the samples was collected on the slope above the flat area to provide reference/comparison metals concentrations outside of the expected contamination area at the Subject Property. The samples were collected from a depth intervals ranging from of 0.0 to 0.6 feet bgs. YTEP personnel collected GPS data for the sample locations. The coordinates of the sample locations based on the YTEP data are presented in Table 3. The approximate sample locations are shown on Figure 4 and Figure 5.

4.3 Soil Sampling – July 18, 2013

Additional sampling was proposed because the results from the samples collected on April 9, 2013 indicated that screening levels were exceeded for several analytes in the deeper samples. A total of seven soil samples (including one field duplicate) were collected at the Subject Property. Four of the samples were collected at greater depths from sample locations Tire-Fire-1, Tire-Fire-2, Tire-Fire-3, and Tire-Fire-4.

Two additional samples (Tire-Fire-6 and Tire-Fire-7) were collected from areas that were outside of the areas where contamination was known to be present based on the samples collected on July 9, 2013. Tire-Fire-6 and Tire-Fire-7 were collected from locations down slope of the principal sampling area. Tire-Fire-6 was separated from the principal sampling area by a block wall approximately two-feet high. Tire-Fire-7 was collected at the west end of the block wall where surface runoff from Tire-Fire-3 and Tire-Fire-4 may have been concentrated.

The samples were collected from depth intervals ranging from of 0.0 to 1.2 feet bgs. The samples were shipped by FedEx on Friday July 19, 2013 for overnight delivery. The samples arrived on Monday July 22, 2013 at a temperature of approximately 7.8°C. Because the temperature of the

samples exceeded the recommended temperature range of 0°C to 6°C it was decided to have the laboratory discard the samples.

4.4 Soil Sampling – July 24, 2013

Because of the temperature issue associated with the samples collected on July 18, 2013 another set of samples were collected on July 24, 2013. A total of seven soil samples (including one field duplicate) were collected at the Subject Property. Four of the samples were collected at greater depths from sample locations Tire-Fire-1, Tire-Fire-2, Tire-Fire-3, and Tire-Fire-4. Two additional samples (Tire-Fire-6 and Tire-Fire-7) were collected from areas that were outside of the areas where contamination was known to be present based on the samples collected on July 9, 2013. The samples were collected from depth intervals ranging from of 0.0 to 1.5 feet bgs. The coordinates of the sample locations based on the YTEP data are presented in Table 3. The approximate sample locations are shown on Figure 4 and Figure 5.

4.5 Chemical Analysis Methods

The soil samples were analyzed by Calscience Environmental Laboratories, Inc. (Calscience) of Garden Grove, California. Calscience is certified by the California Department of Public Health for the requested analysis.

4.6 Modifications to the Approved Sampling and Analysis Plan

Because of conditions in the field there were some modifications to the Sampling and Analysis Plan (SAP). These modifications included:

- The SAP indicated that the soil samples would be collected from two depth intervals. The first interval was proposed to be 0.0 to 0.5 feet bgs and the second proposed interval was to be 0.5 to 1.0 feet bgs. Because of the presence of rocks at a depth of approximately 0.6 feet bgs the samples were collected at depth intervals of 0.0 to 0.1 feet bgs and 0.5 to 0.6 feet bgs. Residual burned materials were scraped off the surface prior to sample collection.
- Two samples were proposed in the SAP to target tire burning areas. Because only one area was identified where tires had obviously been burned (Tire-Fire-1) the other proposed sample (Tire-Fire-2) was collected from an area where debris was present beyond the area where tire burning had occurred.
- Four additional samples were collected from greater depths from the initial four sample locations because some analytes exceeded the screening levels from the previous deeper samples.

- Two additional samples were collected (Tire-Fire-6 and Tire-Fire-7) to determine if contamination extended beyond the footprint of the former mobile home. Deeper samples were also collected because screening levels were exceeded for some analytes in the samples collected on April 9, 2013.

5.0 CHEMICAL ANALYSIS RESULTS

The laboratory analytical reports are included in Appendix C, Appendix D, and Appendix E. Detections of analytes that exceeded the screening levels are shown in the table below. In some cases the reporting limit for dimethyl phthalate was higher than the screening level. The reporting limit for arsenic exceeded the screening level.

SUMMARY OF CHEMICAL CONCENTRATIONS EXCEEDING THE SCREENING LEVELS IN SOIL SAMPLES FROM THE APRIL 9, 2013 AND JULY 24, 2013 SAMPLING EVENTS

Sample ID	Date	TPH-Diesel With Silica Gel (mg/kg)	TPH-Motor Oil With Silica Gel (mg/kg)	Dimethyl Phthalate (mg/kg)	As (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
	RSL	83	370	0.035 ^a	0.39 ^b	1.7 ^b	230 ^b	200 ^b	150 ^b	600 ^b
Tire-Fire-1-0.0'-0.1'	4/9/13	25	86	<0.50 / 0.055	1.01	<1.00	82.1	30.0	32.4	1,440
Tire-Fire-1-0.5'-0.6'	4/9/13	<5.0	<25	<0.50 / 0.077	<1.00	<1.00	146	<1.00	27.7	72.9
Tire-Fire-1-(1.2')	7/24/13	--	--	<0.010	--	--	--	--	--	--
Tire-Fire-2-0.0'-0.1'	4/9/13	64	99	0.50 / 0.091	1.04	<1.00	102	19.9	30.3	429
Tire-Fire-2-0.5'-0.6'	4/9/13	36	170	0.53 / 0.091	<1.00	<1.00	181	1.03	28.3	48.4
Tire-Fire-2-(1.3')	7/24/13	--	--	<0.010	--	--	--	--	--	--
Tire-Fire-3-0.0'-0.1'	4/9/13	6,300	12,000	<1.0	10.8	1.91	988	230	86.8	1,270
Tire-Fire-3-0.5'-0.6'	4/9/13	1,000	4,400	<5.0	2.20	<1.00	70.3	14.0	268	84.9
Tire-Fire-3-(1.5')	7/24/13	13	81	<0.010	<1.00	<1.00	204	<1.00	28.3	55.1
Tire-Fire-4-0.0'-0.1'	4/9/13	31	180	<1.0	26.8	2.58	2,430	74.4	64.8	2,830
Tire-Fire-4-0.5'-0.6'	4/9/13	220	930	<2.5	2.54	<1.00	144	7.64	95.9	185
Tire-Fire-4-(1.0')	7/24/13	<5.0	<25	<0.010	--	--	--	--	--	--
Tire-Fire-5-0.0'-0.1' (Duplicate of Tire-Fire-1-0.0'-0.1')	4/9/13	23	84	<0.50 / 0.074	<1.00	<1.00	97.3	23.3	29.1	1,950
Tire-Fire-6-(0.0'-0.1')	7/24/13	14	150	<0.079	<1.00	<1.00	104	3.96	20.4	90.2
Tire-Fire-7-(0.0'-0.1')	7/24/13	15	88	<0.010	13.1	1.41	234	147	85.5	1,130
Tire-Fire-Background-Metals-0.0'-0.1'	4/9/13	--	--	--	4.33	<1.00	30.5	11.0	52.8	60.6

NOTES:

- 0.055** Analytes detected at or above the screening level shown in red bold.
- <0.50/**0.055** A second analysis was conducted for SVOCs using lower reporting limits for samples Tire-Fire -1, Tire-Fire-2, and Tire-Fire-5 (field duplicate).
- TPH Total Petroleum Hydrocarbon
- mg/kg milligrams per kilogram
- RSL Resident Screening Level.
- Diesel Range Organics and TPH-Motor Oil reported after silica gel cleanup.
- Not analyzed.

6.0 DATA QUALITY EVALUATION

6.1 Review of Reporting Limits

The sampling and analysis plan included tables listing the reporting limits provided by Calscience for all analytes. FES requested the lowest reporting limits possible for all analytes. Calscience initially analyzed SVOCs using higher reporting limits than were provided for the SAP. After the original SVOC results were received, FES requested that the samples be re-extracted and analyzed using the lower reporting limits. Both results are provided in the previous table. Because of matrix interference the samples from Tire-Fire-3 and Tire-Fire-4 could not be analyzed using the lower limits.

Diesel Range Organics (DRO) EPA Method 8015B

Calscience estimated a reporting limit of 5.0 mg/kg for the DRO analysis. All of the samples with no detections had a reporting limit of 5.0 mg/kg. The reporting limits for the samples with detections ranged from 5.0 mg/kg to 100 mg/kg. The screening level for DRO was 83 mg/kg so the reporting limits were considered acceptable.

TPH-Motor Oil (TPH-MO) EPA Method 8015B (M)

Calscience estimated a reporting limit of 5.0 mg/kg for the TPH-MO analysis. All of the samples with no detections had a reporting limit of 25 mg/kg. The reporting limits for the samples with detections ranged from 25 mg/kg to 620 mg/kg. The screening level for TPH-MO was 370 mg/kg so the reporting limits were considered acceptable.

Gasoline Range Organics (GRO) EPA Method 8015B

Calscience estimated a reporting limit of 0.50 mg/kg for the GRO analysis. None of the samples had detections and the reporting limit for all of the samples was 0.50 mg/kg. The screening level for GRO was 83 mg/kg so the reporting limits were considered acceptable.

Semi-Volatile Organic Compounds (SVOCs) EPA Method 8270C

A total of 71 SVOCs were analyzed for this project. Six of the 71 SVOCs were detected in the samples. Screening levels were not available for 35 of the SVOCs. The screening levels for 20 of the SVOCs with screening levels were less than 1.00 mg/kg with a total of 26 SVOCs screening levels less than 5.00 mg/kg.

The reporting limits for Tire-Fire-1, Tire-Fire-2, and Tire-Fire-5 for the second analysis were significantly lower than those for Tire-Fire-3 and Tire-Fire-4 which could not be re-analyzed using the lower limits because they contained high concentrations of petroleum compounds. For the SVOCs detected, the reporting limits for dimethyl phthalate, naphthalene, and phenol exceeded the screening levels in some samples.

The table below shows the analytes for which the reporting limits exceeded the screening levels. The SVOC reporting limits for these analytes were considered acceptable because they were the lowest that the laboratory stated that they could achieve.

**LIST OF SVOC ANALYTES FOR WHICH REPORTING LEVELS
EXCEEDED THE SCREENING LEVEL**

Analyte	Units	Screening Level	Range of Reporting Limits	Number of Samples for which the Reporting Limit Equals or Exceeds the Screening Level and for which there was no Detection of the Analyte
1,2,4-Trichlorobenzene	mg/kg	1.5	0.02 – 5.0	2
1,2-Dichlorobenzene	mg/kg	1.1	0.02 – 5.0	2
1,4-Dichlorobenzene	mg/kg	0.59	0.02 – 5.0	4
2,4,5-Trichlorophenol	mg/kg	0.18	0.02 – 5.0	5
2,4,6-Trichlorophenol	mg/kg	0.23	0.02 – 5.0	4
2,4-Dichlorophenol	mg/kg	0.30	0.02 – 5.0	4
2,4-Dimethylphenol	mg/kg	0.67	0.02 – 5.0	4
2,4-Dinitrotoluene	mg/kg	0.00039	0.02 – 5.0	16
2-Chlorophenol	mg/kg	0.012	0.02 – 5.0	16
2-Methylnaphthalene	mg/kg	0.25	0.02 – 5.0	4
Anthracene	mg/kg	2.8	0.02 – 5.0	1
Benzo (a) Anthracene	mg/kg	0.38	0.02 – 5.0	4
Benzo (a) Pyrene	mg/kg	0.038	0.02 – 5.0	7
Benzo (b) Fluoranthene	mg/kg	0.38	0.02 – 5.0	4
Benzo (k) Fluoranthene	mg/kg	0.38	0.02 – 5.0	4
Bis(2-Chloroethyl) Ether	mg/kg	0.0004	0.1 – 25	16
Bis(2-Chloroisopropyl)	mg/kg	0.00015	0.02 – 5.0	16
Dibenz (a,h) Anthracene	mg/kg	0.062	0.02 – 5.0	6
Diethyl Phthalate	mg/kg	0.035	0.01 – 5.0	6
Dimethyl Phthalate	mg/kg	0.035	0.01 – 5.0	6
Hexachlorobenzene	mg/kg	3.0	0.02 – 5.0	4
Hexachloroethane	mg/kg	3.0	0.02 – 5.0	1
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.62	0.02 – 5.0	4
Naphthalene	mg/kg	1.3	0.02 – 5.0	2
Pentachlorophenol	mg/kg	3.0	0.2 – 25	4
Phenol	mg/kg	0.076	0.02 – 5.0	6

NOTES:

mg/kg Milligrams per kilogram.

Volatile Organic Compounds (VOCs) EPA Method 8260B

A total of 71 VOCs were analyzed for this project. Screening levels were not available for 32 of the VOCs. Four of the 71 VOCs were detected in the samples. The reporting limits for VOCs that were detected were lower than the screening levels. Two of the VOCs had reporting limits that were higher than the screening levels. The other reporting limits were less than the screening levels. The table below shows the analytes for which the reporting limits exceeded the screening levels. The VOC reporting limits for these analytes were considered acceptable because they were the lowest that the laboratory stated that they could achieve.

LIST OF VOC ANALYTES FOR WHICH REPORTING LEVELS EXCEEDED THE SCREENING LEVEL

Analyte	Units	Screening Level	Range of Reporting Limits	Number of Samples for which the Reporting Limit Equals or Exceeds the Screening Level and for which there was no Detection of the Analyte
1,2-Dibromo-3-Chloropropane	µg/kg	4.5	4.2 – 6.5	5
1,2-Dibromoethane	µg/kg	0.33	0.83 – 1.3	9

NOTES:

µg/kg Micrograms per kilogram.

Metals by EPA Method 6020 (All metals except for mercury)

A total of 19 metals (excluding mercury) were analyzed for this project. There was no screening level available for magnesium. There were detections of all metals except mercury, selenium, silver, and thallium. The reporting limits for the 19 metals were all lower than the screening levels except for arsenic which had a reporting limit of 1.00 mg/kg which is higher than the screening level of 0.39 mg/kg. The metals reporting limits were considered acceptable. Although the reporting limit for arsenic exceeded the screening level this should not require further action because the reference metals sample contained 4.33 mg/kg of arsenic.

Mercury by EPA Method 7471A

The reporting limit for mercury was 0.0835 mg/kg which is well below the screening level of 1.3 mg/kg. There were no detections of mercury in the samples. The reporting limit for mercury was considered acceptable.

6.2 Review of Laboratory Reports

The laboratory analytical reports are included in Appendix C, Appendix D, and Appendix E. All of the analyses were conducted by Calscience. FES reviewed the laboratory analytical reports to determine if there were any data quality issues. The discussions below are based on a review of the quality control results.

Diesel Range Organics (DRO) EPA Method 8015B

There were no detections of DRO in the method blanks. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were higher than the acceptable range indicating a possible high bias in the DRO results. The RPD for the MS/MSD was within the acceptable range. The results for the DRO analyses were considered acceptable.

TPH-Motor Oil (TPH-MO) EPA Method 8015B (M)

There was no detection of TPH-MO in the method blanks. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were within the acceptable range. The RPD for the MS/MSD was 17% which is higher than the laboratory control limit of 15% for the first batch of samples. The results for the TPH-MO analyses were considered acceptable.

Gasoline Range Organics (GRO) EPA Method 8015B

There was no detection of GRO in the method blank. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were lower than the acceptable limit indicating a possible low bias in the GRO results. The RPD for the MS/MSD was within the acceptable range. The results for the GRO analyses were considered acceptable.

Semi-Volatile Organic Compounds (SVOCs) EPA Method 8270C

There were two analyses of samples Tire-Fire-1, Tire-Fire-2, and Tire-Fire-5 for SVOCs because the initial reporting limits were higher than requested. The initial samples from Tire-Fire-3 and Tire-Fire-4 were not reanalyzed because matrix interference prevented lowering of the reporting limits.

Initial Analysis of SVOCs

There were no detections of SVOCs in the method blank. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits.

The matrix spike and matrix spike duplicate recoveries were within the acceptable range. The RPD for the MS/MSD for pentachlorophenol was 25% which is higher than the laboratory control limit of 22%. The results for the SVOC analyses were considered acceptable.

Second Analysis of Tire-Fire-1, Tire-Fire-2, and Tire-Fire-5 for SVOCs

There were no detections of SVOCs in the method blank. The surrogate recovery for p-Terphenyl-d14 was higher than the acceptable limit. All other surrogate recoveries were within acceptable limits. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were within the acceptable range for the initial analysis. The RPD (initial analysis) for the MS/MSD for pentachlorophenol was 25% which is higher than the laboratory control limit of 22%. There were no detections of pentachlorophenol in any of the samples. All other RPDs were within the acceptable limits. The results for the SVOC analyses were considered acceptable.

Third Analysis for SVOCs

There were no detections of SVOCs in the method blank. Surrogate recoveries were within the acceptable range except for p-Terpphenyl-d14 which had a higher than acceptable. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were within the acceptable range except for 4-Nitrophenol. The RPD for the MS/MSD for 4-Nitrophenol was 26% which is higher than the laboratory control limit of 20%. The results for the SVOC analyses were considered acceptable.

Volatile Organic Compounds (VOCs) EPA Method 8260B

There were no detections of VOCs in the method blank. Surrogate recoveries were within the acceptable range. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were within the acceptable range. The RPD for the MS/MSD for 1,2-Dichlorobenzene, p/m-Xylene, and o-Xylene were higher than the laboratory control limits for these analytes. There were no detections of these three analytes in the samples. The results for the VOC analyses were considered acceptable.

Metals by EPA Method 6020 (All metals except for mercury)

There were no detections of metals in the method blanks. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were within the acceptable range except for silver which had a higher recovery than the acceptable range. No RPDs were calculated for aluminum, magnesium, manganese, and zinc because of suspected matrix interference. The post digestion spike (PDS) analyses were within the acceptable recovery limits except for silver which had a higher recovery than the acceptable limit. No recovery percentages were calculated for aluminum, copper (third analysis only), magnesium, manganese,

and zinc because of suspected matrix interference of these analytes. The results for the metals analyses were considered acceptable.

Mercury by EPA Method 7471A

There was no detection of mercury in the method blanks. The laboratory control sample and laboratory control sample duplicate were within acceptable recovery limits and within relative percent difference limits. The matrix spike and matrix spike duplicate recoveries were within the acceptable range. The results for the mercury analyses were considered acceptable.

6.3 Assessment of Field Variability of Co-Located Soil Samples

Two co-located soil samples were collected for this project. The co-located samples were created by placing soil from the same locations in a clean glass mixing bowl and homogenizing the sample with gloved hands. Soil from the homogenized sample was placed into the various containers and labeled with a different sample identification. No co-located sample was collected for VOC analysis because volatilization can occur during mixing. The laboratory homogenized the individual samples prior to extraction and analysis.

The equation for calculating the RPD is:

$$\text{RPD} = \frac{|X1 - X2|}{[(X1 + X2)/2]} \times 100$$

RPD = Relative Percent Difference (as %)

X1 - X2 = Absolute value (always positive) of X1 – X2

X1 = Original sample concentration

X2 = Duplicate sample concentration

A RPD of 35% or less is generally considered acceptable for soil samples. The RPDs for the co-located samples with detections in both samples are shown in the two tables on the following page.

**SUMMARY OF RELATIVE PERCENT DIFFERENCES
FOR ORGANIC CHEMICALS IN THE CO-LOCATED SOIL SAMPLES FROM THE
APRIL 9, 2013 AND JULY 24, 2013 SAMPLING EVENTS**

Sample ID	Date	TPH-Diesel With Silica Gel (mg/kg)	TPH-Motor Oil With Silica Gel (mg/kg)	Bis(2-Ethylhexyl) Phthalate (mg/kg)	Dimethyl Phthalate (mg/kg)	Naphthalene (mg/kg)	Pyridine (mg/kg)
Tire-Fire-1-0.0'-0.1'	4/9/13	25	86	0.14	0.055	0.024	0.031
Tire-Fire-5-0.0'-0.1' (Duplicate of Tire-Fire-1-0.0'-0.1')	4/9/13	23	84	0.042	0.074	0.030	0.040
Relative Percent Difference (RPD)		8.3%	2.4%	107.7%	29.5%	22.2%	25.4%
Tire-Fire-3-(1.5')	7/24/13	13	81	<0.010	<0.010	<0.020	<0.020
Tire-Fire-8-(1.3') (Duplicate of Tire-Fire-3-(1.5'))	7/24/13	15	88	<0.010	<0.010	<0.020	<0.020
Relative Percent Difference (RPD)		14.3%	8.3%	NA	NA	NA	NA

NOTES:

107.7% RPDs greater than or equal to 35% shown in red bold.

TPH Total Petroleum Hydrocarbon
mg/kg milligrams per kilogram

TPH-Diesel and TPH-Motor Oil reported after silica gel cleanup.

**SUMMARY OF RELATIVE PERCENT DIFFERENCES
FOR METALS IN THE CO-LOCATED SOIL SAMPLES FROM THE
APRIL 9, 2013 AND JULY 24, 2013 SAMPLING EVENTS**

Sample ID	Date	Al (mg/kg)	Ba (mg/kg)	Cr (mg/kg)	Co (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Mg (mg/kg)	Mn (mg/kg)	Ni (mg/kg)	V (mg/kg)	Zn (mg/kg)
Tire-Fire-1-0.0'-0.1'	4/9/13	7,920	31.4	27.1	19.4	82.1	30.0	8,210	349	32.4	24.5	1,440
Tire-Fire-5-0.0'-0.1' (Duplicate of Tire-Fire-1-0.0'-0.1')	4/9/13	6,470	28.2	24.6	23.7	97.3	23.3	6,620	311	29.1	20.4	1,950
Relative Percent Difference (RPD)		8.3%	20.2%	10.7%	9.7%	20.0%	16.9%	25.1%	21.4%	11.5%	10.7%	18.3%
Tire-Fire-3-(1.5')	7/24/13	11,800	12.1	12.2	14.4	204	<1.00	12,400	358	28.3	41.0	55.1
Tire-Fire-8-(1.3') (Duplicate of Tire-Fire-3-(1.5'))	7/24/13	14,100	14.5	14.5	17.7	240	1.04	15,600	414	39.2	47.6	64.4
Relative Percent Difference (RPD)		17.8%	18%	17.2%	20.6%	16.2%	NA	22.9%	1.5%	32.3%	14.9%	15.6%

NOTES:

mg/kg milligrams per kilogram

All of the RPDs were less than 35% except for Bis(2-Ethylhexyl) Phthalate, which was 107.7% which is higher than the generally accepted 35% for soil samples. The concentration of Bis(2-Ethylhexyl) Phthalate in this co-located sample was well under the screening level of 35 mg/kg. Since all of the other RPDs were within the 35% limit it appears that the homogenization process was generally adequate except for Bis(2-Ethylhexyl) Phthalate. It is possible that a more rigorous homogenization and the use of a splitting device would have produced a lower RPD.

6.4 Equipment Blanks

No equipment blanks were collected because the samples were collected from near the surface with no contact between the equipment and the soil collected for the sample.

6.5 Investigation Derived Wastes

During the initial sampling on April 9, 2013 there were no obvious indications of contamination below the surface materials (which were scraped to the side of the sample locations) so all solid investigation derived wastes were placed back in the holes where they were collected. During the second (July 18, 2013) and third round (July 24, 2013) of sample collection soils were placed back into the holes. These materials will need to be removed during the cleanup of the Subject Property. No water was used for decontamination.

7.0 MEASUREMENT QUALITY OBJECTIVES (MQOs)

Data assessment criteria are used to evaluate the quality of the field sampling and laboratory performance for the sampling event, and are expressed in terms of analytical precision, accuracy, representativeness, completeness, and comparability, which are described below.

7.1 Precision

Precision is the degree of mutual agreement between or among independent measurements of a similar property usually reported as relative percent difference (RPD). This indicator relates to the analysis of duplicate laboratory samples, duplicate matrix spikes, and field duplicates (co-located samples). An RPD of <20% for water and <35% for soil, depending upon the chemical being analyzed is generally considered acceptable.

RPDs for the co-located soil samples ranged from 2.4% to 107.7%. The only analyte that exceeded the 35% was Bis(2-Ethylhexyl) Phthalate with a RPD of 107.7%.

Laboratory precision was assessed using laboratory control samples and laboratory control sample duplicates (LCS/LCSD) and matrix spikes and matrix spike duplicates (MS/MSD). Precision was expressed in terms of RPD between the values resulting from duplicate analysis. The results of these analyses are described in Section 6.2.

7.2 Accuracy/Bias

Accuracy is the degree of agreement of a measurement with a known or true value. To determine accuracy, a laboratory value was compared to a known or true concentration. Accuracy for this project was determined by laboratory control samples and laboratory control sample duplicates and matrix spikes and matrix spike duplicates. Accuracy is expressed as a bias (high or low) and is determined by calculating percent recovery (%R) from MSs/MSDs and LCSs/LCSDs.

LCS %R indicates accuracy relevant to an analytical batch lot and is a measure of analytical accuracy conditions independent of samples and matrices. MS/MSD and surrogate spike %Rs indicate accuracy relevant to a unique sample matrix. The %R of an analyte, and the resulting degree of accuracy expected for the analysis of spiked samples, are dependent upon the sample matrix, method of analysis, and the compound or element being measured. The concentration of the analyte relative to the detection limit of the method also is a significant factor in determining the accuracy of the measurement.

QC samples that were used in this investigation to measure accuracy/bias include the following:

- Matrix spikes - To monitor sample preparation/analysis methodology, as well as, to represent the actual sample matrix itself; and

- Standard reference materials and/or laboratory control samples to monitor sample preparation/analysis methodology and often of a similar media (such as water, soil, sediment) as the field samples.

7.3 Representativeness

Representativeness is the expression of the degree to which data accurately and precisely represent a characteristic of an environmental condition or a population. It relates both to the area of interest and to the method of taking the individual sample. The principal study question for this project was whether the Subject Property contains contaminated soils above concentrations regarded as safe for reuse of the Subject Property.

This project collected judgmental samples in areas where there appeared to be contamination from the burning of tires and the mobile home. Two of the samples, Tire-Fire-6 and Tire-Fire-7 were collected from areas that were down slope of the principal sampling area but which did not appear to have burned material or debris. The reference metals sample was collected upslope and beyond the area known to be contaminated.

Factors that affect representativeness include:

- Use of appropriate sampling procedures, including equipment and equipment decontamination and sample holding temperatures;
- Use of appropriate analytical methods for the required parameters and project reporting limits; and
- Analysis of samples within the required holding times.

The portion of each collected sample that was chosen for analysis also affects sample representativeness. The laboratory homogenized all samples prior to taking aliquots for analysis to ensure that the reported results were representative of the sample received.

This investigation used sampling and analytical methods for ensuring the data collected reflects the environmental conditions in the areas sampled. To further ensure the representativeness of the data collected, chain-of-custody procedures, sample preservation, and maximum sample holding times were followed.

QC samples that were used in this investigation to quantitatively measure representativeness included the use of temperature blanks. The temperatures were recorded upon receipt of the samples by the laboratories to serve as a QC check for temperature-related sample preservation. All samples (except the samples collected on July 18, 2013 which were not analyzed) were received within the acceptance criteria for samples requiring preservation at 4°C +/- 2°C.

A qualitative measure of representativeness included verification that documented sample collection and analytical methods (including sample handling, chain-of-custody procedures, sample

preservation, and sample holding times protocols) were followed to ensure that the data reflects the environmental conditions.

7.4 Comparability

Comparability expresses the confidence with which one dataset can be compared to another. The use of methods from EPA or “Standard Methods” or from some other recognized sources allows the data to be compared facilitating evaluation of trends or changes at a site. Comparability also refers to the reporting of data in comparable units so direct comparisons are simplified. Comparability during analysis is dependent upon analytical methods, detection limits, laboratories, units of measure, and sample preparation procedures. Comparability is determined on a qualitative rather than quantitative basis. For this project, comparability of all data collected was ensured by adherence to standard sample collection procedures, standard field measurement procedures, and standard analysis and reporting methods, including consistent units.

7.5 Completeness

Completeness is expressed as percent of valid usable data actually obtained compared to the amount that was expected.

A total of 15 soil samples (excluding the co-located samples) were collected from the Subject Property. One of the samples was collected from an area not expected to have been impacted by activities at the Subject Property to determine reference metals concentrations. Two additional samples were collected from areas beyond visible contamination on July 24, 2013. The Sampling and Analysis Plan called for the collection of nine soil samples from the original locations. The locations sampled on July 24, 2013 included two new locations, Tire-Fire-6 and Tire-Fire-7. The percent completeness is 100% based on the number of samples in the SAP. The additional samples collected on July 24, 2013 were not included in the SAP.

7.6 Sensitivity

Laboratory methods utilized in the assessment were sensitive enough to be able to quantify the parameters of concern at or below the screening levels except for the analytes described in Section 6.1. A table listing analytes for which the reporting limits were higher than the screening levels is provided in Section 6.1.

8.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Sample Locations

Fifteen samples (excluding the co-located samples) from seven locations were collected from the Subject Property. The samples were collected from various intervals with a maximum depth of 1.5 feet bgs.

The following sample locations were from areas expected to contain some contamination:

- Tire-Fire-1 (approximate center of area containing melted metal and burned tires);
- Tire-Fire-2 (area that contained surface debris but not significantly burned);
- Tire-Fire-3 (eastern footprint of former mobile home);
- Tire-Fire-4 (western footprint of former mobile home);
- Tire-Fire-5 (field duplicate of Tire-Fire-1-0.0'-0.1'); and
- Tire-Fire-8 (field duplicate of Tire-Fire-3-(1.5')).

The following sample locations were from areas down slope of Tire-Fire-1, Tire-Fire-2, Tire-Fire-3, and Tire-Fire-4:

- Tire-Fire-6 (approximately 29 feet south of Tire-Fire-3 and approximately 16 feet south of the concrete block wall; and
- Tire-Fire-7 (approximately 21 feet southwest of Tire-Fire-4 just beyond the end of the concrete block wall).

The following sample location was upslope of the other samples on the slope between State Highway 96 and the relatively flat area all of the other samples were collected:

- Tire-Fire-Background-Metals-0.0'-0.1' (collected to provide reference metals concentrations from an area not expected to be significantly contaminated from activities at the Subject Property).

8.2 Tire-Fire-1

Tire-Fire-1 Discussion

Tire-Fire-1 was located near the center of an area of burned tires (Appendix B, Photos 2, 3, and 4). The surface material which appeared to consist of burned rubber and melted metal was scraped off to get to the soil underneath. The material directly below the residue was mostly gravel-sized (~0.75 to 2.9 inches) schist fragments. A total of three samples were collected at this location from the following depths:

- Tire-Fire-1-0.0'-0.1' was collected on April 9, 2013 from 0.0'-0.1' bgs;
- Tire-Fire-1-0.5'-0.6' was collected on April 9, 2013 from 0.5'-0.6' bgs; and
- Tire-Fire-1-(1.2') was collected on July 24, 2013 from 1.2' bgs.

Diesel Range Organics and TPH-Motor Oil were only detected in the sample collected from 0.0'-0.1' bgs at this location. The detections were below the screening levels. Gasoline Range Organics

and VOCs were not detected at this location. Several SVOCs were detected at Fire-Fire-1 with only dimethyl phthalate exceeding the screening level (based on the actual reporting limits). Of the 12 metals detected at Tire-Fire-1 only arsenic and zinc exceeded the screening levels. The only analyte detected in the sample collected from 0.5'-0.6' bgs above the screening level (based on the actual reporting limits) was dimethyl phthalate. There were no detections of SVOCs in the sample collected from 1.2' bgs on July 24, 2013.

Tire-Fire-1 Conclusion

The only analytes that exceeded the screening levels (based on the actual reporting limits) at this location were dimethyl phthalate, arsenic, and zinc. The concentration of arsenic in the 0.0'-0.1' bgs sample of 1.01 mg/kg is less than the reference metals sample which was 4.33 mg/kg. The high concentration of zinc in the shallow sample is probably due to the burning of the tires and wheels at this location. The concentration of zinc (72.9 mg/kg) in the 0.5'-.6' bgs sample is close to the reference concentration which for zinc was 60.6 mg/kg. The only analyte detected in the 0.5'-0.6' bgs sample at a concentration of 0.077 mg/kg was dimethyl phthalate exceeding the screening level of 0.035 mg/kg. There were no detections of SVOCs in the 1.2' bgs sample. The vertical delineation of contamination at this location has been achieved.

Tire-Fire-1 Recommendations

FES recommends the removal and offsite disposal of the first 1.2 feet of soil in the area of Tire-Fire-1 where there is evidence of burned material.

8.3 Tire-Fire-2

Tire-Fire-2 Discussion

Tire-Fire-2 was located in an area that did not appear to have surface contamination (Appendix B, Photos 5 and 6) but was in an area where debris was present. The subsurface material consisted of approximately 0.1 feet of sand underlain by gravel-sized schist fragments. A total of three samples were collected at this location from the following depths:

- Tire-Fire-2-0.0'-0.1' was collected on April 9, 2013 from 0.0'-0.1' bgs;
- Tire-Fire-2-0.5'-0.6' was collected on April 9, 2013 from 0.5'-0.6' bgs; and
- Tire-Fire-2-(1.3') was collected on July 24, 2013 from 1.3' bgs.

Diesel Range Organics and TPH-Motor Oil were detected in the 0.0'-0.1' and the 0.5'-0.6' bgs samples at this location but the concentrations were below the screening levels. Gasoline Range Organics were not detected at this location. There was only one detection of VOCs (acetone) at this location in the 0.0'-0.1' bgs sample at a concentration of 0.067 mg/kg which was below the screening level of 0.5 mg/kg. Two SVOCs were detected at Tire-Fire-2 with only the dimethyl phthalate concentration (0.53 mg/kg) exceeding the screening level of 0.035 mg/kg. Of the 12 metals detected at Tire-Fire-2 only arsenic exceeded the screening level. The only analyte

detected in the 0.5'-0.6' bgs sample above the screening level was dimethyl phthalate. There were no detections of SVOCs in the sample collected from 1.3' bgs on July 24, 2013.

Tire-Fire-2 Conclusion

The only analytes that exceeded the screening levels (based on the actual reporting limits) at this location were dimethyl phthalate and arsenic. The concentration of arsenic in the 0.0'-0.1' bgs sample (1.04 mg/kg) is less than the reference metals sample which for arsenic was 4.33 mg/kg. The only analyte detected in the 0.5'-0.6' bgs sample exceeding the screening level was dimethyl phthalate at a concentration of 0.077 mg/kg. There were no detections of SVOCs in the 1.3' bgs sample. The vertical delineation of contamination at this location has been achieved.

Tire-Fire-2 Recommendations

FES recommends the removal and disposal offsite of the first 1.3 feet of soil in the area of Tire-Fire-2 where there is evidence of debris.

8.4 Tire-Fire-3

Tire-Fire-3 Discussion

Tire-Fire-3 was located in an area that was probably within the footprint of the burned mobile home as shown on Figure 4 and Figure 5. The sample location was between two metal sheets and the surface consisted of approximately ½" melted metal and burned debris (Appendix B, Photos 7 and 8). The subsurface material consisted of approximately 0.1 feet of sand underlain by gravel-sized schist fragments. A total of three samples were collected at this location from the following depths:

- Tire-Fire-3-0.0'-0.1' was collected on April 9, 2013 from 0.0'-0.1' bgs;
- Tire-Fire-3-0.5'-0.6' was collected on April 9, 2013 from 0.5'-0.6' bgs; and
- Tire-Fire-3-(1.5') was collected on July 24, 2013 from 1.5' bgs.

Diesel Range Organics and TPH-Motor Oil were detected in the 0.0'-0.1' and 0.5'-0.6' bgs samples at this location at concentrations significantly above the screening levels (up to 12,000 mg/kg for TPH-Motor Oil). The concentrations of DRO and TPH-MO were below the screening levels in the sample collected from 1.5' bgs. Gasoline Range Organics were not detected at this location. There were no detections of SVOCs at Fire-Fire-3 but the reporting limits exceeded the screening levels for numerous analytes in the upper two samples as described in Section 6.1. There were no detections (using lower detection limits) of SVOCs in the sample collected from 1.5' bgs. There were two detections of VOCs (acetone and 2-Butanone) which were below the screening levels. Of the 14 metals detected at Tire-Fire-3 six (arsenic, cadmium, copper, lead, nickel, and zinc) exceeded the screening levels. Only arsenic and nickel exceeded the screening levels in the sample collected from 0.5'-0.6' bgs. All of the metals detected in the sample collected from 1.5' bgs were below the screening levels.

Tire-Fire-3 Conclusion

The analytes that exceeded the screening levels (based on the actual reporting limits) at this location were DRO, TPH-MO, arsenic, cadmium, copper, lead, nickel, and zinc. The concentration of arsenic (2.20 mg/kg) in the 0.5'-0.6' bgs sample is less than the reference metals concentration of 4.33 mg/kg for the Subject Property. The concentrations of DRO and TPH-MO were under the screening levels in the sample collected from 1.5' bgs. There were no detections of SVOCs in the sample collected from 1.5' bgs and all of the metals concentrations were below the screening level at this depth.

Tire-Fire-3 Recommendations

FES recommends the removal and disposal offsite of the first 1.5 feet of soil within and approximately 10 feet beyond the footprint of the former mobile home including the area between the former mobile home and the concrete block wall to the south (Figure 5) where there is evidence of burned material and other debris.

8.5 Tire-Fire-4

Tire-Fire-4 Discussion

Tire-Fire-4 was located in an area that was probably within the footprint of the burned mobile home as shown on Figure 4 and Figure 5. The sample location was in an area of burned material and debris and the surface consisted of approximately 1" melted metal and burned debris (Appendix B, Photos 9 and 10). The subsurface material consisted of approximately 0.1 feet of sand underlain by gravel-sized schist fragments. A total of three samples were collected at this location from the following depths:

- Tire-Fire-4-0.0'-0.1' was collected on April 9, 2013 from 0.0'-0.1' bgs;
- Tire-Fire-4-0.5'-0.6' was collected on April 9, 2013 from 0.5'-0.6' bgs; and
- Tire-Fire-4-(1.0') was collected on July 24, 2013 from 1.0' bgs.

Diesel Range Organics and TPH-Motor Oil were detected in the 0.0'-0.1' and 0.5'-0.6' bgs samples. The sample from 0.5'-0.6' bgs exceeded the screening levels. Gasoline Range Organics were not detected at this location. There were no detections of SVOCs at Fire-Fire-4 but the reporting limits exceeded the screening levels for numerous analytes in the upper two samples as described in Section 6.1. There were no detections (using lower detection limits) of SVOCs in the sample collected from 1.0' bgs. Acetone was detected in the 0.0'-0.1' and 0.5'-0.6' bgs samples with concentrations below the screening levels. Four of the 14 metals detected at Tire-Fire-4 (arsenic, cadmium, copper, and zinc) exceeded the screening levels. Arsenic was the only metal in the 1.0' bgs sample that exceeded the screening level.

Tire-Fire-4 Conclusion

The analytes that exceeded the screening levels (based on the actual reporting limits) at this location were DRO, TPH-MO, arsenic, cadmium, copper, and zinc. The concentration of arsenic (2.54 mg/kg) in the 0.5'-0.6' bgs sample is less than the reference concentration sample which for arsenic was 4.33 mg/kg. There were no detections of DRO, TPH-MO, or SVOCs in the sample collected from 1.0' bgs.

Tire-Fire-4 Recommendations

FES recommends the removal and disposal offsite of the first 1.5 feet of soil within and approximately 10 feet beyond the footprint of the former mobile home including the area between the former mobile home and the concrete block wall to the south (Figure 5) where there is evidence of burned material and other debris.

8.6 Tire-Fire-6

Tire-Fire-6 Discussion

Tire-Fire-6 was located in an area south of Tire-Fire-3 that did not have burned material or debris as shown on Figure 4 and Figure 5. The sample location was intended to be outside of the area of known contamination. (Appendix B, Photo 13). The subsurface material consisted of approximately 0.1 feet of silt and gravel. One sample was collected at this location from 0.0' to 0.1 feet on July 24, 2013. The sample collected on July 18, 2013 was not analyzed.

Tire-Fire-6 Conclusion

There were no detections of any analytes above the screening levels.

Tire-Fire-6 Recommendations

FES recommends that no further action is necessary in the vicinity of Tire-Fire-6.

8.7 Tire-Fire-7

Tire-Fire-7 Discussion

Tire-Fire-7 was located at the end of the concrete block wall as shown on Figure 4 and Figure 5 and in Appendix B, Photo 14. The sample location was chosen because it was lower than the former mobile home and where runoff from the contaminated area may have been concentrated (Appendix B, Photo 14). The subsurface material consisted of approximately 0.1 feet of silt and charcoal fragments. One sample was collected at this location from 0.0' to 0.1 feet on July 24, 2013. The only analytes that exceeded the screening levels were arsenic, copper, and zinc. The sample collected on July 18, 2013 was not analyzed.

Tire-Fire-7 Conclusion

The concentrations of arsenic, copper, and zinc exceeded the screening levels and were higher than the concentrations in the reference metals sample. There were small pieces of charcoal in the material at the surface which probably indicate that this area was burned. There may have been debris in this area as evidenced by the blanket and other items to the southwest of the sample location. It is possible that there has been some migration of metals by surface water as evidenced by the elevated concentrations of arsenic, copper, and zinc at Tire-Fire-7. The potential transport of metals may have occurred through dissolved metals being precipitated down slope or by the transport of soil particles from the metals-impacted areas of the Subject Property.

Tire-Fire-7 Recommendations

FES recommends the following at Tire-Fire-7:

- Collection of a deeper sample to achieve vertical delineation;
- Clearing of brush to the southwest of this sample point to see if there is evidence of debris in the area; and
- Collection of two additional samples (a shallow and a deep from a single location) to the southwest of Tire-Fire-7 to achieve horizontal delineation.

8.8 Human and Ecological Risk

Human Risk

The concentrations of DRO, TPH-Motor Oil, dimethyl phthalate, arsenic, cadmium, copper, lead, nickel, and zinc are considered a potential human risk if impacted soils are not removed from the Subject Property. Prior to redevelopment the areas where these analytes exceed the screening level will need to be removed from the Subject Property and disposed of at an appropriate permitted facility. Because some of the SVOCs and VOCs had reporting limits that exceeded the screening levels it is possible that these compounds could be present but undetected at the Subject Property. By removing the soils known to be contaminated (to the depth of the deepest sample) as recommended it seems less likely that undetected SVOCs exceeding the screening levels would remain.

Ecological Risk

The concentrations of DRO, TPH-Motor Oil, dimethyl phthalate, arsenic, cadmium, copper, lead, nickel, and zinc at the Subject Property are considered a potential ecological risk if impacted soils are not removed from the Subject Property. Prior to redevelopment the areas where these analytes exceed the screening level will need to be removed from the Subject Property and disposed of at an appropriate permitted facility. Because some of the SVOCs and VOCs had reporting limits that exceeded the screening levels it is possible that these compounds could be present but undetected at the Subject Property. By removing the soils known to be contaminated (to the depth of the

deepest sample) as recommended it seems less likely that undetected SVOCs exceeding the screening levels would remain. The following species are listed by the United States Fish and Wildlife Service and the National Marine Fisheries Service for the Weitchpec quadrangle that includes the Subject Property and the surrounding eight quadrangles:

Type	Listing Agency	Common Name	Category	Habitat Designated
Fish	NMFS	green sturgeon	T	yes
	NMFS	CA coastal Chinook salmon	T	yes
	US FWS	tidewater goby	E	yes
	NMFS	Northern California steelhead	T	yes
	NMFS	S. OR/N. CA coho salmon	T	yes
Birds	US FWS	marbled murrelet	T	yes
	US FWS	Western yellow-billed cuckoo	C	no
	US FWS	northern spotted owl	T	yes
Mammals	US FWS	fisher, West Coast DPS	C	no

US FWS US Fish and Wildlife Service
 NMFS National Marine Fisheries Service
 T Threatened species
 C Candidate species
 DPS Distinct Population Segment

8.9 Principal Study Questions

We have performed a Phase II environmental site assessment of the property located at Yurok Tribe Assignment number 530-053-010-73 on Highway 96 approximately one mile east of Weitchpec, CA in conformance with the scope and limitations of ASTM Practice E 1903-11 and for the following objectives developed pursuant to section 5.1 of ASTM Practice E 1903-11.

- assess and evaluate the recognized environmental conditions identified in the Phase I ESA conducted by the YTEP in 2012; and
- provide sufficient information regarding the presence or absence of contamination at the Site.

The principal study questions were whether the Subject Property contains contaminated soils from the unauthorized burning of tires and a former residence above concentrations regarded as safe for use of the Subject Property?

The alternative actions that could result from resolution of the principal study questions include:

- If contamination is not identified over allowable levels the Subject Property can be cleaned up and the Yurok Tribe can proceed with redevelopment of the Subject Property; and
- If contamination is identified over allowable levels, additional assessment and/or cleanup may be necessary prior to redevelopment and use of the Subject Property.
- If contamination is limited to the areas sampled; and
- Additional assessment and cleanup will be necessary prior to redevelopment.

This assessment has concluded that contamination is present over allowable levels in the area where tires were burned, in the area of the former residence, and in the vicinity of Tire-Fire-7. These areas will require excavation and disposal of soil after the surface debris is removed. Additional assessment is necessary to the southwest of Tire-Fire-7. Confirmation sampling will be required at the time of the excavation to ensure that the horizontal extent of contamination has been removed and that remaining soils do not contain contaminants above the screening levels.

Reporting Limits Exceeding Screening Levels for SVOCs and VOCs

As listed in Section 8.0 there were 23 instances where the reporting limits exceeded the screening levels for SVOCs. Only one SVOC (dimethyl phthalate) was detected in the deeper samples from the initial four sampling locations and the concentration was below the screening level. It is possible that some SVOCs may be present at the Subject Property at concentrations exceeding the screening levels but below the laboratory reporting limits. By removing the soils known to be contaminated (to the depth of the deepest sample) as recommended it seems less likely that SVOCs exceeding the screening levels would remain.

As listed in Section 8.0 there were two instances where the reporting limits exceeded the screening levels for VOCs. The two compounds were 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. Although all of the VOCs that were detected at the Subject Property were below the screening levels, it is possible that the two VOCs may be present at the Subject Property at concentrations exceeding the screening levels. By removing the soils known to be contaminated (to the depth of the deepest sample) as recommended it seems less likely that VOCs exceeding the screening levels would remain.

9.0 REFERENCES

ASTM E1903 – 11, 2011, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*.

California Regional Water Quality Control Board San Francisco Bay Region, 2008, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, INTERIM FINAL- November 2007 (Revised May 2008)*.

Wagner and Saucedo, 1987, *Geologic Map of the Weed Quadrangle, California*, California Division of Mines and Geology.

Yurok Tribe Environmental Program, 2012, *Phase I Environmental Site Assessment Report for: Yurok Tribe Assignment Number 530-053-010-73, Located on: Near Saints Rest, Highway 96, in Weitchpec, California, APN: 530-053-010-000*, September 17.

TABLES

TABLE 1
SUMMARY OF CHEMICAL ANALYSES OF SOIL SAMPLES FOR PETROLEUM, SVOCs, AND VOCs
TIRE FIRE PROPERTY
Humboldt County, California

	Date Sampled	Diesel Range Organics	TPH-Motor Oil	Gasoline Range Organics	Bis(2-Ethylhexyl) Phthalate	Butyl Benzyl Phthalate	Dimethyl Phthalate	Naphthalene	Phenol	Pyridine	Acetone	Benzene	2-Butanone (Methyl Ethyl Ketone)	Toluene
	Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample ID	Residential Screening Level	83 ^a	370 ^a	83 ^a	35 ^a	256 ^b	0.035 ^a	1.3 ^a	0.076 ^a	78.2 ^b	0.5 ^a	0.044 ^a	3.9 ^a	2.9 ^a
Tire-Fire-1-0.0'-0.1'	09-Apr-13	25 ¹	86 ¹	<0.50	<0.50 / 0.14 ²	<0.50 / 0.02 ²	<0.50 / 0.055 ²	<0.50 / 0.024 ²	<0.50 / 0.023 ²	<0.50 / 0.031 ²	<0.065	<0.0013	<0.026	<0.0013
Tire-Fire-1-0.5'-0.6'	09-Apr-13	<5.0	<25	<0.50	<0.50 / <0.014 ²	<0.50 / <0.014 ²	<0.50 / 0.077 ²	<0.50 / <0.027 ²	<0.50 / <0.027 ²	<0.50 / <0.027 ²	<0.042	<0.00083	<0.017	<0.00083
Tire-Fire-1-(1.2')	24-Jul-13	--	--	--	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	--	--	--	--
Tire-Fire-2-0.0'-0.1'	09-Apr-13	64 ¹	99 ¹	<0.50	<0.50 / 0.042 ²	<0.50 / <0.016 ²	0.50 / 0.091 ²	<0.50 / <0.031 ²	<0.50 / <0.031 ²	<0.50 / <0.031 ²	0.067	<0.00084	<0.017	<0.00084
Tire-Fire-2-0.5'-0.6'	09-Apr-13	36 ¹	170 ¹	<0.50	<0.50 / <0.026 ²	<0.50 / <0.026 ²	0.53 / 0.091 ²	<0.50 / <0.053 ²	<0.50 / <0.053 ²	<0.50 / <0.053 ²	<0.047	<0.00095	<0.019	<0.00095
Tire-Fire-2-(1.3')	24-Jul-13	--	--	--	<0.010	<0.010	0.011	<0.020	<0.020	<0.020	--	--	--	--
Tire-Fire-3-0.0'-0.1'	09-Apr-13	6,300 ¹	12,000 ¹	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.150	<0.00090	0.035	<0.00090
Tire-Fire-3-0.5'-0.6'	09-Apr-13	1,000 ¹	4,400 ¹	<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.100	<0.00096	<0.019	<0.00096
Tire-Fire-3-(1.5')	24-Jul-13	13 ¹	81 ¹	--	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	--	--	--	--
Tire-Fire-4-0.0'-0.1'	09-Apr-13	31 ¹	180 ¹	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.110	<0.00087	<0.017	<0.00087
Tire-Fire-4-0.5'-0.6'	09-Apr-13	220 ¹	930 ¹	<0.50	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.052	<0.00088	<0.018	<0.00088
Tire-Fire-4-(1.0')	24-Jul-13	<5.0	<25	--	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	--	--	--	--
Tire-Fire-5-0.0'-0.1' (Duplicate of Tire-Fire-1-0.0'-0.1')	09-Apr-13	23 ¹	84 ¹	<0.50	2.8 / 0.042 ²	<0.50 / <0.013 ²	<0.50 / 0.074 ²	<0.50 / 0.030 ²	<0.50 / <0.027 ²	<0.50 / 0.040 ²	0.160	0.0027	0.026	0.0018
Tire-Fire-6-(0.0'-0.1')	24-Jul-13	14 ¹	150 ¹	--	0.16	0.23	<0.079	<0.16	<0.16	<0.16	--	--	--	--
Tire-Fire-7-(0.0'-0.1')	24-Jul-13	33 ¹	170 ¹	--	0.27	<0.10	<0.10	<0.20	<0.20	<0.20	--	--	--	--
Tire-Fire-8-(1.3') (Duplicate of Tire-Fire-3-(1.5'))	24-Jul-13	15 ¹	88 ¹	--	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	--	--	--	--
Tire-Fire-Background-Metals-0.0'-0.1'	09-Apr-13	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

25 Bold indicates a result that exceeds the detection limit.

6,300 Red bold indicates a result that exceeds a screening level.

-- Not analyzed.

mg/kg milligrams per kilogram or parts per million

^a Table A Environmental Screening Levels (ESLs) Shallow Soils (<3m bgs) Groundwater is Current or Potential Source of Drinking Water. California Regional Water Quality Control Board San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, November 2007, revised May 2008. The environmental screening level for TPH (residual fuels) was applied to motor oil.

^b USEPA - Online RSL Calculator - Resident Risk-Based Screening Levels (RSL) for Soil. http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

¹ The laboratory reported that "The chromatographic pattern was inconsistent with the profile of the reference fuel standard."

² SVOCs were initially analyzed on 4-15-13. The laboratory was asked to reanalyze because the reporting limits from the 4-15-13 analyses were higher than requested. The lab reanalyzed samples Tire-Fire-1, Tire-Fire-2, and Tire-Fire-5 on 4-24-13 but stated that "The reporting limit is elevated resulting from matrix interference." for samples Tire-Fire-3 and Tire-Fire-4 so they did not reanalyze them. The results for both analysis are shown for Tire-Fire-1, Tire-Fire-2, and Tire-Fire-5.

TABLE 2
SUMMARY OF CHEMICAL ANALYSES OF SOIL SAMPLES FOR METALS
TIRE FIRE PROPERTY
Humboldt County, California

	Date Sampled	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
	Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample ID	Residential Screening Level	77,400 ^a	6.3 ^b	0.39 ^b	750 ^b	4.0 ^b	1.7 ^b	2,500 ^c	40 ^b	230 ^b	200 ^b	NA	1,800 ^a	1.3 ^b	40 ^b	150 ^b	10 ^b	20 ^b	1.3 ^b	160 ^b	600 ^b
Tire-Fire-1-0.0'-0.1'	09-Apr-13	7,920	<2.00	1.01	31.4	<1.00	<1.00	27.1	19.4	82.1	30.0	8,210	349	<0.0835	<1.00	32.4	<1.00	<1.00	<1.00	24.5	1,440
Tire-Fire-1-0.5'-0.6'	09-Apr-13	8,810	<2.00	<1.00	9.63	<1.00	<1.00	31.8	12.4	146	<1.00	8,990	604	<0.0835	<1.00	27.7	<1.00	<1.00	<1.00	27.1	72.9
Tire-Fire-1-(1.2')	24-Jul-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tire-Fire-2-0.0'-0.1'	09-Apr-13	9,020	<2.00	1.04	58.4	<1.00	<1.00	24.5	10.5	102	19.9	7,720	335	<0.0835	<1.00	30.3	<1.00	<1.00	<1.00	24.7	429
Tire-Fire-2-0.5'-0.6'	09-Apr-13	9,680	<2.00	<1.00	11.8	<1.00	<1.00	28.1	13.8	181	1.03	10,800	402	<0.0835	<1.00	28.3	<1.00	<1.00	<1.00	32.5	48.4
Tire-Fire-2-(1.3')	24-Jul-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tire-Fire-3-0.0'-0.1'	09-Apr-13	10,800	4.43	10.8	109	<1.00	1.91	44.0	15.9	988	230	10,500	341	<0.0835	<1.00	86.8	<1.00	<1.00	<1.00	26.1	1,270
Tire-Fire-3-0.5'-0.6'	09-Apr-13	8,440	<2.00	2.20	29.1	<1.00	<1.00	51.1	22.0	70.3	14.0	24,100	391	<0.0835	<1.00	268	<1.00	<1.00	<1.00	33.1	84.9
Tire-Fire-3-(1.5')	24-Jul-13	11,800	--	<1.00	12.1	--	<1.00	12.2	14.4	204	<1.00	12,400	358	<0.0835	--	28.3	--	--	--	41.0	55.1
Tire-Fire-4-0.0'-0.1'	09-Apr-13	39,700	<2.00	26.8	329	<1.00	2.58	52.6	13.2	2,430	74.4	7,590	447	<0.0835	1.21	64.8	<1.00	<1.00	<1.00	28.6	2,830
Tire-Fire-4-0.5'-0.6'	09-Apr-13	9,830	<2.00	2.54	37.5	<1.00	<1.00	36.3	16.5	144	7.64	14,300	412	<0.0835	<1.00	95.9	<1.00	<1.00	<1.00	40.8	185
Tire-Fire-4-(1.0')	24-Jul-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tire-Fire-5-0.0'-0.1' (Duplicate of Tire-Fire-1-0.0'-0.1')	09-Apr-13	6,470	<2.00	<1.00	28.2	<1.00	<1.00	24.6	23.7	97.3	23.3	6,620	311	<0.0835	<1.00	29.1	<1.00	<1.00	<1.00	20.4	1,950
Tire-Fire-6-(0.0'-0.1')	24-Jul-13	8,650	--	<1.00	15.5	--	<1.00	12.9	10.7	104	3.96	9,080	304	<0.0835	--	20.4	--	--	--	28.1	90.2
Tire-Fire-7-(0.0'-0.1')	24-Jul-13	25,400	--	13.1	142	--	1.41	95.8	22.8	234	147	15,700	694	<0.0835	--	85.5	--	--	--	50.9	1,130
Tire-Fire-8-(1.3') (Duplicate of Tire-Fire-3-(1.5'))	18-Jul-13	14,100	--	<1.00	14.5	--	<1.00	14.5	17.7	240	1.04	15,600	414	<0.0835	--	39.2	--	--	--	47.6	64.4
Tire-Fire-Background-Metals-0.0'-0.1'	09-Apr-13	12,300	<2.00	4.33	122	<1.00	<1.00	43.5	12.9	30.5	11.0	7,290	538	<0.0835	<1.00	52.8	<1.00	<1.00	<1.00	26.6	60.6

Notes:

7,920 Bold indicates a result that exceeds the detection limit.

1.01 Red bold indicates a result that exceeds a screening level.

mg/kg milligrams per kilogram or parts per million

-- Not analyzed.

^a USEPA - Online RSL Calculator - Resident Risk-Based Screening Levels (RSL) for Soil. http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

^b Table A Environmental Screening Levels (ESLs) Shallow Soils (<3m bgs) Groundwater is Current or Potential Source of Drinking Water. California Regional Water Quality Control Board San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, November 2007, revised May 2008.

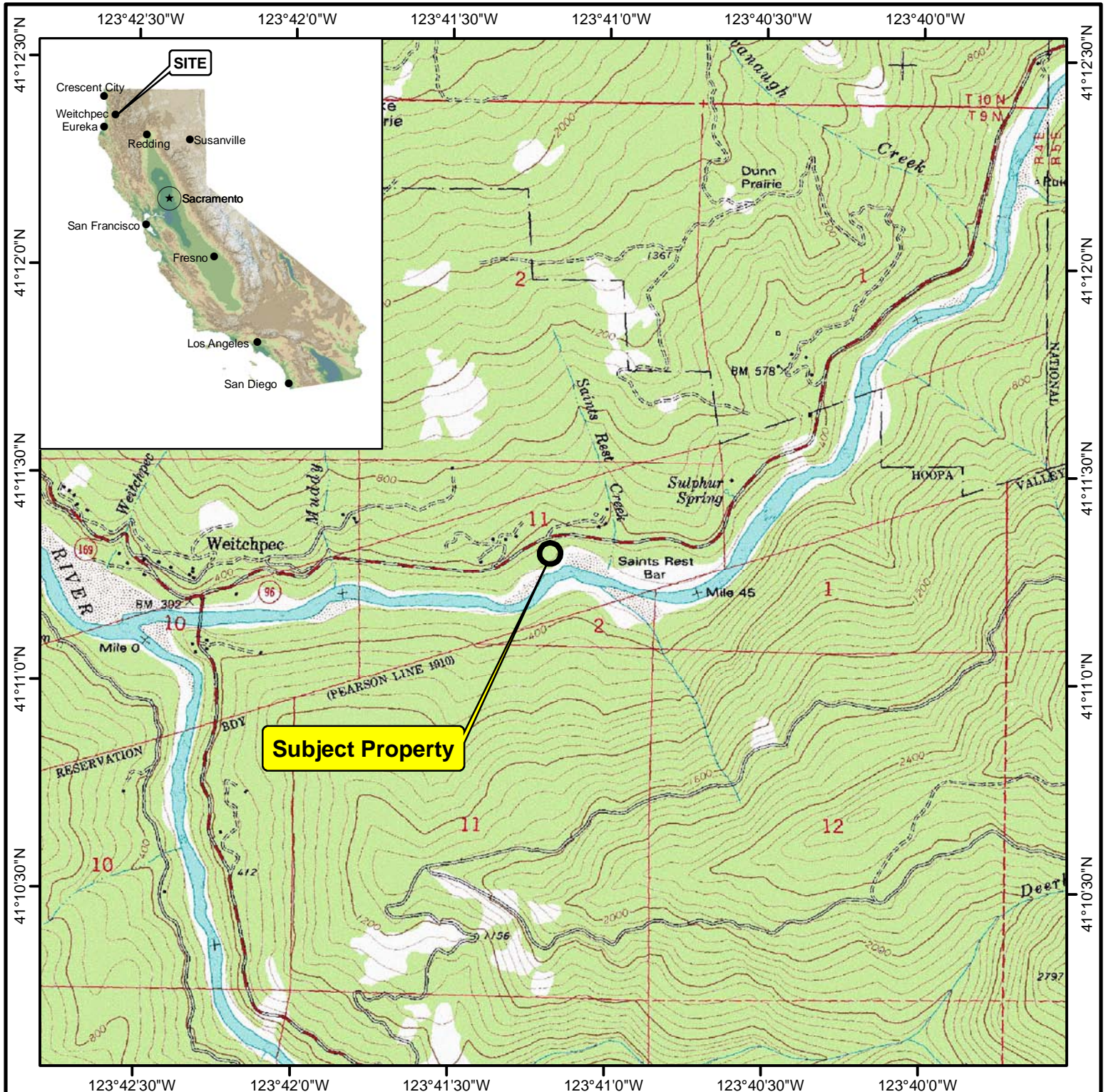
^c Table C. Environmental Screening Levels (ESLs) Deep Soils (>3m bgs) Groundwater is Current or Potential Source of Drinking Water. California Regional Water Quality Control Board San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, November 2007, revised May 2008.

TABLE 3
TIRE FIRE PROPERTY
GPS COORDINATES COLLECTED BY YTEP
Humboldt County, California

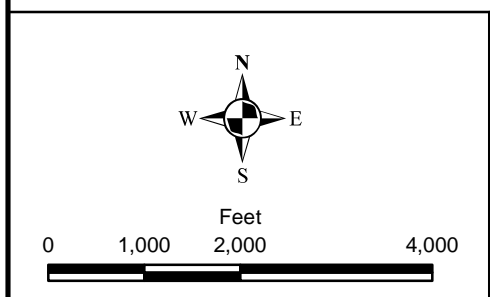
Feature	Latitude	Longitude	Collection Method	Horizontal Datum
Tire-Fire-1	41.1885928600	-123.6863982800	Collected by YTEP - (Trimble)	NAD 83
Tire-Fire-2	41.1885443800	-123.6865602900	Collected by YTEP - (Trimble)	NAD 83
Tire-Fire-3	41.1884045200	-123.6864808500	Collected by YTEP - (Trimble)	NAD 83
Tire-Fire-4	41.1883937800	-123.6865791300	Collected by YTEP - (Trimble)	NAD 83
Tire-Fire-Background-Metals	41.1887500000	-123.6864900000	Collected by YTEP - (Garmin)	NAD 83
Tire-Fire-6	41.1883257240	-123.6864727204	Collected by YTEP - (Trimble)	NAD 83
Tire-Fire-7	41.1883452273	-123.6866204041	Collected by YTEP - (Trimble)	NAD 83
Tire-Fire Access	41.1889575100	-123.6866250300	Collected by YTEP - (Trimble)	NAD 83

Notes: Locations were plotted based on the GPS locations collected by YTEP on April 9, 2013.

FIGURES



Subject Property



LEGEND

Base Image Data Source:
1:24,000 Digital Raster Graph Mosaic of
Humboldt County, California

ALL LOCATIONS APPROXIMATE

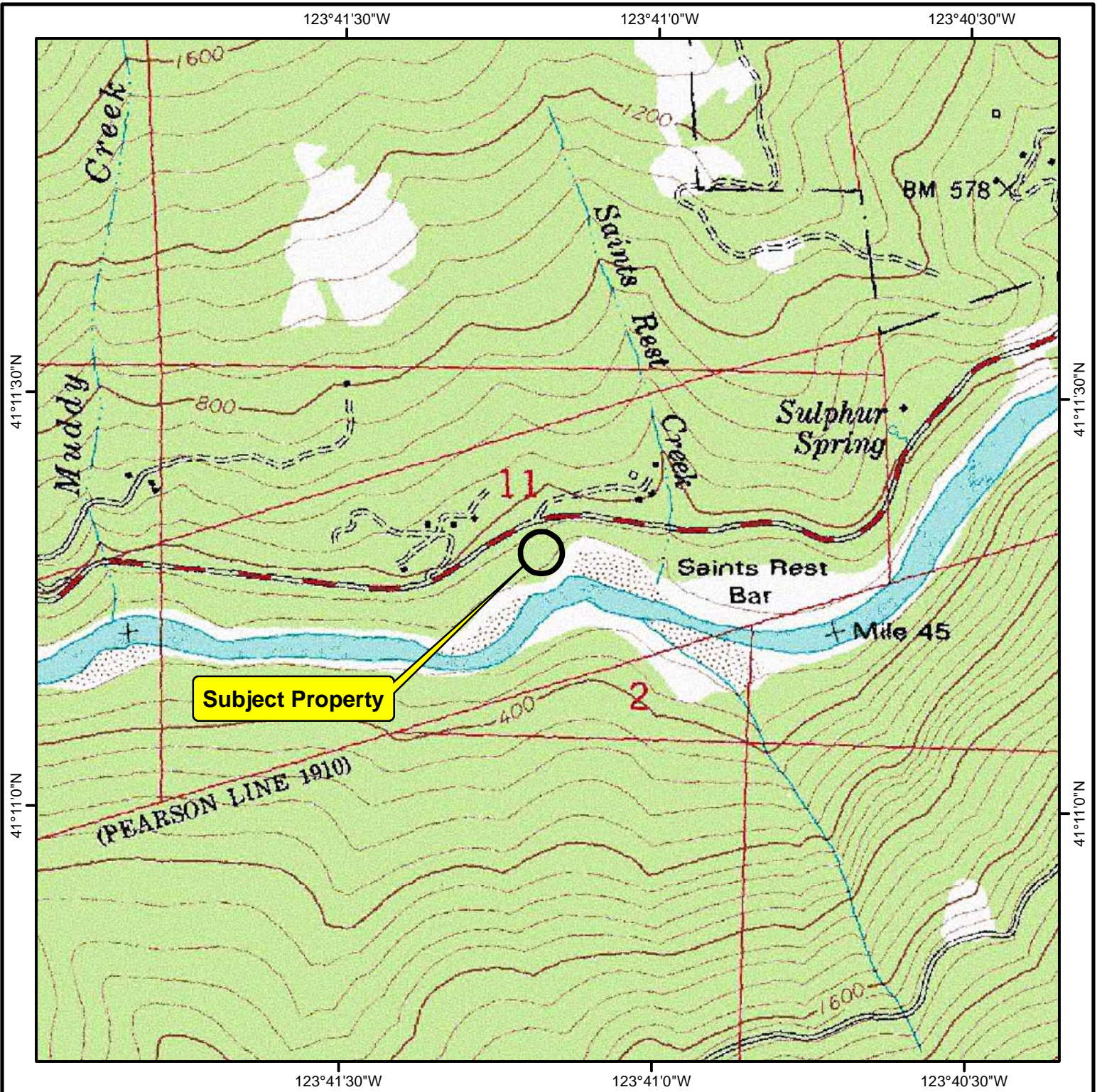
**Yurok Tribe
Environmental Program**

**Figure 1
Location Map
Tire Fire Property
Humboldt County, California**

Date: 8-9-13
By: SJT



Freshwater Environmental Services



LEGEND

Base Image Data Source:
1:24,000 Digital Raster Graph Mosaic of
Humboldt County, California

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

Figure 2
USGS 7.5' Topographic Map
Tire Fire Property
Humboldt County, California

Date: 8-9-13

By: SJT



Freshwater Environmental Services



LEGEND

Base Image Data Source: USDA-FSA Aerial Photography Field Office Color Digital Ortho Photo Quad, Image Date May 31, 2012.

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

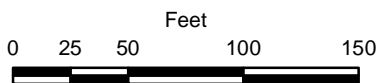
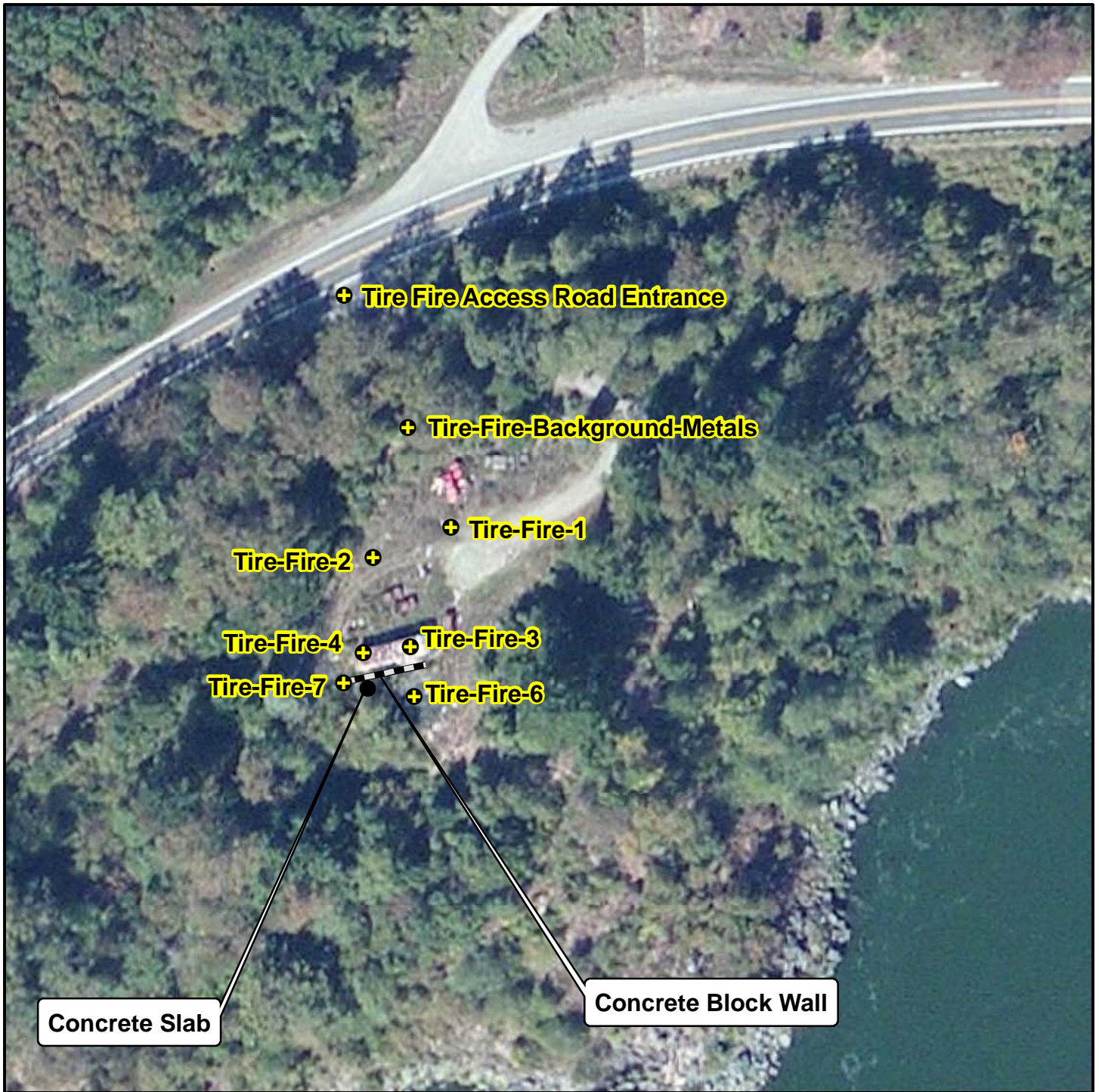
Figure 3
2012 Aerial Photograph
Tire Fire Property
Humboldt County, California



Freshwater Environmental Services

Date: 8-9-13

By: SJT



LEGEND

Sample locations and other features based on GPS points collected by YTEP on April 9, 2013 and July 24, 2013.

Base Image Data Source: terraserver
Image Date October 11, 2010.

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

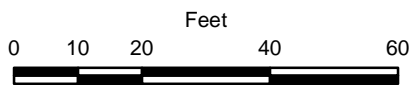
Figure 4
Sample Locations
Tire Fire Property
Humboldt County, California



Freshwater Environmental Services

Date: 8-19-13

By: SJT



LEGEND

+ Sample locations and other features based on GPS points collected by YTEP on April 9, 2013 and July 24, 2013.

Base Image Data Source: terraserver
Image Date October 11, 2010.

ALL LOCATIONS APPROXIMATE

Yurok Tribe
Environmental Program

Figure 5
Sample Location Detail
Tire Fire Property
Humboldt County, California



Freshwater Environmental Services

Date: 8-19-13

By: SJT

APPENDIX A
Boring Logs

Log of Boring Tire-Fire-1

Date Started: April 9, 2013
Date Completed: July 24, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel, Rock Bar, Jackhammer

Recovery	Depth (ft)	Description	USCS	Remarks
	0			Ground Surface
	0.1	Approximately 1" of melted metal and burned rubber was scraped off prior to collecting the sample.	GP	↑ Soil Sample: Tire-Fire-1-(0.0'-0.1') ↓ (Collected 4-9-13)
	0.2	~90% gravel consisting of angular schist fragments, ~5% silt, ~5% clay, moist, 10YR 5/1 (gray).		
	0.5	Boring stopped at 0.6' on April 9, 2013.		↑ Soil Sample: Tire-Fire-1-(0.5'-0.6') ↓ (Collected 4-9-13)
	0.7	Boring continued on July 18, 2013. ~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		
	1.0	Boring stopped at 1.0' on July 18, 2013.		Soil Sample: Tire-Fire-1-(1.0') (Collected 7-18-13 – Not Analyzed)
	1.1	Boring continued on July 24, 2013. ~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		Soil Sample: Tire-Fire-1-(1.2') (Collected 7-24-13)
	1.2	BOH ~ 1.2'		
	1.3			
	1.4			
	1.5			

Total Depth: ~ 1.2 feet

Tire-Fire-1

Yurok Tribe Environmental Program

Tire Fire Property



Freshwater Environmental Services

Date: 8-14-13

By: SJT

Log of Boring Tire-Fire-2

Date Started: April 9, 2013
Date Completed: July 24, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel, Rock Bar, Jackhammer

Recovery	Depth (ft)	Description	USCS	Remarks
	0	Ground Surface		
	0.1	~90% sand, medium to coarse, angular, ~10% silt, moist, 10YR 4/1 (dark gray).	SP	↑ Soil Sample: Tire-Fire-2-(0.0'-0.1') ↓ (Collected 4-9-13)
	0.2	~90% gravel consisting of angular schist fragments, ~5% silt, ~5% clay, moist, 10YR 5/1 (gray).	GP	
	0.5			↑ Soil Sample: Tire-Fire-2-(0.5'-0.6') ↓ (Collected 4-9-13)
	0.6	Boring stopped at 0.6' on April 9, 2013.		
	0.7	Boring continued on July 18, 2013.		
	0.8	~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		
	0.9			↑ Soil Sample: Tire-Fire-2-(1.0') ↓ (Collected 7-18-13 – Not Analyzed)
	1.0	Boring stopped at 1.0' on July 18, 2013.		
	1.1	Boring continued on July 24, 2013.		
	1.2	~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		
	1.3			↑ Soil Sample: Tire-Fire-2-(1.3') ↓ (Collected 7-24-13)
		BOH ~ 1.3'		
100%	1.4			
	1.5			

Total Depth: ~ 1.3 feet

Tire-Fire-2

Yurok Tribe Environmental Program
 Tire Fire Property



Freshwater Environmental Services

Date: 8-14-13

By: SJT

Log of Boring Tire-Fire-3

Date Started: April 9, 2013
Date Completed: July 24, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel, Rock Bar, Jackhammer

Recovery	Depth (ft)	Description	USCS	Remarks
	0			Ground Surface
	0.1	Approximately ½" of melted metal was scraped off prior to collecting the sample.	SP	↑ Soil Sample: Tire-Fire-3-(0.0'-0.1') (Collected 4-9-13)
	0.2	~90% sand, medium to coarse, angular to subangular, ~10% silt, moist, 10YR 4/1 (dark gray).	GP	
	0.3	~90% gravel consisting of schist fragments, angular, ~5% silt, ~5% clay, moist, 10YR 5/1 (gray).		
	0.5			↑ Soil Sample: Tire-Fire-3-(0.5'-0.6') (Collected 4-9-13)
	0.6	Boring stopped at 0.6' on April 9, 2013.		
	0.7	Boring continued on July 18, 2013.		
	0.8	~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		
	1.0			
	1.1			Soil Sample: Tire-Fire-3-(1.2') (Collected 7-18-13 – Not Analyzed)
	1.2	Boring stopped at 1.2' on July 18, 2013.		
	1.3	Boring continued on July 24, 2013.		
	1.4	~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		Soil Sample: Tire-Fire-3-(1.5') (Collected 7-24-13)
	1.5			
BOH ~ 1.5'				

Total Depth: ~ 1.5 feet

Tire-Fire-3

Yurok Tribe Environmental Program

Tire Fire Property

Date: 8-14-13

By: SJT



Freshwater Environmental Services

Log of Boring Tire-Fire-4

Date Started: April 9, 2013
Date Completed: July 24, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel, Rock Bar, Jackhammer

Recovery	Depth (ft)	Description	USCS	Remarks
	0	Ground Surface		
	0.1	Approximately 1" of melted metal and charcoal was scraped off prior to collecting the sample.	SP	↑ Soil Sample: Tire-Fire-4-(0.0'-0.1') (Collected 4-9-13)
	0.2	~90% sand, medium to coarse, angular, ~10% silt, moist, 10YR 4/1 (dark gray).	GP	
	0.3	~90% gravel consisting of angular schist fragments, ~5% silt, ~5% clay, moist, 10YR 5/1 (gray).		
	0.5			↑ Soil Sample: Tire-Fire-4-(0.5'-0.6') (Collected 4-9-13)
	0.6	Boring stopped at 0.6' on April 9, 2013.		
	0.7	Boring continued on July 18, 2013.		
	0.8	~80% gravel consisting of angular schist fragments, ~15% silt, ~5% clay, dry, 10YR 5/1 (gray).		
	0.9			Soil Sample: Tire-Fire-4-(1.0') (Collected 7-18-13 – Not Analyzed)
	1.0	Boring continued on July 24, 2013.		Tire-Fire-4-(1.0') (Collected on 7-24-13)
		BOH ~ 1.0'		
	1.1			
	1.2			
	1.3			
	1.4			
	1.5			

Total Depth: ~ 1.0 feet

Tire-Fire-4

Yurok Tribe Environmental Program

Tire Fire Property

Date: 7-19-13

By: SJT




Freshwater Environmental Services

Log of Boring **Tire-Fire-6**

Date Started: July 18, 2013
Date Completed: July 18, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel and Rock Bar

Recovery	Depth (ft)	Description	USCS	Remarks
	0			Ground Surface
100%	0.1	~50% silt, ~40% gravel consisting of angular schist fragments up to approximately 1", ~10% very fine sand, dry, 10YR 4/1 (dark gray).	ML	 Soil Sample: Tire-Fire-6-(0.0'-0.1') (Collected 7-24-13)
	0.2			BOH ~ 0.1'
	0.3			
	0.4			
	0.5			
	0.6			
	0.7			
	0.8			
	0.9			
	1.0			
	1.1			
	1.2			
	1.3			
	1.4			
	1.5			

Total Depth: ~ 0.1 feet

Tire-Fire-6

Yurok Tribe Environmental Program
 Tire Fire Property



Freshwater Environmental Services

Date: 8-7-13

By: SJT

Log of Boring **Tire-Fire-7**

Date Started: July 24, 2013
Date Completed: July 24, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel and Rock Bar

Recovery	Depth (ft)	Description	USCS	Remarks
	0			Ground Surface
100%	0.1	~80% silt, ~20% charcoal fragments, dry, 10YR 4/1 (dark gray).	ML	<div style="display: flex; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> <div style="margin-right: 5px;">↑</div> <div style="font-size: 0.8em;">Soil Sample: Tire-Fire-7-(0.0'-0.1')</div> <div style="margin-right: 5px;">↓</div> </div> <div style="margin-top: 5px;">(Collected 7-24-13)</div>
	0.2			BOH ~ 0.1'
	0.3			
	0.4			
	0.5			
	0.6			
	0.7			
	0.8			
	0.9			
	1.0			
	1.1			
	1.2			
	1.3			
	1.4			
	1.5			

Total Depth: ~ 0.1 feet

Tire-Fire-7

Yurok Tribe Environmental Program
Tire Fire Property



Freshwater Environmental Services


Date: 8-7-13

By: SJT

Log of Boring Tire-Fire-Background-Metals

Date Started: April 9, 2013
Date Completed: April 9, 2013

Driller: Freshwater Environmental Services
Drilling Method: Shovel and Rock Bar

Recovery	Depth (ft)	Description	USCS	Remarks
	0			Ground Surface
100%	0.1	~70% silt, ~20% gravel up to 3/4", subangular to subrounded, ~5% roots and organics, ~5% fine sand, moist, 10YR 4/1 (dark gray).	ML	<div style="border: 1px solid black; padding: 2px; display: inline-block;">  </div> Soil Sample: Tire-Fire-Background-Metals-(0.0'-0.1') (Collected 4-9-13)
	0.2			BOH ~ 0.1'
	0.3			
	0.4			
	0.5			
	0.6			
	0.7			
	0.8			
	0.9			
	1.0			
	1.1			
	1.2			
	1.3			
	1.4			
	1.5			

Total Depth: ~ 0.1 feet

Tire-Fire-Background-Metals

Yurok Tribe Environmental Program

Tire Fire Property



Freshwater Environmental Services

Date: 4-18-13

By: SJT

APPENDIX B
Sample Location Photographs



Photo 1. Tire Fire Site.
Image date: December 11, 2012.



Photo 2. Sample location for Tire-Fire-1.
Image date: December 11, 2012.



Photo 3. Sample location for Tire-Fire-1.
Image date: April 9, 2013.



Photo 4. Sample location for Tire-Fire-1.
Image date: April 9, 2013.



Photo 5. Sample location for Tire-Fire-2.
Image date: April 9, 2013.



Photo 6. Sample location for Tire-Fire-2.
Image date: April 9, 2013.



Photo 7. Sample location for Tire-Fire-3.
Image date: April 9, 2013.



Photo 8. Sample location for Tire-Fire-3.
Image date: April 9, 2013.



Photo 9. Sample location for Tire-Fire-4.
Image date: April 9, 2013.



Photo 10. Sample location for Tire-Fire-4.
Image date: April 9, 2013.



Photo 11. Sample location for Tire-Fire-Background-Metals.
Image date: April 9, 2013.



Photo 12. Sample location for Tire-Fire-Background-Metals.
Image date: April 9, 2013.



Photo 13. Sample location for Tire-Fire-6.
Image date: July 24, 2013.



Photo 14. Sample location for Tire-Fire-7.
Image date: July 24, 2013.

APPENDIX C
Laboratory Report and Chain-of-Custody Record - 1



CALSCIENCE

WORK ORDER NUMBER: 13-04-0823

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Freshwater Environmental Services

Client Project Name: Tire Fire Property

Attention: Stan Thiesen
78 Sunny Brae Center
Arcata, CA 95521-6742

Approved for release on 04/19/2013 by:
Don Burley
Project Manager

ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any litigation which may arise.



Contents

Client Project Name: Tire Fire Property

Work Order Number: 13-04-0823

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/11/2013. They were assigned to Work Order 13-04-0823.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with an immediate holding time (HT \leq 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontract Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B

Project: Tire Fire Property

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC 45	04/12/13	04/18/13 17:22	130412B03A

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	25	5.0	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	108	61-145	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC 45	04/12/13	04/18/13 17:38	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1	SG	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	104	61-145	

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC 45	04/12/13	04/18/13 17:57	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	64	5.0	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	97	61-145	

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC 45	04/12/13	04/18/13 18:14	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	36	5.0	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	99	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B

Project: Tire Fire Property

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC 45	04/12/13	04/18/13 18:31	130412B03A

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	6300	120	25	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	125	61-145			

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC 45	04/12/13	04/18/13 18:49	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	1000	100	20	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	111	61-145			

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC 45	04/12/13	04/18/13 19:06	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	31	10	2	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	105	61-145			

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	GC 45	04/12/13	04/18/13 19:25	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	220	50	10	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	96	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Return to Contents

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B

Project: Tire Fire Property

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC 45	04/12/13	04/18/13 19:42	130412B03A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Diesel Range Organics	23	5.0	1	SG,HD	mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
n-Octacosane	100	61-145	

Method Blank	099-15-414-214	N/A	Solid	GC 45	04/12/13	04/18/13 14:41	130412B03A
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Diesel Range Organics	ND	5.0	1		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
n-Octacosane	100	61-145	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Tire Fire Property

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC 45	04/12/13	04/18/13 17:22	130412B04A

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	86	25	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	108	61-145	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC 45	04/12/13	04/18/13 17:38	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1	SG	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	104	61-145	

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC 45	04/12/13	04/18/13 17:57	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	99	25	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	97	61-145	

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC 45	04/12/13	04/18/13 18:14	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	170	25	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	99	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Tire Fire Property

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC 45	04/12/13	04/18/13 18:31	130412B04A

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	12000	620	25	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	125	61-145			

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC 45	04/12/13	04/18/13 18:49	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	4400	500	20	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	111	61-145			

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC 45	04/12/13	04/18/13 19:06	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	180	50	2	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	105	61-145			

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	GC 45	04/12/13	04/18/13 19:25	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	930	250	10	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	96	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: Tire Fire Property

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC 45	04/12/13	04/18/13 19:42	130412B04A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Motor Oil	84	25	1	SG,HD	mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
n-Octacosane	100	61-145	

Method Blank	099-15-420-402	N/A	Solid	GC 45	04/12/13	04/18/13 14:41	130412B04A
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Motor Oil	ND	25	1		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
n-Octacosane	100	61-145	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5030C
Method: EPA 8015B

Project: Tire Fire Property

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC 22	04/12/13	04/12/13 17:20	130412B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	70	42-126	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC 22	04/12/13	04/12/13 18:59	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	78	42-126	

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC 22	04/12/13	04/12/13 19:32	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	76	42-126	

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC 22	04/12/13	04/12/13 20:05	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	76	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5030C
Method: EPA 8015B

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC 22	04/12/13	04/12/13 20:37	130412B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	71	42-126	

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC 22	04/12/13	04/12/13 21:10	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	76	42-126	

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC 22	04/12/13	04/12/13 21:43	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	72	42-126	

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	GC 22	04/12/13	04/12/13 22:16	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	77	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC 22	04/12/13	04/12/13 22:49	130412B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	73	42-126	

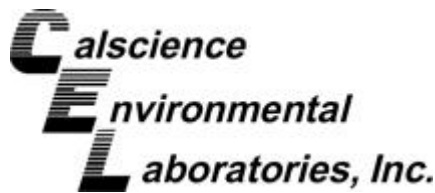
Method Blank	099-12-024-704	N/A	Solid	GC 22	04/12/13	04/12/13 14:08	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	71	42-126	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

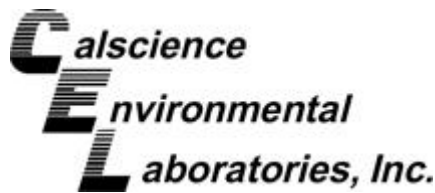
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC/MS CCC	04/12/13	04/15/13 14:13	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	78	38-134			2-Fluorophenol	96	42-120		
Nitrobenzene-d5	83	42-150			p-Terphenyl-d14	90	35-167		
Phenol-d6	101	46-118			2,4,6-Tribromophenol	100	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

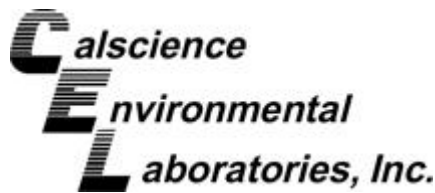
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC/MS CCC	04/12/13	04/15/13 16:24	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	80	38-134			2-Fluorophenol	95	42-120		
Nitrobenzene-d5	83	42-150			p-Terphenyl-d14	95	35-167		
Phenol-d6	99	46-118			2,4,6-Tribromophenol	78	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

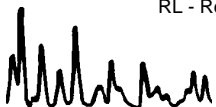
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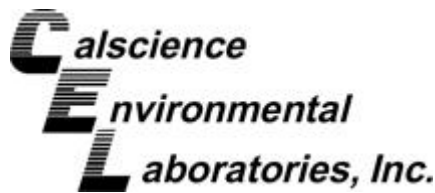
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC/MS CCC	04/12/13	04/15/13 16:50	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	0.50	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	78	38-134			2-Fluorophenol	92	42-120		
Nitrobenzene-d5	83	42-150			p-Terphenyl-d14	95	35-167		
Phenol-d6	101	46-118			2,4,6-Tribromophenol	99	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

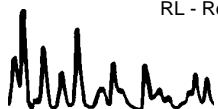
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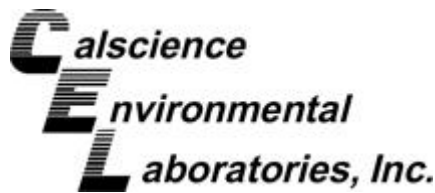
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC/MS CCC	04/12/13	04/15/13 17:17	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	0.53	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	76	38-134			2-Fluorophenol	88	42-120		
Nitrobenzene-d5	79	42-150			p-Terphenyl-d14	92	35-167		
Phenol-d6	92	46-118			2,4,6-Tribromophenol	82	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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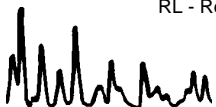
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC/MS CCC	04/12/13	04/15/13 18:09	130412L07

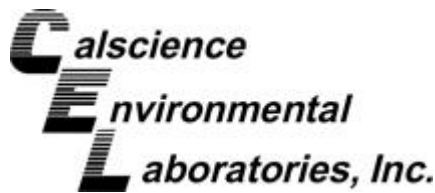
Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	1.0	2		2,4-Dimethylphenol	ND	1.0	2	
Acenaphthylene	ND	1.0	2		4,6-Dinitro-2-Methylphenol	ND	5.0	2	
Aniline	ND	1.0	2		2,4-Dinitrophenol	ND	5.0	2	
Anthracene	ND	1.0	2		2,4-Dinitrotoluene	ND	1.0	2	
Azobenzene	ND	1.0	2		2,6-Dinitrotoluene	ND	1.0	2	
Benzidine	ND	20	2		Fluoranthene	ND	1.0	2	
Benzo (a) Anthracene	ND	1.0	2		Fluorene	ND	1.0	2	
Benzo (a) Pyrene	ND	1.0	2		Hexachloro-1,3-Butadiene	ND	1.0	2	
Benzo (b) Fluoranthene	ND	1.0	2		Hexachlorobenzene	ND	1.0	2	
Benzo (g,h,i) Perylene	ND	1.0	2		Hexachlorocyclopentadiene	ND	5.0	2	
Benzo (k) Fluoranthene	ND	1.0	2		Hexachloroethane	ND	1.0	2	
Benzoic Acid	ND	5.0	2		Indeno (1,2,3-c,d) Pyrene	ND	1.0	2	
Benzyl Alcohol	ND	1.0	2		Isophorone	ND	1.0	2	
Bis(2-Chloroethoxy) Methane	ND	1.0	2		2-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroethyl) Ether	ND	5.0	2		1-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroisopropyl) Ether	ND	1.0	2		2-Methylphenol	ND	1.0	2	
Bis(2-Ethylhexyl) Phthalate	ND	1.0	2		3/4-Methylphenol	ND	1.0	2	
4-Bromophenyl-Phenyl Ether	ND	1.0	2		N-Nitroso-di-n-propylamine	ND	1.0	2	
Butyl Benzyl Phthalate	ND	1.0	2		N-Nitrosodimethylamine	ND	1.0	2	
4-Chloro-3-Methylphenol	ND	1.0	2		N-Nitrosodiphenylamine	ND	1.0	2	
4-Chloroaniline	ND	1.0	2		Naphthalene	ND	1.0	2	
2-Chloronaphthalene	ND	1.0	2		4-Nitroaniline	ND	1.0	2	
2-Chlorophenol	ND	1.0	2		3-Nitroaniline	ND	1.0	2	
4-Chlorophenyl-Phenyl Ether	ND	1.0	2		2-Nitroaniline	ND	1.0	2	
Chrysene	ND	1.0	2		Nitrobenzene	ND	5.0	2	
Di-n-Butyl Phthalate	ND	1.0	2		4-Nitrophenol	ND	1.0	2	
Di-n-Octyl Phthalate	ND	1.0	2		2-Nitrophenol	ND	1.0	2	
Dibenz (a,h) Anthracene	ND	1.0	2		Pentachlorophenol	ND	5.0	2	
Dibenzofuran	ND	1.0	2		Phenanthrene	ND	1.0	2	
1,2-Dichlorobenzene	ND	1.0	2		Phenol	ND	1.0	2	
1,3-Dichlorobenzene	ND	1.0	2		Pyrene	ND	1.0	2	
1,4-Dichlorobenzene	ND	1.0	2		Pyridine	ND	1.0	2	
3,3'-Dichlorobenzidine	ND	20	2		1,2,4-Trichlorobenzene	ND	1.0	2	
2,4-Dichlorophenol	ND	1.0	2		2,4,6-Trichlorophenol	ND	1.0	2	
Diethyl Phthalate	ND	1.0	2		2,4,5-Trichlorophenol	ND	1.0	2	
Dimethyl Phthalate	ND	1.0	2						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	69	38-134			2-Fluorophenol	73	42-120		
Nitrobenzene-d5	66	42-150			p-Terphenyl-d14	124	35-167		
Phenol-d6	79	46-118			2,4,6-Tribromophenol	92	36-132		

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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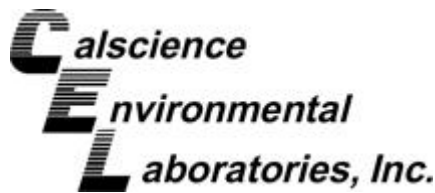
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC/MS CCC	04/12/13	04/15/13 19:29	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	5.0	10		2,4-Dimethylphenol	ND	5.0	10	
Acenaphthylene	ND	5.0	10		4,6-Dinitro-2-Methylphenol	ND	25	10	
Aniline	ND	5.0	10		2,4-Dinitrophenol	ND	25	10	
Anthracene	ND	5.0	10		2,4-Dinitrotoluene	ND	5.0	10	
Azobenzene	ND	5.0	10		2,6-Dinitrotoluene	ND	5.0	10	
Benidine	ND	100	10		Fluoranthene	ND	5.0	10	
Benzo (a) Anthracene	ND	5.0	10		Fluorene	ND	5.0	10	
Benzo (a) Pyrene	ND	5.0	10		Hexachloro-1,3-Butadiene	ND	5.0	10	
Benzo (b) Fluoranthene	ND	5.0	10		Hexachlorobenzene	ND	5.0	10	
Benzo (g,h,i) Perylene	ND	5.0	10		Hexachlorocyclopentadiene	ND	25	10	
Benzo (k) Fluoranthene	ND	5.0	10		Hexachloroethane	ND	5.0	10	
Benzoic Acid	ND	25	10		Indeno (1,2,3-c,d) Pyrene	ND	5.0	10	
Benzyl Alcohol	ND	5.0	10		Isophorone	ND	5.0	10	
Bis(2-Chloroethoxy) Methane	ND	5.0	10		2-Methylnaphthalene	ND	5.0	10	
Bis(2-Chloroethyl) Ether	ND	25	10		1-Methylnaphthalene	ND	5.0	10	
Bis(2-Chloroisopropyl) Ether	ND	5.0	10		2-Methylphenol	ND	5.0	10	
Bis(2-Ethylhexyl) Phthalate	ND	5.0	10		3/4-Methylphenol	ND	5.0	10	
4-Bromophenyl-Phenyl Ether	ND	5.0	10		N-Nitroso-di-n-propylamine	ND	5.0	10	
Butyl Benzyl Phthalate	ND	5.0	10		N-Nitrosodimethylamine	ND	5.0	10	
4-Chloro-3-Methylphenol	ND	5.0	10		N-Nitrosodiphenylamine	ND	5.0	10	
4-Chloroaniline	ND	5.0	10		Naphthalene	ND	5.0	10	
2-Chloronaphthalene	ND	5.0	10		4-Nitroaniline	ND	5.0	10	
2-Chlorophenol	ND	5.0	10		3-Nitroaniline	ND	5.0	10	
4-Chlorophenyl-Phenyl Ether	ND	5.0	10		2-Nitroaniline	ND	5.0	10	
Chrysene	ND	5.0	10		Nitrobenzene	ND	25	10	
Di-n-Butyl Phthalate	ND	5.0	10		4-Nitrophenol	ND	5.0	10	
Di-n-Octyl Phthalate	ND	5.0	10		2-Nitrophenol	ND	5.0	10	
Dibenz (a,h) Anthracene	ND	5.0	10		Pentachlorophenol	ND	25	10	
Dibenzofuran	ND	5.0	10		Phenanthrene	ND	5.0	10	
1,2-Dichlorobenzene	ND	5.0	10		Phenol	ND	5.0	10	
1,3-Dichlorobenzene	ND	5.0	10		Pyrene	ND	5.0	10	
1,4-Dichlorobenzene	ND	5.0	10		Pyridine	ND	5.0	10	
3,3'-Dichlorobenzidine	ND	100	10		1,2,4-Trichlorobenzene	ND	5.0	10	
2,4-Dichlorophenol	ND	5.0	10		2,4,6-Trichlorophenol	ND	5.0	10	
Diethyl Phthalate	ND	5.0	10		2,4,5-Trichlorophenol	ND	5.0	10	
Dimethyl Phthalate	ND	5.0	10						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	69	38-134			2-Fluorophenol	64	42-120		
Nitrobenzene-d5	60	42-150			p-Terphenyl-d14	104	35-167		
Phenol-d6	70	46-118			2,4,6-Tribromophenol	57	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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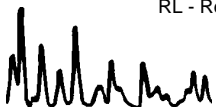
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC/MS CCC	04/12/13	04/15/13 18:36	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	1.0	2		2,4-Dimethylphenol	ND	1.0	2	
Acenaphthylene	ND	1.0	2		4,6-Dinitro-2-Methylphenol	ND	5.0	2	
Aniline	ND	1.0	2		2,4-Dinitrophenol	ND	5.0	2	
Anthracene	ND	1.0	2		2,4-Dinitrotoluene	ND	1.0	2	
Azobenzene	ND	1.0	2		2,6-Dinitrotoluene	ND	1.0	2	
Benzidine	ND	20	2		Fluoranthene	ND	1.0	2	
Benzo (a) Anthracene	ND	1.0	2		Fluorene	ND	1.0	2	
Benzo (a) Pyrene	ND	1.0	2		Hexachloro-1,3-Butadiene	ND	1.0	2	
Benzo (b) Fluoranthene	ND	1.0	2		Hexachlorobenzene	ND	1.0	2	
Benzo (g,h,i) Perylene	ND	1.0	2		Hexachlorocyclopentadiene	ND	5.0	2	
Benzo (k) Fluoranthene	ND	1.0	2		Hexachloroethane	ND	1.0	2	
Benzoic Acid	ND	5.0	2		Indeno (1,2,3-c,d) Pyrene	ND	1.0	2	
Benzyl Alcohol	ND	1.0	2		Isophorone	ND	1.0	2	
Bis(2-Chloroethoxy) Methane	ND	1.0	2		2-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroethyl) Ether	ND	5.0	2		1-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroisopropyl) Ether	ND	1.0	2		2-Methylphenol	ND	1.0	2	
Bis(2-Ethylhexyl) Phthalate	ND	1.0	2		3/4-Methylphenol	ND	1.0	2	
4-Bromophenyl-Phenyl Ether	ND	1.0	2		N-Nitroso-di-n-propylamine	ND	1.0	2	
Butyl Benzyl Phthalate	ND	1.0	2		N-Nitrosodimethylamine	ND	1.0	2	
4-Chloro-3-Methylphenol	ND	1.0	2		N-Nitrosodiphenylamine	ND	1.0	2	
4-Chloroaniline	ND	1.0	2		Naphthalene	ND	1.0	2	
2-Chloronaphthalene	ND	1.0	2		4-Nitroaniline	ND	1.0	2	
2-Chlorophenol	ND	1.0	2		3-Nitroaniline	ND	1.0	2	
4-Chlorophenyl-Phenyl Ether	ND	1.0	2		2-Nitroaniline	ND	1.0	2	
Chrysene	ND	1.0	2		Nitrobenzene	ND	5.0	2	
Di-n-Butyl Phthalate	ND	1.0	2		4-Nitrophenol	ND	1.0	2	
Di-n-Octyl Phthalate	ND	1.0	2		2-Nitrophenol	ND	1.0	2	
Dibenz (a,h) Anthracene	ND	1.0	2		Pentachlorophenol	ND	5.0	2	
Dibenzofuran	ND	1.0	2		Phenanthrene	ND	1.0	2	
1,2-Dichlorobenzene	ND	1.0	2		Phenol	ND	1.0	2	
1,3-Dichlorobenzene	ND	1.0	2		Pyrene	ND	1.0	2	
1,4-Dichlorobenzene	ND	1.0	2		Pyridine	ND	1.0	2	
3,3'-Dichlorobenzidine	ND	20	2		1,2,4-Trichlorobenzene	ND	1.0	2	
2,4-Dichlorophenol	ND	1.0	2		2,4,6-Trichlorophenol	ND	1.0	2	
Diethyl Phthalate	ND	1.0	2		2,4,5-Trichlorophenol	ND	1.0	2	
Dimethyl Phthalate	ND	1.0	2						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	54	38-134			2-Fluorophenol	48	42-120		
Nitrobenzene-d5	60	42-150			p-Terphenyl-d14	84	35-167		
Phenol-d6	63	46-118			2,4,6-Tribromophenol	56	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

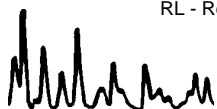
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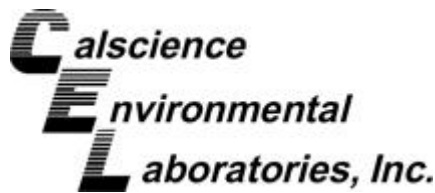
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.5'-0.6'	13-04-0823-8-A	04/09/13 12:05	Solid	GC/MS CCC	04/12/13	04/15/13 19:02	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	2.5	5		2,4-Dimethylphenol	ND	2.5	5	
Acenaphthylene	ND	2.5	5		4,6-Dinitro-2-Methylphenol	ND	12	5	
Aniline	ND	2.5	5		2,4-Dinitrophenol	ND	12	5	
Anthracene	ND	2.5	5		2,4-Dinitrotoluene	ND	2.5	5	
Azobenzene	ND	2.5	5		2,6-Dinitrotoluene	ND	2.5	5	
Benzidine	ND	50	5		Fluoranthene	ND	2.5	5	
Benzo (a) Anthracene	ND	2.5	5		Fluorene	ND	2.5	5	
Benzo (a) Pyrene	ND	2.5	5		Hexachloro-1,3-Butadiene	ND	2.5	5	
Benzo (b) Fluoranthene	ND	2.5	5		Hexachlorobenzene	ND	2.5	5	
Benzo (g,h,i) Perylene	ND	2.5	5		Hexachlorocyclopentadiene	ND	12	5	
Benzo (k) Fluoranthene	ND	2.5	5		Hexachloroethane	ND	2.5	5	
Benzoic Acid	ND	12	5		Indeno (1,2,3-c,d) Pyrene	ND	2.5	5	
Benzyl Alcohol	ND	2.5	5		Isophorone	ND	2.5	5	
Bis(2-Chloroethoxy) Methane	ND	2.5	5		2-Methylnaphthalene	ND	2.5	5	
Bis(2-Chloroethyl) Ether	ND	12	5		1-Methylnaphthalene	ND	2.5	5	
Bis(2-Chloroisopropyl) Ether	ND	2.5	5		2-Methylphenol	ND	2.5	5	
Bis(2-Ethylhexyl) Phthalate	ND	2.5	5		3/4-Methylphenol	ND	2.5	5	
4-Bromophenyl-Phenyl Ether	ND	2.5	5		N-Nitroso-di-n-propylamine	ND	2.5	5	
Butyl Benzyl Phthalate	ND	2.5	5		N-Nitrosodimethylamine	ND	2.5	5	
4-Chloro-3-Methylphenol	ND	2.5	5		N-Nitrosodiphenylamine	ND	2.5	5	
4-Chloroaniline	ND	2.5	5		Naphthalene	ND	2.5	5	
2-Chloronaphthalene	ND	2.5	5		4-Nitroaniline	ND	2.5	5	
2-Chlorophenol	ND	2.5	5		3-Nitroaniline	ND	2.5	5	
4-Chlorophenyl-Phenyl Ether	ND	2.5	5		2-Nitroaniline	ND	2.5	5	
Chrysene	ND	2.5	5		Nitrobenzene	ND	12	5	
Di-n-Butyl Phthalate	ND	2.5	5		4-Nitrophenol	ND	2.5	5	
Di-n-Octyl Phthalate	ND	2.5	5		2-Nitrophenol	ND	2.5	5	
Dibenz (a,h) Anthracene	ND	2.5	5		Pentachlorophenol	ND	12	5	
Dibenzofuran	ND	2.5	5		Phenanthrene	ND	2.5	5	
1,2-Dichlorobenzene	ND	2.5	5		Phenol	ND	2.5	5	
1,3-Dichlorobenzene	ND	2.5	5		Pyrene	ND	2.5	5	
1,4-Dichlorobenzene	ND	2.5	5		Pyridine	ND	2.5	5	
3,3'-Dichlorobenzidine	ND	50	5		1,2,4-Trichlorobenzene	ND	2.5	5	
2,4-Dichlorophenol	ND	2.5	5		2,4,6-Trichlorophenol	ND	2.5	5	
Diethyl Phthalate	ND	2.5	5		2,4,5-Trichlorophenol	ND	2.5	5	
Dimethyl Phthalate	ND	2.5	5						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	72	38-134			2-Fluorophenol	69	42-120		
Nitrobenzene-d5	65	42-150			p-Terphenyl-d14	106	35-167		
Phenol-d6	74	46-118			2,4,6-Tribromophenol	52	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

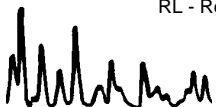
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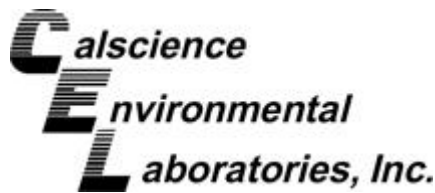
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC/MS CCC	04/12/13	04/15/13 17:43	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	2.8	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	72	38-134			2-Fluorophenol	88	42-120		
Nitrobenzene-d5	79	42-150			p-Terphenyl-d14	96	35-167		
Phenol-d6	97	46-118			2,4,6-Tribromophenol	100	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

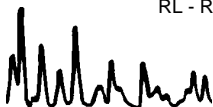
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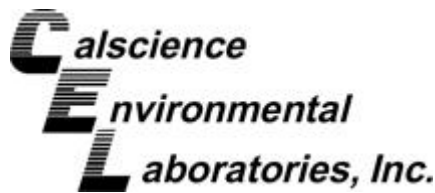
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-2,450	N/A	Solid	GC/MS CCC	04/12/13	04/15/13 12:54	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	79	38-134			2-Fluorophenol	79	42-120		
Nitrobenzene-d5	82	42-150			p-Terphenyl-d14	88	35-167		
Phenol-d6	89	46-118			2,4,6-Tribromophenol	57	36-132		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

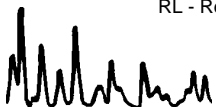
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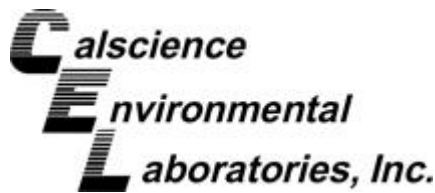
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-G	04/09/13 11:00	Solid	GC/MS W	04/09/13	04/17/13 14:20	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	65	1.3		c-1,3-Dichloropropene	ND	1.3	1.3	
Benzene	ND	1.3	1.3		t-1,3-Dichloropropene	ND	2.6	1.3	
Bromobenzene	ND	1.3	1.3		Ethylbenzene	ND	1.3	1.3	
Bromochloromethane	ND	2.6	1.3		2-Hexanone	ND	26	1.3	
Bromodichloromethane	ND	1.3	1.3		Isopropylbenzene	ND	1.3	1.3	
Bromoforn	ND	6.5	1.3		p-Isopropyltoluene	ND	1.3	1.3	
Bromomethane	ND	26	1.3		Methylene Chloride	ND	13	1.3	
2-Butanone	ND	26	1.3		4-Methyl-2-Pentanone	ND	26	1.3	
n-Butylbenzene	ND	1.3	1.3		Naphthalene	ND	13	1.3	
sec-Butylbenzene	ND	1.3	1.3		n-Propylbenzene	ND	2.6	1.3	
tert-Butylbenzene	ND	1.3	1.3		Styrene	ND	1.3	1.3	
Carbon Disulfide	ND	13	1.3		1,1,1,2-Tetrachloroethane	ND	1.3	1.3	
Carbon Tetrachloride	ND	1.3	1.3		1,1,2,2-Tetrachloroethane	ND	2.6	1.3	
Chlorobenzene	ND	1.3	1.3		Tetrachloroethene	ND	1.3	1.3	
Chloroethane	ND	2.6	1.3		Toluene	ND	1.3	1.3	
Chloroform	ND	1.3	1.3		1,2,3-Trichlorobenzene	ND	2.6	1.3	
Chloromethane	ND	26	1.3		1,2,4-Trichlorobenzene	ND	2.6	1.3	
2-Chlorotoluene	ND	1.3	1.3		1,1,1-Trichloroethane	ND	1.3	1.3	
4-Chlorotoluene	ND	1.3	1.3		1,1,2-Trichloroethane	ND	1.3	1.3	
Dibromochloromethane	ND	2.6	1.3		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	13	1.3	
1,2-Dibromo-3-Chloropropane	ND	6.5	1.3		Trichloroethene	ND	2.6	1.3	
1,2-Dibromoethane	ND	1.3	1.3		Trichlorofluoromethane	ND	13	1.3	
Dibromomethane	ND	1.3	1.3		1,2,3-Trichloropropane	ND	2.6	1.3	
1,2-Dichlorobenzene	ND	1.3	1.3		1,2,4-Trimethylbenzene	ND	2.6	1.3	
1,3-Dichlorobenzene	ND	1.3	1.3		1,3,5-Trimethylbenzene	ND	2.6	1.3	
1,4-Dichlorobenzene	ND	1.3	1.3		Vinyl Acetate	ND	13	1.3	
Dichlorodifluoromethane	ND	2.6	1.3		Vinyl Chloride	ND	1.3	1.3	
1,1-Dichloroethane	ND	1.3	1.3		p/m-Xylene	ND	2.6	1.3	
1,2-Dichloroethane	ND	1.3	1.3		o-Xylene	ND	1.3	1.3	
1,1-Dichloroethene	ND	1.3	1.3		Methyl-t-Butyl Ether (MTBE)	ND	2.6	1.3	
c-1,2-Dichloroethene	ND	1.3	1.3		Tert-Butyl Alcohol (TBA)	ND	26	1.3	
t-1,2-Dichloroethene	ND	1.3	1.3		Diisopropyl Ether (DIPE)	ND	1.3	1.3	
1,2-Dichloropropane	ND	1.3	1.3		Ethyl-t-Butyl Ether (ETBE)	ND	1.3	1.3	
1,3-Dichloropropane	ND	1.3	1.3		Tert-Amyl-Methyl Ether (TAME)	ND	1.3	1.3	
2,2-Dichloropropane	ND	6.5	1.3		Ethanol	ND	650	1.3	
1,1-Dichloropropene	ND	2.6	1.3						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	87	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	114	71-155			Toluene-d8	98	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

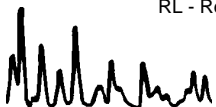
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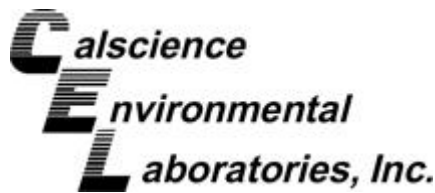
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.5'-0.6'	13-04-0823-2-C	04/09/13 11:20	Solid	GC/MS W	04/09/13	04/17/13 16:32	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	42	0.833		c-1,3-Dichloropropene	ND	0.83	0.833	
Benzene	ND	0.83	0.833		t-1,3-Dichloropropene	ND	1.7	0.833	
Bromobenzene	ND	0.83	0.833		Ethylbenzene	ND	0.83	0.833	
Bromochloromethane	ND	1.7	0.833		2-Hexanone	ND	17	0.833	
Bromodichloromethane	ND	0.83	0.833		Isopropylbenzene	ND	0.83	0.833	
Bromoform	ND	4.2	0.833		p-Isopropyltoluene	ND	0.83	0.833	
Bromomethane	ND	17	0.833		Methylene Chloride	ND	8.3	0.833	
2-Butanone	ND	17	0.833		4-Methyl-2-Pentanone	ND	17	0.833	
n-Butylbenzene	ND	0.83	0.833		Naphthalene	ND	8.3	0.833	
sec-Butylbenzene	ND	0.83	0.833		n-Propylbenzene	ND	1.7	0.833	
tert-Butylbenzene	ND	0.83	0.833		Styrene	ND	0.83	0.833	
Carbon Disulfide	ND	8.3	0.833		1,1,1,2-Tetrachloroethane	ND	0.83	0.833	
Carbon Tetrachloride	ND	0.83	0.833		1,1,2,2-Tetrachloroethane	ND	1.7	0.833	
Chlorobenzene	ND	0.83	0.833		Tetrachloroethene	ND	0.83	0.833	
Chloroethane	ND	1.7	0.833		Toluene	ND	0.83	0.833	
Chloroform	ND	0.83	0.833		1,2,3-Trichlorobenzene	ND	1.7	0.833	
Chloromethane	ND	17	0.833		1,2,4-Trichlorobenzene	ND	1.7	0.833	
2-Chlorotoluene	ND	0.83	0.833		1,1,1-Trichloroethane	ND	0.83	0.833	
4-Chlorotoluene	ND	0.83	0.833		1,1,2-Trichloroethane	ND	0.83	0.833	
Dibromochloromethane	ND	1.7	0.833		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.3	0.833	
1,2-Dibromo-3-Chloropropane	ND	4.2	0.833		Trichloroethene	ND	1.7	0.833	
1,2-Dibromoethane	ND	0.83	0.833		Trichlorofluoromethane	ND	8.3	0.833	
Dibromomethane	ND	0.83	0.833		1,2,3-Trichloropropane	ND	1.7	0.833	
1,2-Dichlorobenzene	ND	0.83	0.833		1,2,4-Trimethylbenzene	ND	1.7	0.833	
1,3-Dichlorobenzene	ND	0.83	0.833		1,3,5-Trimethylbenzene	ND	1.7	0.833	
1,4-Dichlorobenzene	ND	0.83	0.833		Vinyl Acetate	ND	8.3	0.833	
Dichlorodifluoromethane	ND	1.7	0.833		Vinyl Chloride	ND	0.83	0.833	
1,1-Dichloroethane	ND	0.83	0.833		p/m-Xylene	ND	1.7	0.833	
1,2-Dichloroethane	ND	0.83	0.833		o-Xylene	ND	0.83	0.833	
1,1-Dichloroethene	ND	0.83	0.833		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.833	
c-1,2-Dichloroethene	ND	0.83	0.833		Tert-Butyl Alcohol (TBA)	ND	17	0.833	
t-1,2-Dichloroethene	ND	0.83	0.833		Diisopropyl Ether (DIPE)	ND	0.83	0.833	
1,2-Dichloropropane	ND	0.83	0.833		Ethyl-t-Butyl Ether (ETBE)	ND	0.83	0.833	
1,3-Dichloropropane	ND	0.83	0.833		Tert-Amyl-Methyl Ether (TAME)	ND	0.83	0.833	
2,2-Dichloropropane	ND	4.2	0.833		Ethanol	ND	420	0.833	
1,1-Dichloropropene	ND	1.7	0.833						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	106	79-133		
1,2-Dichloroethane-d4	120	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

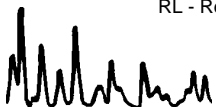
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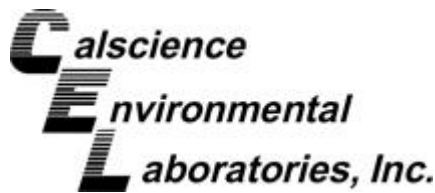
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.0'-0.1'	13-04-0823-3-C	04/09/13 12:10	Solid	GC/MS W	04/09/13	04/17/13 17:01	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	67	42	0.839		c-1,3-Dichloropropene	ND	0.84	0.839	
Benzene	ND	0.84	0.839		t-1,3-Dichloropropene	ND	1.7	0.839	
Bromobenzene	ND	0.84	0.839		Ethylbenzene	ND	0.84	0.839	
Bromochloromethane	ND	1.7	0.839		2-Hexanone	ND	17	0.839	
Bromodichloromethane	ND	0.84	0.839		Isopropylbenzene	ND	0.84	0.839	
Bromoform	ND	4.2	0.839		p-Isopropyltoluene	ND	0.84	0.839	
Bromomethane	ND	17	0.839		Methylene Chloride	ND	8.4	0.839	
2-Butanone	ND	17	0.839		4-Methyl-2-Pentanone	ND	17	0.839	
n-Butylbenzene	ND	0.84	0.839		Naphthalene	ND	8.4	0.839	
sec-Butylbenzene	ND	0.84	0.839		n-Propylbenzene	ND	1.7	0.839	
tert-Butylbenzene	ND	0.84	0.839		Styrene	ND	0.84	0.839	
Carbon Disulfide	ND	8.4	0.839		1,1,1,2-Tetrachloroethane	ND	0.84	0.839	
Carbon Tetrachloride	ND	0.84	0.839		1,1,2,2-Tetrachloroethane	ND	1.7	0.839	
Chlorobenzene	ND	0.84	0.839		Tetrachloroethene	ND	0.84	0.839	
Chloroethane	ND	1.7	0.839		Toluene	ND	0.84	0.839	
Chloroform	ND	0.84	0.839		1,2,3-Trichlorobenzene	ND	1.7	0.839	
Chloromethane	ND	17	0.839		1,2,4-Trichlorobenzene	ND	1.7	0.839	
2-Chlorotoluene	ND	0.84	0.839		1,1,1-Trichloroethane	ND	0.84	0.839	
4-Chlorotoluene	ND	0.84	0.839		1,1,2-Trichloroethane	ND	0.84	0.839	
Dibromochloromethane	ND	1.7	0.839		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.4	0.839	
1,2-Dibromo-3-Chloropropane	ND	4.2	0.839		Trichloroethene	ND	1.7	0.839	
1,2-Dibromoethane	ND	0.84	0.839		Trichlorofluoromethane	ND	8.4	0.839	
Dibromomethane	ND	0.84	0.839		1,2,3-Trichloropropane	ND	1.7	0.839	
1,2-Dichlorobenzene	ND	0.84	0.839		1,2,4-Trimethylbenzene	ND	1.7	0.839	
1,3-Dichlorobenzene	ND	0.84	0.839		1,3,5-Trimethylbenzene	ND	1.7	0.839	
1,4-Dichlorobenzene	ND	0.84	0.839		Vinyl Acetate	ND	8.4	0.839	
Dichlorodifluoromethane	ND	1.7	0.839		Vinyl Chloride	ND	0.84	0.839	
1,1-Dichloroethane	ND	0.84	0.839		p/m-Xylene	ND	1.7	0.839	
1,2-Dichloroethane	ND	0.84	0.839		o-Xylene	ND	0.84	0.839	
1,1-Dichloroethene	ND	0.84	0.839		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.839	
c-1,2-Dichloroethene	ND	0.84	0.839		Tert-Butyl Alcohol (TBA)	ND	17	0.839	
t-1,2-Dichloroethene	ND	0.84	0.839		Diisopropyl Ether (DIPE)	ND	0.84	0.839	
1,2-Dichloropropane	ND	0.84	0.839		Ethyl-t-Butyl Ether (ETBE)	ND	0.84	0.839	
1,3-Dichloropropane	ND	0.84	0.839		Tert-Amyl-Methyl Ether (TAME)	ND	0.84	0.839	
2,2-Dichloropropane	ND	4.2	0.839		Ethanol	ND	420	0.839	
1,1-Dichloropropene	ND	1.7	0.839						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	80-120			Dibromofluoromethane	107	79-133		
1,2-Dichloroethane-d4	119	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

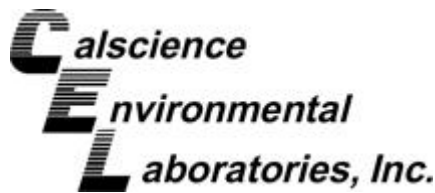
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.5'-0.6'	13-04-0823-4-C	04/09/13 12:20	Solid	GC/MS W	04/09/13	04/17/13 17:31	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	47	0.947		c-1,3-Dichloropropene	ND	0.95	0.947	
Benzene	ND	0.95	0.947		t-1,3-Dichloropropene	ND	1.9	0.947	
Bromobenzene	ND	0.95	0.947		Ethylbenzene	ND	0.95	0.947	
Bromochloromethane	ND	1.9	0.947		2-Hexanone	ND	19	0.947	
Bromodichloromethane	ND	0.95	0.947		Isopropylbenzene	ND	0.95	0.947	
Bromoform	ND	4.7	0.947		p-Isopropyltoluene	ND	0.95	0.947	
Bromomethane	ND	19	0.947		Methylene Chloride	ND	9.5	0.947	
2-Butanone	ND	19	0.947		4-Methyl-2-Pentanone	ND	19	0.947	
n-Butylbenzene	ND	0.95	0.947		Naphthalene	ND	9.5	0.947	
sec-Butylbenzene	ND	0.95	0.947		n-Propylbenzene	ND	1.9	0.947	
tert-Butylbenzene	ND	0.95	0.947		Styrene	ND	0.95	0.947	
Carbon Disulfide	ND	9.5	0.947		1,1,1,2-Tetrachloroethane	ND	0.95	0.947	
Carbon Tetrachloride	ND	0.95	0.947		1,1,2,2-Tetrachloroethane	ND	1.9	0.947	
Chlorobenzene	ND	0.95	0.947		Tetrachloroethene	ND	0.95	0.947	
Chloroethane	ND	1.9	0.947		Toluene	ND	0.95	0.947	
Chloroform	ND	0.95	0.947		1,2,3-Trichlorobenzene	ND	1.9	0.947	
Chloromethane	ND	19	0.947		1,2,4-Trichlorobenzene	ND	1.9	0.947	
2-Chlorotoluene	ND	0.95	0.947		1,1,1-Trichloroethane	ND	0.95	0.947	
4-Chlorotoluene	ND	0.95	0.947		1,1,2-Trichloroethane	ND	0.95	0.947	
Dibromochloromethane	ND	1.9	0.947		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.5	0.947	
1,2-Dibromo-3-Chloropropane	ND	4.7	0.947		Trichloroethene	ND	1.9	0.947	
1,2-Dibromoethane	ND	0.95	0.947		Trichlorofluoromethane	ND	9.5	0.947	
Dibromomethane	ND	0.95	0.947		1,2,3-Trichloropropane	ND	1.9	0.947	
1,2-Dichlorobenzene	ND	0.95	0.947		1,2,4-Trimethylbenzene	ND	1.9	0.947	
1,3-Dichlorobenzene	ND	0.95	0.947		1,3,5-Trimethylbenzene	ND	1.9	0.947	
1,4-Dichlorobenzene	ND	0.95	0.947		Vinyl Acetate	ND	9.5	0.947	
Dichlorodifluoromethane	ND	1.9	0.947		Vinyl Chloride	ND	0.95	0.947	
1,1-Dichloroethane	ND	0.95	0.947		p/m-Xylene	ND	1.9	0.947	
1,2-Dichloroethane	ND	0.95	0.947		o-Xylene	ND	0.95	0.947	
1,1-Dichloroethene	ND	0.95	0.947		Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.947	
c-1,2-Dichloroethene	ND	0.95	0.947		Tert-Butyl Alcohol (TBA)	ND	19	0.947	
t-1,2-Dichloroethene	ND	0.95	0.947		Diisopropyl Ether (DIPE)	ND	0.95	0.947	
1,2-Dichloropropane	ND	0.95	0.947		Ethyl-t-Butyl Ether (ETBE)	ND	0.95	0.947	
1,3-Dichloropropane	ND	0.95	0.947		Tert-Amyl-Methyl Ether (TAME)	ND	0.95	0.947	
2,2-Dichloropropane	ND	4.7	0.947		Ethanol	ND	470	0.947	
1,1-Dichloropropene	ND	1.9	0.947						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	120	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

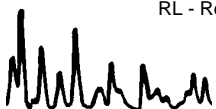
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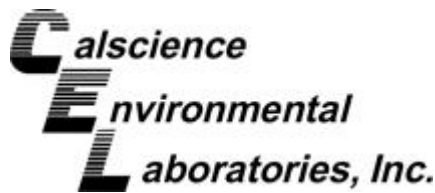
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-C	04/09/13 11:35	Solid	GC/MS W	04/09/13	04/17/13 18:00	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	150	45	0.898		c-1,3-Dichloropropene	ND	0.90	0.898	
Benzene	ND	0.90	0.898		t-1,3-Dichloropropene	ND	1.8	0.898	
Bromobenzene	ND	0.90	0.898		Ethylbenzene	ND	0.90	0.898	
Bromochloromethane	ND	1.8	0.898		2-Hexanone	ND	18	0.898	
Bromodichloromethane	ND	0.90	0.898		Isopropylbenzene	ND	0.90	0.898	
Bromoform	ND	4.5	0.898		p-Isopropyltoluene	ND	0.90	0.898	
Bromomethane	ND	18	0.898		Methylene Chloride	ND	9.0	0.898	
2-Butanone	35	18	0.898		4-Methyl-2-Pentanone	ND	18	0.898	
n-Butylbenzene	ND	0.90	0.898		Naphthalene	ND	9.0	0.898	
sec-Butylbenzene	ND	0.90	0.898		n-Propylbenzene	ND	1.8	0.898	
tert-Butylbenzene	ND	0.90	0.898		Styrene	ND	0.90	0.898	
Carbon Disulfide	ND	9.0	0.898		1,1,1,2-Tetrachloroethane	ND	0.90	0.898	
Carbon Tetrachloride	ND	0.90	0.898		1,1,2,2-Tetrachloroethane	ND	1.8	0.898	
Chlorobenzene	ND	0.90	0.898		Tetrachloroethene	ND	0.90	0.898	
Chloroethane	ND	1.8	0.898		Toluene	ND	0.90	0.898	
Chloroform	ND	0.90	0.898		1,2,3-Trichlorobenzene	ND	1.8	0.898	
Chloromethane	ND	18	0.898		1,2,4-Trichlorobenzene	ND	1.8	0.898	
2-Chlorotoluene	ND	0.90	0.898		1,1,1-Trichloroethane	ND	0.90	0.898	
4-Chlorotoluene	ND	0.90	0.898		1,1,2-Trichloroethane	ND	0.90	0.898	
Dibromochloromethane	ND	1.8	0.898		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.0	0.898	
1,2-Dibromo-3-Chloropropane	ND	4.5	0.898		Trichloroethene	ND	1.8	0.898	
1,2-Dibromoethane	ND	0.90	0.898		Trichlorofluoromethane	ND	9.0	0.898	
Dibromomethane	ND	0.90	0.898		1,2,3-Trichloropropane	ND	1.8	0.898	
1,2-Dichlorobenzene	ND	0.90	0.898		1,2,4-Trimethylbenzene	ND	1.8	0.898	
1,3-Dichlorobenzene	ND	0.90	0.898		1,3,5-Trimethylbenzene	ND	1.8	0.898	
1,4-Dichlorobenzene	ND	0.90	0.898		Vinyl Acetate	ND	9.0	0.898	
Dichlorodifluoromethane	ND	1.8	0.898		Vinyl Chloride	ND	0.90	0.898	
1,1-Dichloroethane	ND	0.90	0.898		p/m-Xylene	ND	1.8	0.898	
1,2-Dichloroethane	ND	0.90	0.898		o-Xylene	ND	0.90	0.898	
1,1-Dichloroethene	ND	0.90	0.898		Methyl-t-Butyl Ether (MTBE)	ND	1.8	0.898	
c-1,2-Dichloroethene	ND	0.90	0.898		Tert-Butyl Alcohol (TBA)	ND	18	0.898	
t-1,2-Dichloroethene	ND	0.90	0.898		Diisopropyl Ether (DIPE)	ND	0.90	0.898	
1,2-Dichloropropane	ND	0.90	0.898		Ethyl-t-Butyl Ether (ETBE)	ND	0.90	0.898	
1,3-Dichloropropane	ND	0.90	0.898		Tert-Amyl-Methyl Ether (TAME)	ND	0.90	0.898	
2,2-Dichloropropane	ND	4.5	0.898		Ethanol	ND	450	0.898	
1,1-Dichloropropene	ND	1.8	0.898						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	94	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	117	71-155			Toluene-d8	97	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

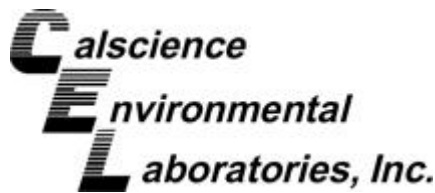
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.5'-0.6'	13-04-0823-6-C	04/09/13 11:45	Solid	GC/MS W	04/09/13	04/17/13 18:30	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	100	48	0.963		c-1,3-Dichloropropene	ND	0.96	0.963	
Benzene	ND	0.96	0.963		t-1,3-Dichloropropene	ND	1.9	0.963	
Bromobenzene	ND	0.96	0.963		Ethylbenzene	ND	0.96	0.963	
Bromochloromethane	ND	1.9	0.963		2-Hexanone	ND	19	0.963	
Bromodichloromethane	ND	0.96	0.963		Isopropylbenzene	ND	0.96	0.963	
Bromoform	ND	4.8	0.963		p-Isopropyltoluene	ND	0.96	0.963	
Bromomethane	ND	19	0.963		Methylene Chloride	ND	9.6	0.963	
2-Butanone	ND	19	0.963		4-Methyl-2-Pentanone	ND	19	0.963	
n-Butylbenzene	ND	0.96	0.963		Naphthalene	ND	9.6	0.963	
sec-Butylbenzene	ND	0.96	0.963		n-Propylbenzene	ND	1.9	0.963	
tert-Butylbenzene	ND	0.96	0.963		Styrene	ND	0.96	0.963	
Carbon Disulfide	ND	9.6	0.963		1,1,1,2-Tetrachloroethane	ND	0.96	0.963	
Carbon Tetrachloride	ND	0.96	0.963		1,1,2,2-Tetrachloroethane	ND	1.9	0.963	
Chlorobenzene	ND	0.96	0.963		Tetrachloroethene	ND	0.96	0.963	
Chloroethane	ND	1.9	0.963		Toluene	ND	0.96	0.963	
Chloroform	ND	0.96	0.963		1,2,3-Trichlorobenzene	ND	1.9	0.963	
Chloromethane	ND	19	0.963		1,2,4-Trichlorobenzene	ND	1.9	0.963	
2-Chlorotoluene	ND	0.96	0.963		1,1,1-Trichloroethane	ND	0.96	0.963	
4-Chlorotoluene	ND	0.96	0.963		1,1,2-Trichloroethane	ND	0.96	0.963	
Dibromochloromethane	ND	1.9	0.963		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.6	0.963	
1,2-Dibromo-3-Chloropropane	ND	4.8	0.963		Trichloroethene	ND	1.9	0.963	
1,2-Dibromoethane	ND	0.96	0.963		Trichlorofluoromethane	ND	9.6	0.963	
Dibromomethane	ND	0.96	0.963		1,2,3-Trichloropropane	ND	1.9	0.963	
1,2-Dichlorobenzene	ND	0.96	0.963		1,2,4-Trimethylbenzene	ND	1.9	0.963	
1,3-Dichlorobenzene	ND	0.96	0.963		1,3,5-Trimethylbenzene	ND	1.9	0.963	
1,4-Dichlorobenzene	ND	0.96	0.963		Vinyl Acetate	ND	9.6	0.963	
Dichlorodifluoromethane	ND	1.9	0.963		Vinyl Chloride	ND	0.96	0.963	
1,1-Dichloroethane	ND	0.96	0.963		p/m-Xylene	ND	1.9	0.963	
1,2-Dichloroethane	ND	0.96	0.963		o-Xylene	ND	0.96	0.963	
1,1-Dichloroethene	ND	0.96	0.963		Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.963	
c-1,2-Dichloroethene	ND	0.96	0.963		Tert-Butyl Alcohol (TBA)	ND	19	0.963	
t-1,2-Dichloroethene	ND	0.96	0.963		Diisopropyl Ether (DIPE)	ND	0.96	0.963	
1,2-Dichloropropane	ND	0.96	0.963		Ethyl-t-Butyl Ether (ETBE)	ND	0.96	0.963	
1,3-Dichloropropane	ND	0.96	0.963		Tert-Amyl-Methyl Ether (TAME)	ND	0.96	0.963	
2,2-Dichloropropane	ND	4.8	0.963		Ethanol	ND	480	0.963	
1,1-Dichloropropene	ND	1.9	0.963						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	80-120			Dibromofluoromethane	106	79-133		
1,2-Dichloroethane-d4	122	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

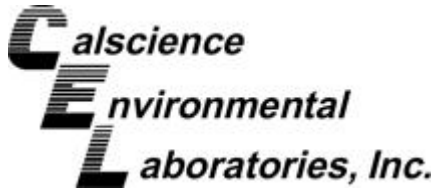
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-C	04/09/13 12:00	Solid	GC/MS W	04/09/13	04/17/13 18:59	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	110	44	0.87		c-1,3-Dichloropropene	ND	0.87	0.87	
Benzene	ND	0.87	0.87		t-1,3-Dichloropropene	ND	1.7	0.87	
Bromobenzene	ND	0.87	0.87		Ethylbenzene	ND	0.87	0.87	
Bromochloromethane	ND	1.7	0.87		2-Hexanone	ND	17	0.87	
Bromodichloromethane	ND	0.87	0.87		Isopropylbenzene	ND	0.87	0.87	
Bromoform	ND	4.4	0.87		p-Isopropyltoluene	ND	0.87	0.87	
Bromomethane	ND	17	0.87		Methylene Chloride	ND	8.7	0.87	
2-Butanone	ND	17	0.87		4-Methyl-2-Pentanone	ND	17	0.87	
n-Butylbenzene	ND	0.87	0.87		Naphthalene	ND	8.7	0.87	
sec-Butylbenzene	ND	0.87	0.87		n-Propylbenzene	ND	1.7	0.87	
tert-Butylbenzene	ND	0.87	0.87		Styrene	ND	0.87	0.87	
Carbon Disulfide	ND	8.7	0.87		1,1,1,2-Tetrachloroethane	ND	0.87	0.87	
Carbon Tetrachloride	ND	0.87	0.87		1,1,2,2-Tetrachloroethane	ND	1.7	0.87	
Chlorobenzene	ND	0.87	0.87		Tetrachloroethene	ND	0.87	0.87	
Chloroethane	ND	1.7	0.87		Toluene	ND	0.87	0.87	
Chloroform	ND	0.87	0.87		1,2,3-Trichlorobenzene	ND	1.7	0.87	
Chloromethane	ND	17	0.87		1,2,4-Trichlorobenzene	ND	1.7	0.87	
2-Chlorotoluene	ND	0.87	0.87		1,1,1-Trichloroethane	ND	0.87	0.87	
4-Chlorotoluene	ND	0.87	0.87		1,1,2-Trichloroethane	ND	0.87	0.87	
Dibromochloromethane	ND	1.7	0.87		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.7	0.87	
1,2-Dibromo-3-Chloropropane	ND	4.4	0.87		Trichloroethene	ND	1.7	0.87	
1,2-Dibromoethane	ND	0.87	0.87		Trichlorofluoromethane	ND	8.7	0.87	
Dibromomethane	ND	0.87	0.87		1,2,3-Trichloropropane	ND	1.7	0.87	
1,2-Dichlorobenzene	ND	0.87	0.87		1,2,4-Trimethylbenzene	ND	1.7	0.87	
1,3-Dichlorobenzene	ND	0.87	0.87		1,3,5-Trimethylbenzene	ND	1.7	0.87	
1,4-Dichlorobenzene	ND	0.87	0.87		Vinyl Acetate	ND	8.7	0.87	
Dichlorodifluoromethane	ND	1.7	0.87		Vinyl Chloride	ND	0.87	0.87	
1,1-Dichloroethane	ND	0.87	0.87		p/m-Xylene	ND	1.7	0.87	
1,2-Dichloroethane	ND	0.87	0.87		o-Xylene	ND	0.87	0.87	
1,1-Dichloroethene	ND	0.87	0.87		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.87	
c-1,2-Dichloroethene	ND	0.87	0.87		Tert-Butyl Alcohol (TBA)	ND	17	0.87	
t-1,2-Dichloroethene	ND	0.87	0.87		Diisopropyl Ether (DIPE)	ND	0.87	0.87	
1,2-Dichloropropane	ND	0.87	0.87		Ethyl-t-Butyl Ether (ETBE)	ND	0.87	0.87	
1,3-Dichloropropane	ND	0.87	0.87		Tert-Amyl-Methyl Ether (TAME)	ND	0.87	0.87	
2,2-Dichloropropane	ND	4.4	0.87		Ethanol	ND	440	0.87	
1,1-Dichloropropene	ND	1.7	0.87						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	107	79-133		
1,2-Dichloroethane-d4	121	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

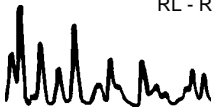
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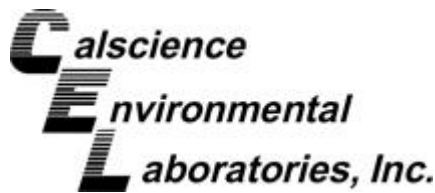
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.5'-0.6'	13-04-0823-8-C	04/09/13 12:05	Solid	GC/MS W	04/09/13	04/17/13 19:29	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	52	44	0.877		c-1,3-Dichloropropene	ND	0.88	0.877	
Benzene	ND	0.88	0.877		t-1,3-Dichloropropene	ND	1.8	0.877	
Bromobenzene	ND	0.88	0.877		Ethylbenzene	ND	0.88	0.877	
Bromochloromethane	ND	1.8	0.877		2-Hexanone	ND	18	0.877	
Bromodichloromethane	ND	0.88	0.877		Isopropylbenzene	ND	0.88	0.877	
Bromoform	ND	4.4	0.877		p-Isopropyltoluene	ND	0.88	0.877	
Bromomethane	ND	18	0.877		Methylene Chloride	ND	8.8	0.877	
2-Butanone	ND	18	0.877		4-Methyl-2-Pentanone	ND	18	0.877	
n-Butylbenzene	ND	0.88	0.877		Naphthalene	ND	8.8	0.877	
sec-Butylbenzene	ND	0.88	0.877		n-Propylbenzene	ND	1.8	0.877	
tert-Butylbenzene	ND	0.88	0.877		Styrene	ND	0.88	0.877	
Carbon Disulfide	ND	8.8	0.877		1,1,1,2-Tetrachloroethane	ND	0.88	0.877	
Carbon Tetrachloride	ND	0.88	0.877		1,1,2,2-Tetrachloroethane	ND	1.8	0.877	
Chlorobenzene	ND	0.88	0.877		Tetrachloroethene	ND	0.88	0.877	
Chloroethane	ND	1.8	0.877		Toluene	ND	0.88	0.877	
Chloroform	ND	0.88	0.877		1,2,3-Trichlorobenzene	ND	1.8	0.877	
Chloromethane	ND	18	0.877		1,2,4-Trichlorobenzene	ND	1.8	0.877	
2-Chlorotoluene	ND	0.88	0.877		1,1,1-Trichloroethane	ND	0.88	0.877	
4-Chlorotoluene	ND	0.88	0.877		1,1,2-Trichloroethane	ND	0.88	0.877	
Dibromochloromethane	ND	1.8	0.877		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.8	0.877	
1,2-Dibromo-3-Chloropropane	ND	4.4	0.877		Trichloroethene	ND	1.8	0.877	
1,2-Dibromoethane	ND	0.88	0.877		Trichlorofluoromethane	ND	8.8	0.877	
Dibromomethane	ND	0.88	0.877		1,2,3-Trichloropropane	ND	1.8	0.877	
1,2-Dichlorobenzene	ND	0.88	0.877		1,2,4-Trimethylbenzene	ND	1.8	0.877	
1,3-Dichlorobenzene	ND	0.88	0.877		1,3,5-Trimethylbenzene	ND	1.8	0.877	
1,4-Dichlorobenzene	ND	0.88	0.877		Vinyl Acetate	ND	8.8	0.877	
Dichlorodifluoromethane	ND	1.8	0.877		Vinyl Chloride	ND	0.88	0.877	
1,1-Dichloroethane	ND	0.88	0.877		p/m-Xylene	ND	1.8	0.877	
1,2-Dichloroethane	ND	0.88	0.877		o-Xylene	ND	0.88	0.877	
1,1-Dichloroethene	ND	0.88	0.877		Methyl-t-Butyl Ether (MTBE)	ND	1.8	0.877	
c-1,2-Dichloroethene	ND	0.88	0.877		Tert-Butyl Alcohol (TBA)	ND	18	0.877	
t-1,2-Dichloroethene	ND	0.88	0.877		Diisopropyl Ether (DIPE)	ND	0.88	0.877	
1,2-Dichloropropane	ND	0.88	0.877		Ethyl-t-Butyl Ether (ETBE)	ND	0.88	0.877	
1,3-Dichloropropane	ND	0.88	0.877		Tert-Amyl-Methyl Ether (TAME)	ND	0.88	0.877	
2,2-Dichloropropane	ND	4.4	0.877		Ethanol	ND	440	0.877	
1,1-Dichloropropene	ND	1.8	0.877						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	97	80-120			Dibromofluoromethane	107	79-133		
1,2-Dichloroethane-d4	122	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

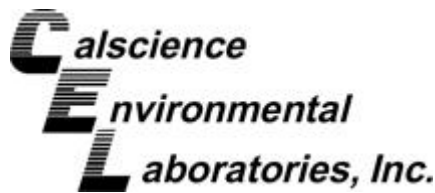
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-C	04/09/13 11:30	Solid	GC/MS W	04/09/13	04/17/13 19:58	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	160	47	0.942		c-1,3-Dichloropropene	ND	0.94	0.942	
Benzene	2.7	0.94	0.942		t-1,3-Dichloropropene	ND	1.9	0.942	
Bromobenzene	ND	0.94	0.942		Ethylbenzene	ND	0.94	0.942	
Bromochloromethane	ND	1.9	0.942		2-Hexanone	ND	19	0.942	
Bromodichloromethane	ND	0.94	0.942		Isopropylbenzene	ND	0.94	0.942	
Bromoform	ND	4.7	0.942		p-Isopropyltoluene	ND	0.94	0.942	
Bromomethane	ND	19	0.942		Methylene Chloride	ND	9.4	0.942	
2-Butanone	26	19	0.942		4-Methyl-2-Pentanone	ND	19	0.942	
n-Butylbenzene	ND	0.94	0.942		Naphthalene	ND	9.4	0.942	
sec-Butylbenzene	ND	0.94	0.942		n-Propylbenzene	ND	1.9	0.942	
tert-Butylbenzene	ND	0.94	0.942		Styrene	ND	0.94	0.942	
Carbon Disulfide	ND	9.4	0.942		1,1,1,2-Tetrachloroethane	ND	0.94	0.942	
Carbon Tetrachloride	ND	0.94	0.942		1,1,2,2-Tetrachloroethane	ND	1.9	0.942	
Chlorobenzene	ND	0.94	0.942		Tetrachloroethene	ND	0.94	0.942	
Chloroethane	ND	1.9	0.942		Toluene	1.8	0.94	0.942	
Chloroform	ND	0.94	0.942		1,2,3-Trichlorobenzene	ND	1.9	0.942	
Chloromethane	ND	19	0.942		1,2,4-Trichlorobenzene	ND	1.9	0.942	
2-Chlorotoluene	ND	0.94	0.942		1,1,1-Trichloroethane	ND	0.94	0.942	
4-Chlorotoluene	ND	0.94	0.942		1,1,2-Trichloroethane	ND	0.94	0.942	
Dibromochloromethane	ND	1.9	0.942		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.4	0.942	
1,2-Dibromo-3-Chloropropane	ND	4.7	0.942		Trichloroethene	ND	1.9	0.942	
1,2-Dibromoethane	ND	0.94	0.942		Trichlorofluoromethane	ND	9.4	0.942	
Dibromomethane	ND	0.94	0.942		1,2,3-Trichloropropane	ND	1.9	0.942	
1,2-Dichlorobenzene	ND	0.94	0.942		1,2,4-Trimethylbenzene	ND	1.9	0.942	
1,3-Dichlorobenzene	ND	0.94	0.942		1,3,5-Trimethylbenzene	ND	1.9	0.942	
1,4-Dichlorobenzene	ND	0.94	0.942		Vinyl Acetate	ND	9.4	0.942	
Dichlorodifluoromethane	ND	1.9	0.942		Vinyl Chloride	ND	0.94	0.942	
1,1-Dichloroethane	ND	0.94	0.942		p/m-Xylene	ND	1.9	0.942	
1,2-Dichloroethane	ND	0.94	0.942		o-Xylene	ND	0.94	0.942	
1,1-Dichloroethene	ND	0.94	0.942		Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.942	
c-1,2-Dichloroethene	ND	0.94	0.942		Tert-Butyl Alcohol (TBA)	ND	19	0.942	
t-1,2-Dichloroethene	ND	0.94	0.942		Diisopropyl Ether (DIPE)	ND	0.94	0.942	
1,2-Dichloropropane	ND	0.94	0.942		Ethyl-t-Butyl Ether (ETBE)	ND	0.94	0.942	
1,3-Dichloropropane	ND	0.94	0.942		Tert-Amyl-Methyl Ether (TAME)	ND	0.94	0.942	
2,2-Dichloropropane	ND	4.7	0.942		Ethanol	ND	470	0.942	
1,1-Dichloropropene	ND	1.9	0.942						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	119	71-155			Toluene-d8	99	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

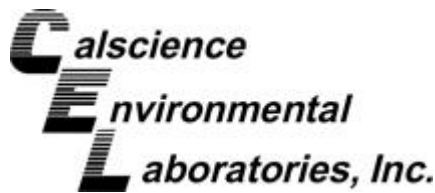
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-025-23,748	N/A	Solid	GC/MS W	04/17/13	04/17/13 13:51	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	1.0	1	
Benzene	ND	1.0	1		t-1,3-Dichloropropene	ND	2.0	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	2.0	1		2-Hexanone	ND	20	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	20	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	20	1		4-Methyl-2-Pentanone	ND	20	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	2.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	2.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	2.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	2.0	1	
Chloromethane	ND	20	1		1,2,4-Trichlorobenzene	ND	2.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
Dibromochloromethane	ND	2.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	2.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	2.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	2.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	2.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	2.0	1		Vinyl Chloride	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	2.0	1	
1,2-Dichloroethane	ND	1.0	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	20	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	500	1	
1,1-Dichloropropene	ND	2.0	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	95	80-120			Dibromofluoromethane	101	79-133		
1,2-Dichloroethane-d4	104	71-155			Toluene-d8	97	80-120		

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6020 / EPA 7471A
Units: mg/kg

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	ICP/MS 03	04/12/13	04/15/13 18:46	130412L01

Comment(s): -Mercury analysis was performed on 04/12/13 14:19 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	1.01	1.00	1		Molybdenum	ND	1.00	1	
Barium	31.4	1.00	1		Nickel	32.4	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	27.1	2.00	1		Thallium	ND	1.00	1	
Cobalt	19.4	1.00	1		Vanadium	24.5	2.00	1	
Copper	82.1	1.00	1		Zinc	1440	5.00	1	
Lead	30.0	1.00	1		Manganese	349	2.50	1	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	ICP/MS 03	04/12/13	04/15/13 18:49	130412L01
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Comment(s): -Mercury analysis was performed on 04/12/13 14:30 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	ND	1.00	1		Molybdenum	ND	1.00	1	
Barium	9.63	1.00	1		Nickel	27.7	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	31.8	2.00	1		Thallium	ND	1.00	1	
Cobalt	12.4	1.00	1		Vanadium	27.1	2.00	1	
Copper	146	1.00	1		Zinc	72.9	5.00	1	
Lead	ND	1.00	1		Manganese	604	2.50	1	

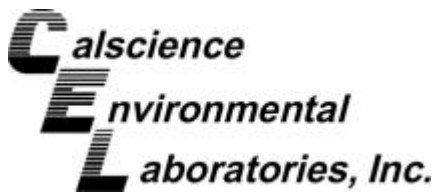
Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	ICP/MS 03	04/12/13	04/15/13 18:52	130412L01
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Comment(s): -Mercury analysis was performed on 04/12/13 14:33 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	1.04	1.00	1		Molybdenum	ND	1.00	1	
Barium	58.4	1.00	1		Nickel	30.3	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	24.5	2.00	1		Thallium	ND	1.00	1	
Cobalt	10.5	1.00	1		Vanadium	24.7	2.00	1	
Copper	102	1.00	1		Zinc	429	5.00	1	
Lead	19.9	1.00	1		Manganese	335	2.50	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6020 / EPA 7471A
Units: mg/kg

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	ICP/MS 03	04/12/13	04/15/13 18:55	130412L01

Comment(s): -Mercury analysis was performed on 04/12/13 14:35 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	ND	1.00	1		Molybdenum	ND	1.00	1	
Barium	11.8	1.00	1		Nickel	28.3	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	28.1	2.00	1		Thallium	ND	1.00	1	
Cobalt	13.8	1.00	1		Vanadium	32.5	2.00	1	
Copper	181	1.00	1		Zinc	48.4	5.00	1	
Lead	1.03	1.00	1		Manganese	402	2.50	1	

Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	ICP/MS 03	04/12/13	04/15/13 18:58	130412L01
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Comment(s): -Mercury analysis was performed on 04/12/13 14:37 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	4.43	2.00	1		Mercury	ND	0.0835	1	
Arsenic	10.8	1.00	1		Molybdenum	ND	1.00	1	
Barium	109	1.00	1		Nickel	86.8	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	1.91	1.00	1		Silver	ND	1.00	1	
Chromium	44.0	2.00	1		Thallium	ND	1.00	1	
Cobalt	15.9	1.00	1		Vanadium	26.1	2.00	1	
Copper	988	1.00	1		Zinc	1270	5.00	1	
Lead	230	1.00	1		Manganese	341	2.50	1	

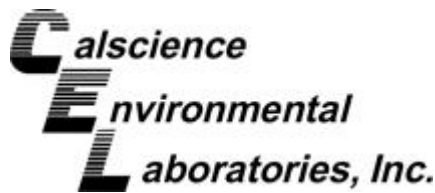
Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	ICP/MS 03	04/12/13	04/15/13 19:01	130412L01
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Comment(s): -Mercury analysis was performed on 04/12/13 14:39 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	2.20	1.00	1		Molybdenum	ND	1.00	1	
Barium	29.1	1.00	1		Nickel	268	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	51.1	2.00	1		Thallium	ND	1.00	1	
Cobalt	22.0	1.00	1		Vanadium	33.1	2.00	1	
Copper	70.3	1.00	1		Zinc	84.9	5.00	1	
Lead	14.0	1.00	1		Manganese	391	2.50	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Return to Contents



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6020 / EPA 7471A
Units: mg/kg

Project: Tire Fire Property

Page 3 of 4

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	ICP/MS 03	04/12/13	04/15/13 19:04	130412L01

Comment(s): -Mercury analysis was performed on 04/12/13 14:41 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	26.8	1.00	1		Molybdenum	1.21	1.00	1	
Barium	329	1.00	1		Nickel	64.8	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	2.58	1.00	1		Silver	ND	1.00	1	
Chromium	52.6	2.00	1		Thallium	ND	1.00	1	
Cobalt	13.2	1.00	1		Vanadium	28.6	2.00	1	
Copper	2430	1.00	1		Zinc	2830	5.00	1	
Lead	74.4	1.00	1		Manganese	447	2.50	1	

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	ICP/MS 03	04/12/13	04/15/13 19:13	130412L01
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Comment(s): -Mercury analysis was performed on 04/12/13 14:44 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	2.54	1.00	1		Molybdenum	ND	1.00	1	
Barium	37.5	1.00	1		Nickel	95.9	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	36.3	2.00	1		Thallium	ND	1.00	1	
Cobalt	16.5	1.00	1		Vanadium	40.8	2.00	1	
Copper	144	1.00	1		Zinc	185	5.00	1	
Lead	7.64	1.00	1		Manganese	412	2.50	1	

Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	ICP/MS 03	04/12/13	04/15/13 19:16	130412L01
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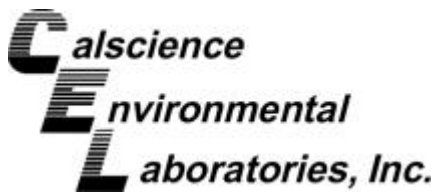
Comment(s): -Mercury analysis was performed on 04/12/13 14:46 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	ND	1.00	1		Molybdenum	ND	1.00	1	
Barium	28.2	1.00	1		Nickel	29.1	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	24.6	2.00	1		Thallium	ND	1.00	1	
Cobalt	23.7	1.00	1		Vanadium	20.4	2.00	1	
Copper	97.3	1.00	1		Zinc	1950	5.00	1	
Lead	23.3	1.00	1		Manganese	311	2.50	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



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Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6020 / EPA 7471A
Units: mg/kg

Project: Tire Fire Property

Page 4 of 4

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-Background-Metals-0.0'-0.1'	13-04-0823-10-B	04/09/13 12:35	Solid	ICP/MS 03	04/12/13	04/15/13 19:19	130412L01

Comment(s): -Mercury analysis was performed on 04/12/13 14:52 with batch 130412L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Mercury	ND	0.0835	1	
Arsenic	4.33	1.00	1		Molybdenum	ND	1.00	1	
Barium	122	1.00	1		Nickel	52.8	1.00	1	
Beryllium	ND	1.00	1		Selenium	ND	1.00	1	
Cadmium	ND	1.00	1		Silver	ND	1.00	1	
Chromium	43.5	2.00	1		Thallium	ND	1.00	1	
Cobalt	12.9	1.00	1		Vanadium	26.6	2.00	1	
Copper	30.5	1.00	1		Zinc	60.6	5.00	1	
Lead	11.0	1.00	1		Manganese	538	2.50	1	

Method Blank	099-15-621-200	N/A	Solid	ICP/MS 03	04/12/13	04/12/13 20:45	130412L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Molybdenum	ND	1.00	1	
Arsenic	ND	1.00	1		Nickel	ND	1.00	1	
Barium	ND	1.00	1		Selenium	ND	1.00	1	
Beryllium	ND	1.00	1		Silver	ND	1.00	1	
Cadmium	ND	1.00	1		Thallium	ND	1.00	1	
Chromium	ND	2.00	1		Vanadium	ND	2.00	1	
Cobalt	ND	1.00	1		Zinc	ND	5.00	1	
Copper	ND	1.00	1		Manganese	ND	2.50	1	
Lead	ND	1.00	1						

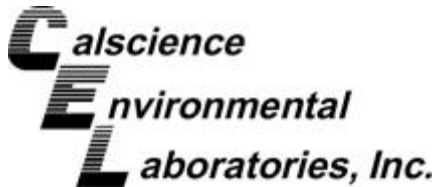
Method Blank	099-04-007-9,225	N/A	Solid	Mercury	04/12/13	04/12/13 12:41	130412L03
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Comment(s): -Preparation/analysis for Mercury was performed by EPA 7471A.

Parameter	Result	RL	DF	Qual
Mercury	ND	0.0835	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Return to Contents



Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020

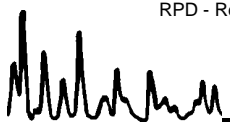
Project Tire Fire Property

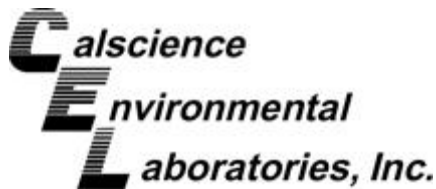
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	ICP/MS 03	04/12/13	04/12/13	130412S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	10.84	43	11.43	46	1-97	5	0-39	
Arsenic	1.013	25.00	25.61	98	25.65	99	72-132	0	0-13	
Barium	31.43	25.00	53.44	88	51.75	81	50-152	3	0-41	
Beryllium	ND	25.00	27.12	108	27.42	110	61-121	1	0-13	
Cadmium	ND	25.00	25.61	102	25.94	104	85-121	1	0-12	
Chromium	27.10	25.00	49.65	90	49.28	89	20-182	1	0-15	
Cobalt	19.40	25.00	41.47	88	42.58	93	40-166	3	0-14	
Copper	82.09	25.00	101.6	78	116.8	139	25-157	14	0-22	
Lead	29.96	25.00	54.54	98	50.38	82	62-134	8	0-23	
Molybdenum	ND	25.00	23.77	95	24.24	97	69-123	2	0-13	
Nickel	32.43	25.00	57.45	100	57.56	100	46-154	0	0-15	
Selenium	ND	25.00	25.03	100	25.27	101	54-132	1	0-14	
Silver	ND	12.50	35.62	285	30.84	247	78-126	14	0-15	3
Thallium	ND	25.00	24.67	99	25.36	101	79-115	3	0-11	
Vanadium	24.45	25.00	50.54	104	48.10	95	28-178	5	0-28	
Zinc	1441	25.00	1131	4X	1819	4X	23-173	4X	0-18	Q
Manganese	348.7	25.00	323.0	4X	329.4	4X	80-120	4X	0-20	Q

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - PDS / PDSO



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3050B
 Method: EPA 6020

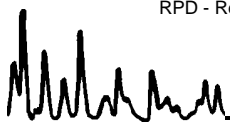
Project Tire Fire Property

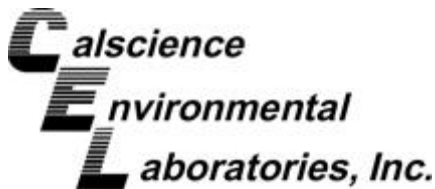
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSO Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	ICP/MS 03	04/12/13	04/12/13	130412S01

Parameter	SAMPLE CONC	SPIKE ADDED	PDS CONC	PDS %REC	%REC CL	Qualifiers
Antimony	ND	25.00	25.65	103	75-125	
Arsenic	1.013	25.00	25.59	98	75-125	
Barium	31.43	25.00	55.44	96	75-125	
Beryllium	ND	25.00	26.82	107	75-125	
Cadmium	ND	25.00	25.45	102	75-125	
Chromium	27.10	25.00	48.94	87	75-125	
Cobalt	19.40	25.00	42.24	91	75-125	
Copper	82.09	25.00	103.5	86	75-125	
Lead	29.96	25.00	54.03	96	75-125	
Molybdenum	ND	25.00	23.62	94	75-125	
Nickel	32.43	25.00	55.25	91	75-125	
Selenium	ND	25.00	25.33	101	75-125	
Silver	ND	12.50	22.05	176	75-125	5
Thallium	ND	25.00	24.59	98	75-125	
Vanadium	24.45	25.00	48.34	96	75-125	
Zinc	1441	25.00	1439	4X	75-125	Q
Manganese	348.7	25.00	366.7	4X	75-125	Q

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B

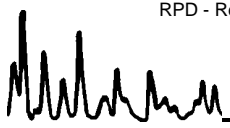
Project Tire Fire Property

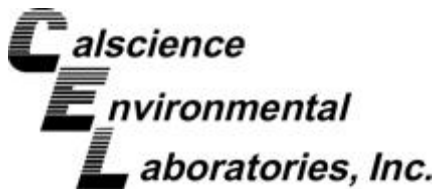
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC 45	04/12/13	04/18/13	130412S03A

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Diesel Range Organics	24.95	400.0	602.3	144	595.8	143	64-130	1	0-15	3

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

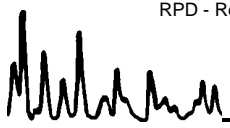
Project Tire Fire Property

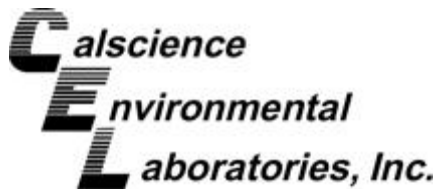
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC 45	04/12/13	04/18/13	130412S04A

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	86.41	400.0	491.9	101	581.9	124	64-130	17	0-15	4

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

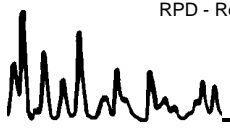
Project Tire Fire Property

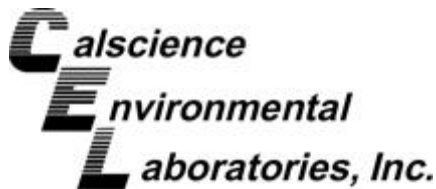
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC 22	04/12/13	04/12/13	130412S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics	ND	10.00	3.757	38	3.858	39	66-108	3	0-18	3

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 7471A Total
 Method: EPA 7471A

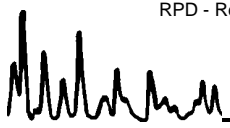
Project Tire Fire Property

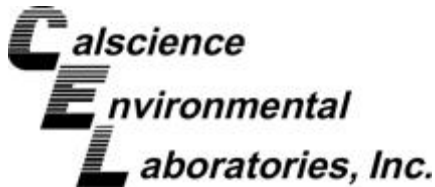
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	Mercury	04/12/13	04/12/13	130412S03

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7386	88	0.7368	88	71-137	0	0-14	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C

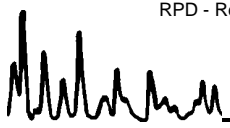
Project Tire Fire Property

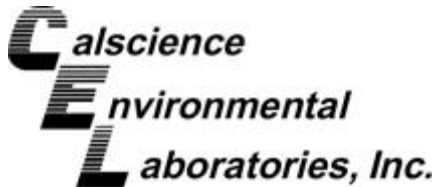
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC/MS CCC	04/12/13	04/15/13	130412S07

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	8.816	88	8.386	84	49-133	5	0-18	
Acenaphthylene	ND	10.00	8.905	89	8.525	85	50-150	4	0-20	
Butyl Benzyl Phthalate	ND	10.00	9.259	93	8.832	88	50-150	5	0-20	
4-Chloro-3-Methylphenol	ND	10.00	9.291	93	8.752	88	50-128	6	0-17	
2-Chlorophenol	ND	10.00	8.937	89	9.373	94	57-111	5	0-17	
1,4-Dichlorobenzene	ND	10.00	7.485	75	8.721	87	49-127	15	0-20	
Dimethyl Phthalate	ND	10.00	9.613	96	9.114	91	50-150	5	0-20	
2,4-Dinitrotoluene	ND	10.00	9.625	96	8.724	87	50-128	10	0-18	
Fluorene	ND	10.00	9.389	94	8.913	89	50-150	5	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	9.287	93	9.567	96	54-144	3	0-17	
Naphthalene	ND	10.00	7.824	78	8.176	82	50-150	4	0-20	
4-Nitrophenol	ND	10.00	8.769	88	7.138	71	30-144	21	0-21	
Pentachlorophenol	ND	10.00	7.545	75	5.854	59	29-113	25	0-22	4
Phenol	ND	10.00	9.096	91	9.382	94	57-123	3	0-16	
Pyrene	ND	10.00	8.333	83	7.697	77	47-149	8	0-20	
1,2,4-Trichlorobenzene	ND	10.00	7.548	75	8.037	80	42-132	6	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B

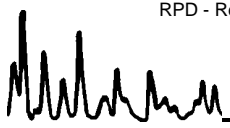
Project Tire Fire Property

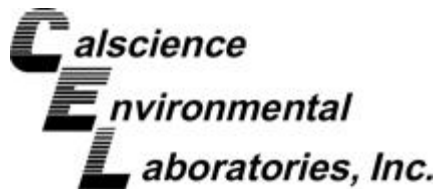
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC/MS W	04/09/13	04/17/13	130417S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.87	88	36.35	73	31-145	19	0-41	
Carbon Tetrachloride	ND	50.00	54.41	109	43.79	88	49-133	22	0-48	
Chlorobenzene	ND	50.00	46.94	94	33.75	68	54-126	33	0-50	
1,2-Dibromoethane	ND	50.00	46.04	92	38.47	77	57-153	18	0-39	
1,2-Dichlorobenzene	ND	50.00	52.41	105	27.02	54	38-128	64	0-62	4
1,2-Dichloroethane	ND	50.00	48.20	96	41.66	83	80-120	15	0-20	
1,1-Dichloroethene	ND	50.00	43.70	87	35.67	71	55-133	20	0-41	
Ethylbenzene	ND	50.00	50.96	102	34.33	69	32-146	39	0-61	
Toluene	ND	50.00	42.81	86	34.87	70	39-141	20	0-52	
Trichloroethene	ND	50.00	43.18	86	35.84	72	57-129	19	0-47	
Vinyl Chloride	ND	50.00	36.65	73	29.08	58	47-137	23	0-58	
p/m-Xylene	ND	100.0	102.8	103	69.61	70	70-130	39	0-30	4
o-Xylene	ND	50.00	51.22	102	35.04	70	70-130	38	0-30	4
Methyl-t-Butyl Ether (MTBE)	ND	50.00	51.17	102	42.80	86	61-145	18	0-33	
Tert-Butyl Alcohol (TBA)	ND	250.0	204.3	82	196.7	79	44-152	4	0-54	
Diisopropyl Ether (DIPE)	ND	50.00	46.55	93	38.65	77	59-137	19	0-36	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	51.55	103	42.99	86	56-140	18	0-36	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	48.46	97	40.30	81	57-141	18	0-35	
Ethanol	ND	500.0	335.4	67	341.6	68	8-170	2	0-77	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020

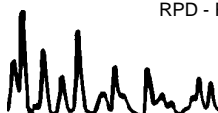
Project: Tire Fire Property

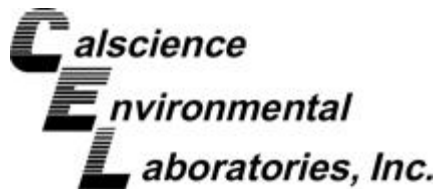
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number					
099-15-621-200	Solid	ICP/MS 03	04/12/13	04/15/13	130412L01					
Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Antimony	25.00	25.27	101	25.57	102	80-120	73-127	1	0-20	
Arsenic	25.00	24.97	100	25.47	102	80-120	73-127	2	0-20	
Barium	25.00	25.57	102	25.75	103	80-120	73-127	1	0-20	
Beryllium	25.00	23.47	94	23.51	94	80-120	73-127	0	0-20	
Cadmium	25.00	25.49	102	25.45	102	80-120	73-127	0	0-20	
Chromium	25.00	24.79	99	25.00	100	80-120	73-127	1	0-20	
Cobalt	25.00	25.34	101	25.35	101	80-120	73-127	0	0-20	
Copper	25.00	26.83	107	26.78	107	80-120	73-127	0	0-20	
Lead	25.00	24.66	99	24.80	99	80-120	73-127	1	0-20	
Molybdenum	25.00	24.52	98	25.13	101	80-120	73-127	2	0-20	
Nickel	25.00	25.69	103	25.59	102	80-120	73-127	0	0-20	
Selenium	25.00	24.30	97	24.48	98	80-120	73-127	1	0-20	
Silver	12.50	11.16	89	11.00	88	80-120	73-127	2	0-20	
Thallium	25.00	24.64	99	24.33	97	80-120	73-127	1	0-20	
Vanadium	25.00	24.89	100	24.76	99	80-120	73-127	1	0-20	
Zinc	25.00	26.21	105	26.96	108	80-120	73-127	3	0-20	
Manganese	25.00	24.88	100	24.71	99	80-120	73-127	1	0-20	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B

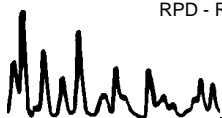
Project: Tire Fire Property

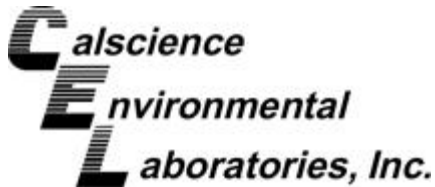
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-414-214	Solid	GC 45	04/12/13	04/18/13	130412B03A

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Diesel Range Organics	400.0	370.3	93	399.1	100	75-123	7	0-12	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

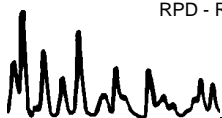
Project: Tire Fire Property

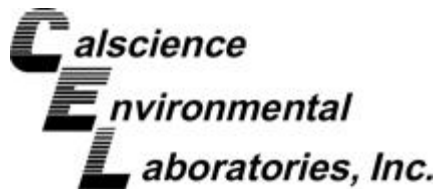
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-420-402	Solid	GC 45	04/12/13	04/18/13	130412B04A

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	400.0	377.7	94	368.7	92	75-123	2	0-12	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

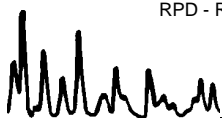
Project: Tire Fire Property

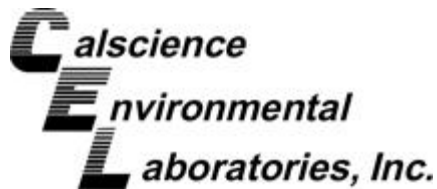
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-024-704	Solid	GC 22	04/12/13	04/12/13	130412B01

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics	10.00	8.339	83	8.797	88	70-118	5	0-28	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 7471A Total
 Method: EPA 7471A

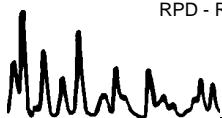
Project: Tire Fire Property

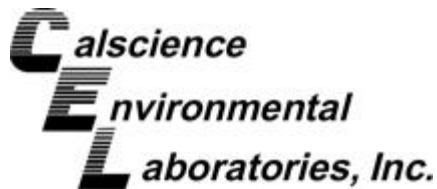
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-007-9,225	Solid	Mercury	04/12/13	04/12/13	130412L03

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	0.8350	0.8115	97	0.8128	97	85-121	0	0-10	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C

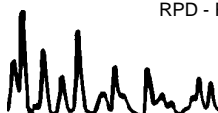
Project: Tire Fire Property

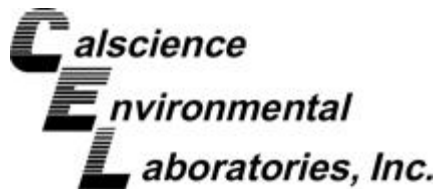
Quality Control Sample ID	Matrix	Instrument		Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-549-2,450	Solid	GC/MS CCC		04/12/13	04/15/13	130412L07				
Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Acenaphthene	10.00	8.747	87	8.672	87	59-125	48-136	1	0-15	
Acenaphthylene	10.00	8.653	87	8.271	83	33-145	14-164	5	0-20	
Butyl Benzyl Phthalate	10.00	9.198	92	9.006	90	0-152	0-177	2	0-20	
4-Chloro-3-Methylphenol	10.00	9.259	93	9.122	91	61-121	51-131	1	0-14	
2-Chlorophenol	10.00	9.536	95	9.456	95	60-114	51-123	1	0-15	
1,4-Dichlorobenzene	10.00	9.292	93	9.149	91	61-121	51-131	2	0-21	
Dimethyl Phthalate	10.00	8.974	90	9.037	90	0-112	0-131	1	0-20	
2,4-Dinitrotoluene	10.00	9.718	97	9.921	99	51-141	36-156	2	0-16	
Fluorene	10.00	9.352	94	9.264	93	59-121	49-131	1	0-20	
N-Nitroso-di-n-propylamine	10.00	8.485	85	8.494	85	64-136	52-148	0	0-15	
Naphthalene	10.00	8.605	86	8.455	85	21-133	2-152	2	0-20	
4-Nitrophenol	10.00	8.159	82	9.136	91	38-152	19-171	11	0-31	
Pentachlorophenol	10.00	4.041	40	4.815	48	38-116	25-129	17	0-20	
Phenol	10.00	9.474	95	9.368	94	59-125	48-136	1	0-15	
Pyrene	10.00	8.568	86	8.421	84	51-141	36-156	2	0-14	
1,2,4-Trichlorobenzene	10.00	8.606	86	8.610	86	58-118	48-128	0	0-18	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B

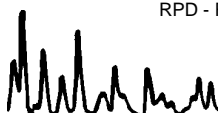
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number					
095-01-025-23,748	Solid	GC/MS W	04/17/13	04/17/13	130417L01					
Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	47.98	96	49.42	99	80-120	73-127	3	0-20	
Carbon Tetrachloride	50.00	59.24	118	61.11	122	65-137	53-149	3	0-20	
Chlorobenzene	50.00	53.10	106	55.27	111	80-120	73-127	4	0-20	
1,2-Dibromoethane	50.00	50.68	101	53.40	107	80-120	73-127	5	0-20	
1,2-Dichlorobenzene	50.00	53.55	107	54.54	109	80-120	73-127	2	0-20	
1,2-Dichloroethane	50.00	50.53	101	52.61	105	80-120	73-127	4	0-20	
1,1-Dichloroethene	50.00	46.83	94	47.64	95	68-128	58-138	2	0-20	
Ethylbenzene	50.00	51.88	104	53.82	108	80-120	73-127	4	0-20	
Toluene	50.00	49.65	99	51.47	103	80-120	73-127	4	0-20	
Trichloroethene	50.00	50.71	101	52.12	104	80-120	73-127	3	0-20	
Vinyl Chloride	50.00	40.84	82	41.09	82	67-127	57-137	1	0-20	
p/m-Xylene	100.0	105.5	105	110.1	110	75-125	67-133	4	0-25	
o-Xylene	50.00	54.45	109	55.83	112	75-125	67-133	3	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	47.74	95	49.85	100	70-124	61-133	4	0-20	
Tert-Butyl Alcohol (TBA)	250.0	260.3	104	263.7	105	73-121	65-129	1	0-20	
Diisopropyl Ether (DIPE)	50.00	47.11	94	49.51	99	69-129	59-139	5	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	51.06	102	53.46	107	70-124	61-133	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	47.89	96	50.25	101	74-122	66-130	5	0-20	
Ethanol	500.0	437.4	87	435.1	87	51-135	37-149	1	0-27	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit



Work Order Number: 13-04-0823

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

For any analysis identified as a "field" test with a holding time (HT) \leq 15 minutes where the sample is received outside of HT, CalScience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet CalScience's internal HT, results will be appropriately qualified.



WO # / LAB USE ONLY

13-04-0823

DATE: 04/10/13
PAGE: 1 OF 1

LABORATORY CLIENT: Freshwater Environmental Services		CLIENT PROJECT NAME / NUMBER: Tire Fire Property		P.O. NO.:	
ADDRESS: 78 Sunny Brae Center		PROJECT CONTACT: Stan Thiesen		SAMPLER(S): (PRINT) Orrin Plocheer	
CITY: Arcata	STATE: CA	ZIP: 95521			
TEL: 707 839-0091	E-MAIL: stan@freshwaterenvironmentalservices.com				

REQUESTED ANALYSES

TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> 10 DAYS						LOG CODE: NA																						
<input type="checkbox"/> COELT EDF		GLOBAL ID: NA																										
SPECIAL INSTRUCTIONS: Please Homogenize Samples prior to Analysis. Metals Include: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc. No percent moisture container was filled for Tire-Fire-2-0.5'-0.6'.						Unpreserved	Preserved	Field Filtered	TPH(g) or GRO	TPH(d) or DRO or (C6-C36) or (C6-C44)	TPH (Diesel and Motor Oil EPA 8015B)	BTEX / MTBE (8260) or (	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	CAM: 17 Metals + manganese (EPA 6020 and 7471)	MS/MSD					
LAB USE ONLY	SAMPLE ID	DATE	TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) or GRO	TPH(d) or DRO or (C6-C36) or (C6-C44)	TPH (Diesel and Motor Oil EPA 8015B)	BTEX / MTBE (8260) or (	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	CAM: 17 Metals + manganese (EPA 6020 and 7471)	MS/MSD					
1	Tire-Fire-1-0.0'-0.1'	4/9/2013	11:00	Soil	11	2	9	NA	X	X	X	X	X	X	X	X						X	X					
2	Tire-Fire-1-0.5'-0.6'	4/9/2013	11:20	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
3	Tire-Fire-2-0.0'-0.1'	4/9/2013	12:10	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
4	Tire-Fire-2-0.5'-0.6'	4/9/2013	12:20	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
5	Tire-Fire-3-0.0'-0.1'	4/9/2013	11:35	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
6	Tire-Fire-3-0.5'-0.6'	4/9/2013	11:45	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
7	Tire-Fire-4-0.0'-0.1'	4/9/2013	12:00	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
8	Tire-Fire-4-0.5'-0.6'	4/9/2013	12:05	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
9	Tire-Fire-5-0.0'-0.1'	4/9/2013	11:30	Soil	4	1	3	NA	X	X	X	X	X	X	X	X						X						
10	Tire-Fire-Background-Metals-0.0'-0.1'	4/9/2013	12:35	Soil	1	1	NA	NA														X						

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature/Affiliation) <i>[Signature]</i>	Date: 4/10/13, 1400	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation) <i>[Signature]</i>		Date: 4/11/13	Time: 1130
Relinquished by: (Signature) <i>(initials)</i>	Received by: (Signature/Affiliation)		Date:	Time:

From: (707) 839-0091
Stan Thiesen
Freshwater Environmental
78 Sunny Brae Center

Origin ID: EKAA



Ship Date: 10APR13
ActWgt: 50.0 LB
CAD: 4822189/INET3370

Dims: 26 X 15 X 15 IN

0823

Arcata, CA 95521

J13111302120326

SHIP TO: (714) 895-5494

BILL SENDER

Alan Kemp
CalScience Environmental Laboratory
7440 Lincoln Way

Garden Grove, CA 92841

Delivery Address Bar Code



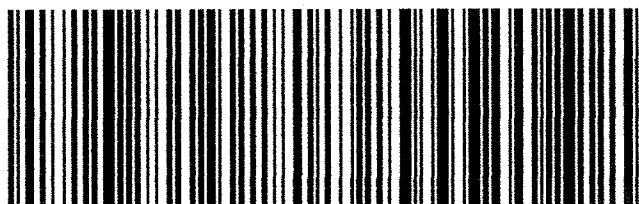
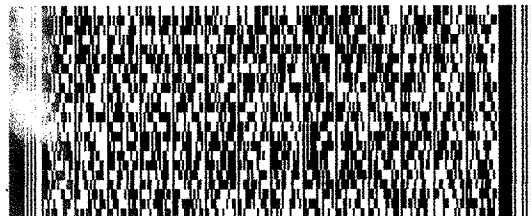
Ref # YTEP Projects
Invoice #
PO #
Dept #

THU - 11 APR 3:00P
STANDARD OVERNIGHT

TRK# 7994 9452 5989
0201

DSR
92841
CA-US
SNA

92 APVA



518G164BE93AB

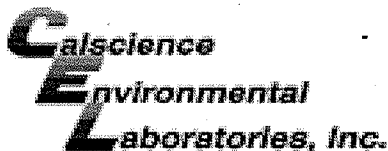
After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Return to Contents



WORK ORDER #: 13-04-0823

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Freshwater Env.

DATE: 04/11/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.2 °C (CF) = 2.0 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: AP

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: AP

Sample _____ No (Not Intact) Not Present Initial: TN

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours...	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® 2oz.PJ

Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

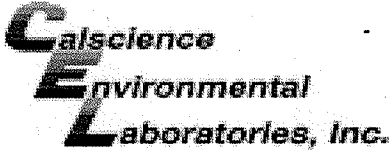
250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Canister Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: TN

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: AP

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered Scanned by: AP





WORK ORDER #: 13-04-0823

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments
 - Sample ID
 - Date and/or Time Collected
 - Project Information
 - # of Container(s)
 - Analysis
- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

(-1) received 19 containers instead of 11.

9x terracores.

1x 8oz. clear glass jar

1x 4oz. clear glass jar

3x 2oz plastic jar

(2-3,5-9) Received 5 containers instead of 4.

3x terracores

1x 4oz. clear glass jar

1x 2oz. plastic jar.

HEADSPACE – Containers with Bubble > 6mm or 1/4 inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: TN 04/11/13



APPENDIX D
Laboratory Report and Chain-of-Custody Record - 2



Supplemental Report 1

Additional requested analyses have been added to the original report.



CALSCIENCE

WORK ORDER NUMBER: 13-04-0823

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Freshwater Environmental Services

Client Project Name: Tire Fire Property

Attention: Stan Thiesen
78 Sunny Brae Center
Arcata, CA 95521-6742

Approved for release on 04/26/2013 by:
Don Burley
Project Manager

ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any litigation which may arise.



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/11/2013. They were assigned to Work Order 13-04-0823.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with an immediate holding time (HT \leq 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

Quality Control:

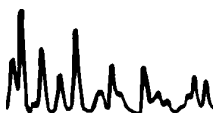
All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontract Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B

Project: Tire Fire Property

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC 45	04/12/13	04/18/13 17:22	130412B03A

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	25	5.0	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	108	61-145	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC 45	04/12/13	04/18/13 17:38	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1	SG	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	104	61-145	

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC 45	04/12/13	04/18/13 17:57	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	64	5.0	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	97	61-145	

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC 45	04/12/13	04/18/13 18:14	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	36	5.0	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	99	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B

Project: Tire Fire Property

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC 45	04/12/13	04/18/13 18:31	130412B03A

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	6300	120	25	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	125	61-145			

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC 45	04/12/13	04/18/13 18:49	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	1000	100	20	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	111	61-145			

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC 45	04/12/13	04/18/13 19:06	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	31	10	2	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	105	61-145			

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	GC 45	04/12/13	04/18/13 19:25	130412B03A
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Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	220	50	10	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	96	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B

Project: Tire Fire Property

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC 45	04/12/13	04/18/13 19:42	130412B03A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Diesel Range Organics	23	5.0	1	SG,HD	mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
n-Octacosane	100	61-145	

Method Blank	099-15-414-214	N/A	Solid	GC 45	04/12/13	04/18/13 14:41	130412B03A
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Diesel Range Organics	ND	5.0	1		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
n-Octacosane	100	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Tire Fire Property

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC 45	04/12/13	04/18/13 17:22	130412B04A

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	86	25	1	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	108	61-145			

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC 45	04/12/13	04/18/13 17:38	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1	SG	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	104	61-145			

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC 45	04/12/13	04/18/13 17:57	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	99	25	1	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	97	61-145			

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC 45	04/12/13	04/18/13 18:14	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	170	25	1	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	99	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Tire Fire Property

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC 45	04/12/13	04/18/13 18:31	130412B04A

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	12000	620	25	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	125	61-145			

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC 45	04/12/13	04/18/13 18:49	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	4400	500	20	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	111	61-145			

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC 45	04/12/13	04/18/13 19:06	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	180	50	2	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	105	61-145			

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	GC 45	04/12/13	04/18/13 19:25	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	930	250	10	SG,HD	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
n-Octacosane	96	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: Tire Fire Property

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC 45	04/12/13	04/18/13 19:42	130412B04A

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	84	25	1	SG,HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	100	61-145	

Method Blank	099-15-420-402	N/A	Solid	GC 45	04/12/13	04/18/13 14:41	130412B04A
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Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	100	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

Project: Tire Fire Property

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	GC 22	04/12/13	04/12/13 17:20	130412B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	70	42-126	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	GC 22	04/12/13	04/12/13 18:59	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	78	42-126	

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	GC 22	04/12/13	04/12/13 19:32	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	76	42-126	

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC 22	04/12/13	04/12/13 20:05	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	76	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5030C
Method: EPA 8015B

Project: Tire Fire Property

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC 22	04/12/13	04/12/13 20:37	130412B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	71	42-126	

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC 22	04/12/13	04/12/13 21:10	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	76	42-126	

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC 22	04/12/13	04/12/13 21:43	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	72	42-126	

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	GC 22	04/12/13	04/12/13 22:16	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	77	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

Project: Tire Fire Property

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	GC 22	04/12/13	04/12/13 22:49	130412B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

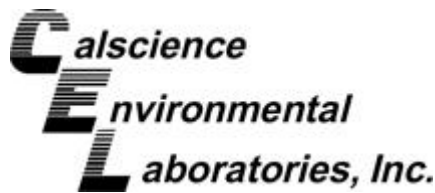
Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	73	42-126	

Method Blank	099-12-024-704	N/A	Solid	GC 22	04/12/13	04/12/13 14:08	130412B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	71	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

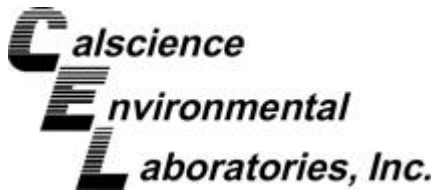
Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-E	04/09/13 11:00	Solid	GC/MS CCC	04/23/13	04/24/13 19:14	130423L06

Comment(s): -The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Phenol	0.023	0.022	1.12		N-Nitrosodimethylamine	ND	0.022	1.12	
2-Chlorophenol	ND	0.022	1.12		Aniline	ND	0.022	1.12	
2-Methylphenol	ND	0.022	1.12		Bis(2-Chloroethyl) Ether	ND	0.11	1.12	
3/4-Methylphenol	ND	0.022	1.12		1,3-Dichlorobenzene	ND	0.022	1.12	
2-Nitrophenol	ND	0.022	1.12		1,4-Dichlorobenzene	ND	0.022	1.12	
2,4-Dimethylphenol	ND	0.022	1.12		Benzyl Alcohol	ND	0.022	1.12	
2,4-Dichlorophenol	ND	0.022	1.12		1,2-Dichlorobenzene	ND	0.022	1.12	
4-Chloro-3-Methylphenol	ND	0.022	1.12		Bis(2-Chloroisopropyl) Ether	ND	0.022	1.12	
2,4-Dinitrophenol	ND	0.11	1.12		N-Nitroso-di-n-propylamine	ND	0.022	1.12	
4-Nitrophenol	ND	0.022	1.12		Hexachloroethane	ND	0.022	1.12	
4,6-Dinitro-2-Methylphenol	ND	0.11	1.12		Nitrobenzene	ND	0.11	1.12	
2,4,6-Trichlorophenol	ND	0.022	1.12		Isophorone	ND	0.022	1.12	
2,4,5-Trichlorophenol	ND	0.022	1.12		Benzoic Acid	ND	0.11	1.12	
Pentachlorophenol	ND	0.022	1.12		Bis(2-Chloroethoxy) Methane	ND	0.022	1.12	
Dimethyl Phthalate	0.055	0.011	1.12		1,2,4-Trichlorobenzene	ND	0.022	1.12	
Diethyl Phthalate	ND	0.011	1.12		4-Chloroaniline	ND	0.022	1.12	
Di-n-Butyl Phthalate	ND	0.011	1.12		Hexachloro-1,3-Butadiene	ND	0.022	1.12	
Butyl Benzyl Phthalate	0.020	0.011	1.12		2-Methylnaphthalene	ND	0.022	1.12	
Bis(2-Ethylhexyl) Phthalate	0.14	0.011	1.12		1-Methylnaphthalene	ND	0.022	1.12	
Di-n-Octyl Phthalate	ND	0.011	1.12		Hexachlorocyclopentadiene	ND	0.022	1.12	
Naphthalene	0.024	0.022	1.12		2-Chloronaphthalene	ND	0.022	1.12	
Acenaphthylene	ND	0.022	1.12		2-Nitroaniline	ND	0.022	1.12	
Acenaphthene	ND	0.022	1.12		3-Nitroaniline	ND	0.022	1.12	
Fluorene	ND	0.022	1.12		Dibenzofuran	ND	0.022	1.12	
Phenanthrene	ND	0.022	1.12		2,4-Dinitrotoluene	ND	0.022	1.12	
Anthracene	ND	0.022	1.12		2,6-Dinitrotoluene	ND	0.022	1.12	
Fluoranthene	ND	0.018	1.12		4-Chlorophenyl-Phenyl Ether	ND	0.022	1.12	
Pyrene	ND	0.022	1.12		4-Nitroaniline	ND	0.022	1.12	
Benzo (a) Anthracene	ND	0.022	1.12		Azobenzene	ND	0.022	1.12	
Chrysene	ND	0.022	1.12		N-Nitrosodiphenylamine	ND	0.022	1.12	
Benzo (k) Fluoranthene	ND	0.022	1.12		4-Bromophenyl-Phenyl Ether	ND	0.022	1.12	
Benzo (b) Fluoranthene	ND	0.022	1.12		Hexachlorobenzene	ND	0.022	1.12	
Benzo (a) Pyrene	ND	0.022	1.12		Benzidine	ND	0.11	1.12	
Indeno (1,2,3-c,d) Pyrene	ND	0.022	1.12		Pyridine	0.031	0.022	1.12	
Dibenz (a,h) Anthracene	ND	0.022	1.12		3,3'-Dichlorobenzidine	ND	0.022	1.12	
Benzo (g,h,i) Perylene	ND	0.022	1.12						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorophenol	49	25-121			Phenol-d6	61	24-113		
Nitrobenzene-d5	51	23-120			2-Fluorobiphenyl	56	30-115		
2,4,6-Tribromophenol	69	19-122			p-Terphenyl-d14	141	18-137		2.7

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

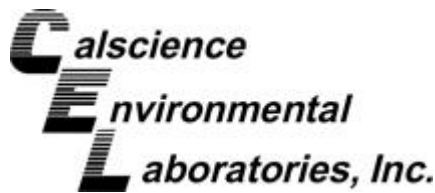
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.5'-0.6'	13-04-0823-2-BF	04/09/13 11:20	Solid	GC/MS CCC	04/23/13	04/24/13 15:44	130423L06

Comment(s): -The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Phenol	ND	0.027	1.37		N-Nitrosodimethylamine	ND	0.027	1.37	
2-Chlorophenol	ND	0.027	1.37		Aniline	ND	0.027	1.37	
2-Methylphenol	ND	0.027	1.37		Bis(2-Chloroethyl) Ether	ND	0.14	1.37	
3/4-Methylphenol	ND	0.027	1.37		1,3-Dichlorobenzene	ND	0.027	1.37	
2-Nitrophenol	ND	0.027	1.37		1,4-Dichlorobenzene	ND	0.027	1.37	
2,4-Dimethylphenol	ND	0.027	1.37		Benzyl Alcohol	ND	0.027	1.37	
2,4-Dichlorophenol	ND	0.027	1.37		1,2-Dichlorobenzene	ND	0.027	1.37	
4-Chloro-3-Methylphenol	ND	0.027	1.37		Bis(2-Chloroisopropyl) Ether	ND	0.027	1.37	
2,4-Dinitrophenol	ND	0.14	1.37		N-Nitroso-di-n-propylamine	ND	0.027	1.37	
4-Nitrophenol	ND	0.027	1.37		Hexachloroethane	ND	0.027	1.37	
4,6-Dinitro-2-Methylphenol	ND	0.14	1.37		Nitrobenzene	ND	0.14	1.37	
2,4,6-Trichlorophenol	ND	0.027	1.37		Isophorone	ND	0.027	1.37	
2,4,5-Trichlorophenol	ND	0.027	1.37		Benzoic Acid	ND	0.14	1.37	
Pentachlorophenol	ND	0.027	1.37		Bis(2-Chloroethoxy) Methane	ND	0.027	1.37	
Dimethyl Phthalate	0.077	0.014	1.37		1,2,4-Trichlorobenzene	ND	0.027	1.37	
Diethyl Phthalate	ND	0.014	1.37		4-Chloroaniline	ND	0.027	1.37	
Di-n-Butyl Phthalate	ND	0.014	1.37		Hexachloro-1,3-Butadiene	ND	0.027	1.37	
Butyl Benzyl Phthalate	ND	0.014	1.37		2-Methylnaphthalene	ND	0.027	1.37	
Bis(2-Ethylhexyl) Phthalate	ND	0.014	1.37		1-Methylnaphthalene	ND	0.027	1.37	
Di-n-Octyl Phthalate	ND	0.014	1.37		Hexachlorocyclopentadiene	ND	0.027	1.37	
Naphthalene	ND	0.027	1.37		2-Chloronaphthalene	ND	0.027	1.37	
Acenaphthylene	ND	0.027	1.37		2-Nitroaniline	ND	0.027	1.37	
Acenaphthene	ND	0.027	1.37		3-Nitroaniline	ND	0.027	1.37	
Fluorene	ND	0.027	1.37		Dibenzofuran	ND	0.027	1.37	
Phenanthrene	ND	0.027	1.37		2,4-Dinitrotoluene	ND	0.027	1.37	
Anthracene	ND	0.027	1.37		2,6-Dinitrotoluene	ND	0.027	1.37	
Fluoranthene	ND	0.022	1.37		4-Chlorophenyl-Phenyl Ether	ND	0.027	1.37	
Pyrene	ND	0.027	1.37		4-Nitroaniline	ND	0.027	1.37	
Benzo (a) Anthracene	ND	0.027	1.37		Azobenzene	ND	0.027	1.37	
Chrysene	ND	0.027	1.37		N-Nitrosodiphenylamine	ND	0.027	1.37	
Benzo (k) Fluoranthene	ND	0.027	1.37		4-Bromophenyl-Phenyl Ether	ND	0.027	1.37	
Benzo (b) Fluoranthene	ND	0.027	1.37		Hexachlorobenzene	ND	0.027	1.37	
Benzo (a) Pyrene	ND	0.027	1.37		Benzidine	ND	0.14	1.37	
Indeno (1,2,3-c,d) Pyrene	ND	0.027	1.37		Pyridine	ND	0.027	1.37	
Dibenz (a,h) Anthracene	ND	0.027	1.37		3,3'-Dichlorobenzidine	ND	0.027	1.37	
Benzo (g,h,i) Perylene	ND	0.027	1.37						
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	59	25-121		Phenol-d6	69	24-113			
Nitrobenzene-d5	46	23-120		2-Fluorobiphenyl	55	30-115			
2,4,6-Tribromophenol	71	19-122		p-Terphenyl-d14	87	18-137			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

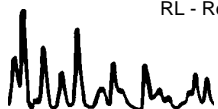
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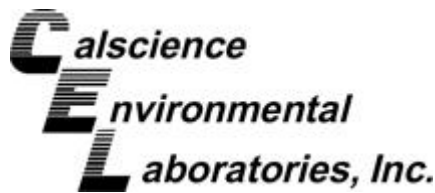
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.0'-0.1'	13-04-0823-3-BF	04/09/13 12:10	Solid	GC/MS CCC	04/23/13	04/24/13 17:56	130423L06

Comment(s): -The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Phenol	ND	0.031	1.57		N-Nitrosodimethylamine	ND	0.031	1.57	
2-Chlorophenol	ND	0.031	1.57		Aniline	ND	0.031	1.57	
2-Methylphenol	ND	0.031	1.57		Bis(2-Chloroethyl) Ether	ND	0.16	1.57	
3/4-Methylphenol	ND	0.031	1.57		1,3-Dichlorobenzene	ND	0.031	1.57	
2-Nitrophenol	ND	0.031	1.57		1,4-Dichlorobenzene	ND	0.031	1.57	
2,4-Dimethylphenol	ND	0.031	1.57		Benzyl Alcohol	ND	0.031	1.57	
2,4-Dichlorophenol	ND	0.031	1.57		1,2-Dichlorobenzene	ND	0.031	1.57	
4-Chloro-3-Methylphenol	ND	0.031	1.57		Bis(2-Chloroisopropyl) Ether	ND	0.031	1.57	
2,4-Dinitrophenol	ND	0.16	1.57		N-Nitroso-di-n-propylamine	ND	0.031	1.57	
4-Nitrophenol	ND	0.031	1.57		Hexachloroethane	ND	0.031	1.57	
4,6-Dinitro-2-Methylphenol	ND	0.16	1.57		Nitrobenzene	ND	0.16	1.57	
2,4,6-Trichlorophenol	ND	0.031	1.57		Isophorone	ND	0.031	1.57	
2,4,5-Trichlorophenol	ND	0.031	1.57		Benzoic Acid	0.28	0.16	1.57	
Pentachlorophenol	ND	0.031	1.57		Bis(2-Chloroethoxy) Methane	ND	0.031	1.57	
Dimethyl Phthalate	0.091	0.016	1.57		1,2,4-Trichlorobenzene	ND	0.031	1.57	
Diethyl Phthalate	ND	0.016	1.57		4-Chloroaniline	ND	0.031	1.57	
Di-n-Butyl Phthalate	ND	0.016	1.57		Hexachloro-1,3-Butadiene	ND	0.031	1.57	
Butyl Benzyl Phthalate	ND	0.016	1.57		2-Methylnaphthalene	ND	0.031	1.57	
Bis(2-Ethylhexyl) Phthalate	0.042	0.016	1.57		1-Methylnaphthalene	ND	0.031	1.57	
Di-n-Octyl Phthalate	ND	0.016	1.57		Hexachlorocyclopentadiene	ND	0.031	1.57	
Naphthalene	ND	0.031	1.57		2-Chloronaphthalene	ND	0.031	1.57	
Acenaphthylene	ND	0.031	1.57		2-Nitroaniline	ND	0.031	1.57	
Acenaphthene	ND	0.031	1.57		3-Nitroaniline	ND	0.031	1.57	
Fluorene	ND	0.031	1.57		Dibenzofuran	ND	0.031	1.57	
Phenanthrene	ND	0.031	1.57		2,4-Dinitrotoluene	ND	0.031	1.57	
Anthracene	ND	0.031	1.57		2,6-Dinitrotoluene	ND	0.031	1.57	
Fluoranthene	ND	0.025	1.57		4-Chlorophenyl-Phenyl Ether	ND	0.031	1.57	
Pyrene	ND	0.031	1.57		4-Nitroaniline	ND	0.031	1.57	
Benzo (a) Anthracene	ND	0.031	1.57		Azobenzene	ND	0.031	1.57	
Chrysene	ND	0.031	1.57		N-Nitrosodiphenylamine	ND	0.031	1.57	
Benzo (k) Fluoranthene	ND	0.031	1.57		4-Bromophenyl-Phenyl Ether	ND	0.031	1.57	
Benzo (b) Fluoranthene	ND	0.031	1.57		Hexachlorobenzene	ND	0.031	1.57	
Benzo (a) Pyrene	ND	0.031	1.57		Benzidine	ND	0.16	1.57	
Indeno (1,2,3-c,d) Pyrene	ND	0.031	1.57		Pyridine	ND	0.031	1.57	
Dibenz (a,h) Anthracene	ND	0.031	1.57		3,3'-Dichlorobenzidine	ND	0.031	1.57	
Benzo (g,h,i) Perylene	ND	0.031	1.57						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorophenol	41	25-121			Phenol-d6	59	24-113		
Nitrobenzene-d5	38	23-120			2-Fluorobiphenyl	46	30-115		
2,4,6-Tribromophenol	53	19-122			p-Terphenyl-d14	109	18-137		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

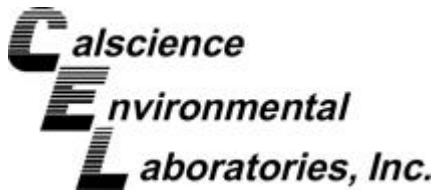
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	GC/MS CCC	04/23/13	04/24/13 18:22	130423L06

Comment(s): -The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Phenol	ND	0.053	2.65		N-Nitrosodimethylamine	ND	0.053	2.65	
2-Chlorophenol	ND	0.053	2.65		Aniline	ND	0.053	2.65	
2-Methylphenol	ND	0.053	2.65		Bis(2-Chloroethyl) Ether	ND	0.26	2.65	
3/4-Methylphenol	ND	0.053	2.65		1,3-Dichlorobenzene	ND	0.053	2.65	
2-Nitrophenol	ND	0.053	2.65		1,4-Dichlorobenzene	ND	0.053	2.65	
2,4-Dimethylphenol	ND	0.053	2.65		Benzyl Alcohol	ND	0.053	2.65	
2,4-Dichlorophenol	ND	0.053	2.65		1,2-Dichlorobenzene	ND	0.053	2.65	
4-Chloro-3-Methylphenol	ND	0.053	2.65		Bis(2-Chloroisopropyl) Ether	ND	0.053	2.65	
2,4-Dinitrophenol	ND	0.26	2.65		N-Nitroso-di-n-propylamine	ND	0.053	2.65	
4-Nitrophenol	ND	0.053	2.65		Hexachloroethane	ND	0.053	2.65	
4,6-Dinitro-2-Methylphenol	ND	0.26	2.65		Nitrobenzene	ND	0.26	2.65	
2,4,6-Trichlorophenol	ND	0.053	2.65		Isophorone	ND	0.053	2.65	
2,4,5-Trichlorophenol	ND	0.053	2.65		Benzoic Acid	ND	0.26	2.65	
Pentachlorophenol	ND	0.053	2.65		Bis(2-Chloroethoxy) Methane	ND	0.053	2.65	
Dimethyl Phthalate	0.091	0.026	2.65		1,2,4-Trichlorobenzene	ND	0.053	2.65	
Diethyl Phthalate	ND	0.026	2.65		4-Chloroaniline	ND	0.053	2.65	
Di-n-Butyl Phthalate	ND	0.026	2.65		Hexachloro-1,3-Butadiene	ND	0.053	2.65	
Butyl Benzyl Phthalate	ND	0.026	2.65		2-Methylnaphthalene	ND	0.053	2.65	
Bis(2-Ethylhexyl) Phthalate	ND	0.026	2.65		1-Methylnaphthalene	ND	0.053	2.65	
Di-n-Octyl Phthalate	ND	0.026	2.65		Hexachlorocyclopentadiene	ND	0.053	2.65	
Naphthalene	ND	0.053	2.65		2-Chloronaphthalene	ND	0.053	2.65	
Acenaphthylene	ND	0.053	2.65		2-Nitroaniline	ND	0.053	2.65	
Acenaphthene	ND	0.053	2.65		3-Nitroaniline	ND	0.053	2.65	
Fluorene	ND	0.053	2.65		Dibenzofuran	ND	0.053	2.65	
Phenanthrene	ND	0.053	2.65		2,4-Dinitrotoluene	ND	0.053	2.65	
Anthracene	ND	0.053	2.65		2,6-Dinitrotoluene	ND	0.053	2.65	
Fluoranthene	ND	0.042	2.65		4-Chlorophenyl-Phenyl Ether	ND	0.053	2.65	
Pyrene	ND	0.053	2.65		4-Nitroaniline	ND	0.053	2.65	
Benzo (a) Anthracene	ND	0.053	2.65		Azobenzene	ND	0.053	2.65	
Chrysene	ND	0.053	2.65		N-Nitrosodiphenylamine	ND	0.053	2.65	
Benzo (k) Fluoranthene	ND	0.053	2.65		4-Bromophenyl-Phenyl Ether	ND	0.053	2.65	
Benzo (b) Fluoranthene	ND	0.053	2.65		Hexachlorobenzene	ND	0.053	2.65	
Benzo (a) Pyrene	ND	0.053	2.65		Benzidine	ND	0.26	2.65	
Indeno (1,2,3-c,d) Pyrene	ND	0.053	2.65		Pyridine	ND	0.053	2.65	
Dibenz (a,h) Anthracene	ND	0.053	2.65		3,3'-Dichlorobenzidine	ND	0.053	2.65	
Benzo (g,h,i) Perylene	ND	0.053	2.65						
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	67	25-121		Phenol-d6	73	24-113			
Nitrobenzene-d5	55	23-120		2-Fluorobiphenyl	65	30-115			
2,4,6-Tribromophenol	81	19-122		p-Terphenyl-d14	140	18-137		2.7	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

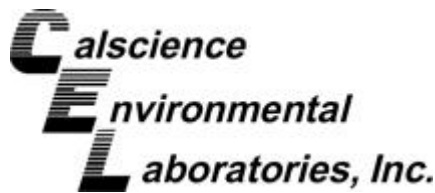
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-BF	04/09/13 11:30	Solid	GC/MS CCC	04/23/13	04/24/13 18:48	130423L06

Comment(s): -The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Phenol	ND	0.027	1.34		N-Nitrosodimethylamine	ND	0.027	1.34	
2-Chlorophenol	ND	0.027	1.34		Aniline	ND	0.027	1.34	
2-Methylphenol	ND	0.027	1.34		Bis(2-Chloroethyl) Ether	ND	0.13	1.34	
3/4-Methylphenol	ND	0.027	1.34		1,3-Dichlorobenzene	ND	0.027	1.34	
2-Nitrophenol	ND	0.027	1.34		1,4-Dichlorobenzene	ND	0.027	1.34	
2,4-Dimethylphenol	ND	0.027	1.34		Benzyl Alcohol	ND	0.027	1.34	
2,4-Dichlorophenol	ND	0.027	1.34		1,2-Dichlorobenzene	ND	0.027	1.34	
4-Chloro-3-Methylphenol	ND	0.027	1.34		Bis(2-Chloroisopropyl) Ether	ND	0.027	1.34	
2,4-Dinitrophenol	ND	0.13	1.34		N-Nitroso-di-n-propylamine	ND	0.027	1.34	
4-Nitrophenol	ND	0.027	1.34		Hexachloroethane	ND	0.027	1.34	
4,6-Dinitro-2-Methylphenol	ND	0.13	1.34		Nitrobenzene	ND	0.13	1.34	
2,4,6-Trichlorophenol	ND	0.027	1.34		Isophorone	ND	0.027	1.34	
2,4,5-Trichlorophenol	ND	0.027	1.34		Benzoic Acid	ND	0.13	1.34	
Pentachlorophenol	ND	0.027	1.34		Bis(2-Chloroethoxy) Methane	ND	0.027	1.34	
Dimethyl Phthalate	0.074	0.013	1.34		1,2,4-Trichlorobenzene	ND	0.027	1.34	
Diethyl Phthalate	ND	0.013	1.34		4-Chloroaniline	ND	0.027	1.34	
Di-n-Butyl Phthalate	ND	0.013	1.34		Hexachloro-1,3-Butadiene	ND	0.027	1.34	
Butyl Benzyl Phthalate	ND	0.013	1.34		2-Methylnaphthalene	ND	0.027	1.34	
Bis(2-Ethylhexyl) Phthalate	0.042	0.013	1.34		1-Methylnaphthalene	ND	0.027	1.34	
Di-n-Octyl Phthalate	ND	0.013	1.34		Hexachlorocyclopentadiene	ND	0.027	1.34	
Naphthalene	0.030	0.027	1.34		2-Chloronaphthalene	ND	0.027	1.34	
Acenaphthylene	ND	0.027	1.34		2-Nitroaniline	ND	0.027	1.34	
Acenaphthene	ND	0.027	1.34		3-Nitroaniline	ND	0.027	1.34	
Fluorene	ND	0.027	1.34		Dibenzofuran	ND	0.027	1.34	
Phenanthrene	ND	0.027	1.34		2,4-Dinitrotoluene	ND	0.027	1.34	
Anthracene	ND	0.027	1.34		2,6-Dinitrotoluene	ND	0.027	1.34	
Fluoranthene	ND	0.021	1.34		4-Chlorophenyl-Phenyl Ether	ND	0.027	1.34	
Pyrene	ND	0.027	1.34		4-Nitroaniline	ND	0.027	1.34	
Benzo (a) Anthracene	ND	0.027	1.34		Azobenzene	ND	0.027	1.34	
Chrysene	ND	0.027	1.34		N-Nitrosodiphenylamine	ND	0.027	1.34	
Benzo (k) Fluoranthene	ND	0.027	1.34		4-Bromophenyl-Phenyl Ether	ND	0.027	1.34	
Benzo (b) Fluoranthene	ND	0.027	1.34		Hexachlorobenzene	ND	0.027	1.34	
Benzo (a) Pyrene	ND	0.027	1.34		Benzidine	ND	0.13	1.34	
Indeno (1,2,3-c,d) Pyrene	ND	0.027	1.34		Pyridine	0.040	0.027	1.34	
Dibenz (a,h) Anthracene	ND	0.027	1.34		3,3'-Dichlorobenzidine	ND	0.027	1.34	
Benzo (g,h,i) Perylene	ND	0.027	1.34						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorophenol	41	25-121			Phenol-d6	59	24-113		
Nitrobenzene-d5	45	23-120			2-Fluorobiphenyl	52	30-115		
2,4,6-Tribromophenol	76	19-122			p-Terphenyl-d14	150	18-137		2.7

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

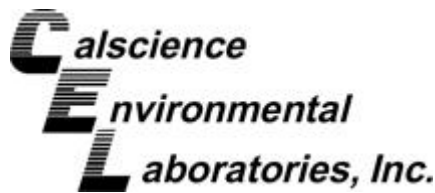
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-009-87	N/A	Solid	GC/MS CCC	04/23/13	04/24/13 11:44	130423L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Phenol	ND	0.020	1		N-Nitrosodimethylamine	ND	0.020	1	
2-Chlorophenol	ND	0.020	1		Aniline	ND	0.020	1	
2-Methylphenol	ND	0.020	1		Bis(2-Chloroethyl) Ether	ND	0.10	1	
3/4-Methylphenol	ND	0.020	1		1,3-Dichlorobenzene	ND	0.020	1	
2-Nitrophenol	ND	0.020	1		1,4-Dichlorobenzene	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1		Benzyl Alcohol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1		1,2-Dichlorobenzene	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1		Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1		N-Nitroso-di-n-propylamine	ND	0.020	1	
4-Nitrophenol	ND	0.020	1		Hexachloroethane	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1		Nitrobenzene	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1		Isophorone	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1		Benzoic Acid	ND	0.10	1	
Pentachlorophenol	ND	0.020	1		Bis(2-Chloroethoxy) Methane	ND	0.020	1	
Dimethyl Phthalate	ND	0.010	1		1,2,4-Trichlorobenzene	ND	0.020	1	
Diethyl Phthalate	ND	0.010	1		4-Chloroaniline	ND	0.020	1	
Di-n-Butyl Phthalate	ND	0.010	1		Hexachloro-1,3-Butadiene	ND	0.020	1	
Butyl Benzyl Phthalate	ND	0.010	1		2-Methylnaphthalene	ND	0.020	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1		1-Methylnaphthalene	ND	0.020	1	
Di-n-Octyl Phthalate	ND	0.010	1		Hexachlorocyclopentadiene	ND	0.020	1	
Naphthalene	ND	0.020	1		2-Chloronaphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1		2-Nitroaniline	ND	0.020	1	
Acenaphthene	ND	0.020	1		3-Nitroaniline	ND	0.020	1	
Fluorene	ND	0.020	1		Dibenzofuran	ND	0.020	1	
Phenanthrene	ND	0.020	1		2,4-Dinitrotoluene	ND	0.020	1	
Anthracene	ND	0.020	1		2,6-Dinitrotoluene	ND	0.020	1	
Fluoranthene	ND	0.016	1		4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
Pyrene	ND	0.020	1		4-Nitroaniline	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1		Azobenzene	ND	0.020	1	
Chrysene	ND	0.020	1		N-Nitrosodiphenylamine	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1		4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1		Hexachlorobenzene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1		Benzidine	ND	0.10	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1		Pyridine	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1		3,3'-Dichlorobenzidine	ND	0.020	1	
Benzo (g,h,i) Perylene	ND	0.020	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorophenol	100	25-121			Phenol-d6	103	24-113		
Nitrobenzene-d5	87	23-120			2-Fluorobiphenyl	81	30-115		
2,4,6-Tribromophenol	77	19-122			p-Terphenyl-d14	102	18-137		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

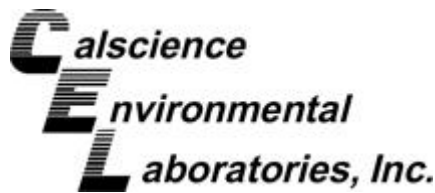
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	GC/MS CCC	04/12/13	04/15/13 18:09	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	1.0	2		2,4-Dimethylphenol	ND	1.0	2	
Acenaphthylene	ND	1.0	2		4,6-Dinitro-2-Methylphenol	ND	5.0	2	
Aniline	ND	1.0	2		2,4-Dinitrophenol	ND	5.0	2	
Anthracene	ND	1.0	2		2,4-Dinitrotoluene	ND	1.0	2	
Azobenzene	ND	1.0	2		2,6-Dinitrotoluene	ND	1.0	2	
Benzidine	ND	20	2		Fluoranthene	ND	1.0	2	
Benzo (a) Anthracene	ND	1.0	2		Fluorene	ND	1.0	2	
Benzo (a) Pyrene	ND	1.0	2		Hexachloro-1,3-Butadiene	ND	1.0	2	
Benzo (b) Fluoranthene	ND	1.0	2		Hexachlorobenzene	ND	1.0	2	
Benzo (g,h,i) Perylene	ND	1.0	2		Hexachlorocyclopentadiene	ND	5.0	2	
Benzo (k) Fluoranthene	ND	1.0	2		Hexachloroethane	ND	1.0	2	
Benzoic Acid	ND	5.0	2		Indeno (1,2,3-c,d) Pyrene	ND	1.0	2	
Benzyl Alcohol	ND	1.0	2		Isophorone	ND	1.0	2	
Bis(2-Chloroethoxy) Methane	ND	1.0	2		2-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroethyl) Ether	ND	5.0	2		1-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroisopropyl) Ether	ND	1.0	2		2-Methylphenol	ND	1.0	2	
Bis(2-Ethylhexyl) Phthalate	ND	1.0	2		3/4-Methylphenol	ND	1.0	2	
4-Bromophenyl-Phenyl Ether	ND	1.0	2		N-Nitroso-di-n-propylamine	ND	1.0	2	
Butyl Benzyl Phthalate	ND	1.0	2		N-Nitrosodimethylamine	ND	1.0	2	
4-Chloro-3-Methylphenol	ND	1.0	2		N-Nitrosodiphenylamine	ND	1.0	2	
4-Chloroaniline	ND	1.0	2		Naphthalene	ND	1.0	2	
2-Chloronaphthalene	ND	1.0	2		4-Nitroaniline	ND	1.0	2	
2-Chlorophenol	ND	1.0	2		3-Nitroaniline	ND	1.0	2	
4-Chlorophenyl-Phenyl Ether	ND	1.0	2		2-Nitroaniline	ND	1.0	2	
Chrysene	ND	1.0	2		Nitrobenzene	ND	5.0	2	
Di-n-Butyl Phthalate	ND	1.0	2		4-Nitrophenol	ND	1.0	2	
Di-n-Octyl Phthalate	ND	1.0	2		2-Nitrophenol	ND	1.0	2	
Dibenz (a,h) Anthracene	ND	1.0	2		Pentachlorophenol	ND	5.0	2	
Dibenzofuran	ND	1.0	2		Phenanthrene	ND	1.0	2	
1,2-Dichlorobenzene	ND	1.0	2		Phenol	ND	1.0	2	
1,3-Dichlorobenzene	ND	1.0	2		Pyrene	ND	1.0	2	
1,4-Dichlorobenzene	ND	1.0	2		Pyridine	ND	1.0	2	
3,3'-Dichlorobenzidine	ND	20	2		1,2,4-Trichlorobenzene	ND	1.0	2	
2,4-Dichlorophenol	ND	1.0	2		2,4,6-Trichlorophenol	ND	1.0	2	
Diethyl Phthalate	ND	1.0	2		2,4,5-Trichlorophenol	ND	1.0	2	
Dimethyl Phthalate	ND	1.0	2						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	69	38-134			2-Fluorophenol	73	42-120		
Nitrobenzene-d5	66	42-150			p-Terphenyl-d14	124	35-167		
Phenol-d6	79	46-118			2,4,6-Tribromophenol	92	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

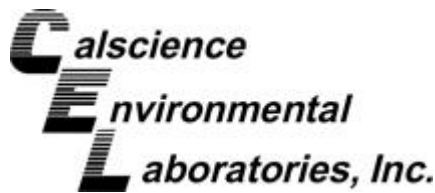
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	GC/MS CCC	04/12/13	04/15/13 19:29	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	5.0	10		2,4-Dimethylphenol	ND	5.0	10	
Acenaphthylene	ND	5.0	10		4,6-Dinitro-2-Methylphenol	ND	25	10	
Aniline	ND	5.0	10		2,4-Dinitrophenol	ND	25	10	
Anthracene	ND	5.0	10		2,4-Dinitrotoluene	ND	5.0	10	
Azobenzene	ND	5.0	10		2,6-Dinitrotoluene	ND	5.0	10	
Benidine	ND	100	10		Fluoranthene	ND	5.0	10	
Benzo (a) Anthracene	ND	5.0	10		Fluorene	ND	5.0	10	
Benzo (a) Pyrene	ND	5.0	10		Hexachloro-1,3-Butadiene	ND	5.0	10	
Benzo (b) Fluoranthene	ND	5.0	10		Hexachlorobenzene	ND	5.0	10	
Benzo (g,h,i) Perylene	ND	5.0	10		Hexachlorocyclopentadiene	ND	25	10	
Benzo (k) Fluoranthene	ND	5.0	10		Hexachloroethane	ND	5.0	10	
Benzoic Acid	ND	25	10		Indeno (1,2,3-c,d) Pyrene	ND	5.0	10	
Benzyl Alcohol	ND	5.0	10		Isophorone	ND	5.0	10	
Bis(2-Chloroethoxy) Methane	ND	5.0	10		2-Methylnaphthalene	ND	5.0	10	
Bis(2-Chloroethyl) Ether	ND	25	10		1-Methylnaphthalene	ND	5.0	10	
Bis(2-Chloroisopropyl) Ether	ND	5.0	10		2-Methylphenol	ND	5.0	10	
Bis(2-Ethylhexyl) Phthalate	ND	5.0	10		3/4-Methylphenol	ND	5.0	10	
4-Bromophenyl-Phenyl Ether	ND	5.0	10		N-Nitroso-di-n-propylamine	ND	5.0	10	
Butyl Benzyl Phthalate	ND	5.0	10		N-Nitrosodimethylamine	ND	5.0	10	
4-Chloro-3-Methylphenol	ND	5.0	10		N-Nitrosodiphenylamine	ND	5.0	10	
4-Chloroaniline	ND	5.0	10		Naphthalene	ND	5.0	10	
2-Chloronaphthalene	ND	5.0	10		4-Nitroaniline	ND	5.0	10	
2-Chlorophenol	ND	5.0	10		3-Nitroaniline	ND	5.0	10	
4-Chlorophenyl-Phenyl Ether	ND	5.0	10		2-Nitroaniline	ND	5.0	10	
Chrysene	ND	5.0	10		Nitrobenzene	ND	25	10	
Di-n-Butyl Phthalate	ND	5.0	10		4-Nitrophenol	ND	5.0	10	
Di-n-Octyl Phthalate	ND	5.0	10		2-Nitrophenol	ND	5.0	10	
Dibenz (a,h) Anthracene	ND	5.0	10		Pentachlorophenol	ND	25	10	
Dibenzofuran	ND	5.0	10		Phenanthrene	ND	5.0	10	
1,2-Dichlorobenzene	ND	5.0	10		Phenol	ND	5.0	10	
1,3-Dichlorobenzene	ND	5.0	10		Pyrene	ND	5.0	10	
1,4-Dichlorobenzene	ND	5.0	10		Pyridine	ND	5.0	10	
3,3'-Dichlorobenzidine	ND	100	10		1,2,4-Trichlorobenzene	ND	5.0	10	
2,4-Dichlorophenol	ND	5.0	10		2,4,6-Trichlorophenol	ND	5.0	10	
Diethyl Phthalate	ND	5.0	10		2,4,5-Trichlorophenol	ND	5.0	10	
Dimethyl Phthalate	ND	5.0	10						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	69	38-134			2-Fluorophenol	64	42-120		
Nitrobenzene-d5	60	42-150			p-Terphenyl-d14	104	35-167		
Phenol-d6	70	46-118			2,4,6-Tribromophenol	57	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

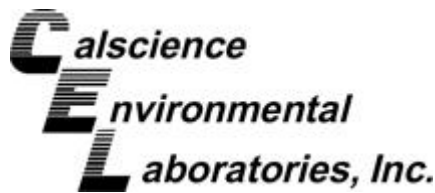
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	GC/MS CCC	04/12/13	04/15/13 18:36	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	1.0	2		2,4-Dimethylphenol	ND	1.0	2	
Acenaphthylene	ND	1.0	2		4,6-Dinitro-2-Methylphenol	ND	5.0	2	
Aniline	ND	1.0	2		2,4-Dinitrophenol	ND	5.0	2	
Anthracene	ND	1.0	2		2,4-Dinitrotoluene	ND	1.0	2	
Azobenzene	ND	1.0	2		2,6-Dinitrotoluene	ND	1.0	2	
Benzidine	ND	20	2		Fluoranthene	ND	1.0	2	
Benzo (a) Anthracene	ND	1.0	2		Fluorene	ND	1.0	2	
Benzo (a) Pyrene	ND	1.0	2		Hexachloro-1,3-Butadiene	ND	1.0	2	
Benzo (b) Fluoranthene	ND	1.0	2		Hexachlorobenzene	ND	1.0	2	
Benzo (g,h,i) Perylene	ND	1.0	2		Hexachlorocyclopentadiene	ND	5.0	2	
Benzo (k) Fluoranthene	ND	1.0	2		Hexachloroethane	ND	1.0	2	
Benzoic Acid	ND	5.0	2		Indeno (1,2,3-c,d) Pyrene	ND	1.0	2	
Benzyl Alcohol	ND	1.0	2		Isophorone	ND	1.0	2	
Bis(2-Chloroethoxy) Methane	ND	1.0	2		2-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroethyl) Ether	ND	5.0	2		1-Methylnaphthalene	ND	1.0	2	
Bis(2-Chloroisopropyl) Ether	ND	1.0	2		2-Methylphenol	ND	1.0	2	
Bis(2-Ethylhexyl) Phthalate	ND	1.0	2		3/4-Methylphenol	ND	1.0	2	
4-Bromophenyl-Phenyl Ether	ND	1.0	2		N-Nitroso-di-n-propylamine	ND	1.0	2	
Butyl Benzyl Phthalate	ND	1.0	2		N-Nitrosodimethylamine	ND	1.0	2	
4-Chloro-3-Methylphenol	ND	1.0	2		N-Nitrosodiphenylamine	ND	1.0	2	
4-Chloroaniline	ND	1.0	2		Naphthalene	ND	1.0	2	
2-Chloronaphthalene	ND	1.0	2		4-Nitroaniline	ND	1.0	2	
2-Chlorophenol	ND	1.0	2		3-Nitroaniline	ND	1.0	2	
4-Chlorophenyl-Phenyl Ether	ND	1.0	2		2-Nitroaniline	ND	1.0	2	
Chrysene	ND	1.0	2		Nitrobenzene	ND	5.0	2	
Di-n-Butyl Phthalate	ND	1.0	2		4-Nitrophenol	ND	1.0	2	
Di-n-Octyl Phthalate	ND	1.0	2		2-Nitrophenol	ND	1.0	2	
Dibenz (a,h) Anthracene	ND	1.0	2		Pentachlorophenol	ND	5.0	2	
Dibenzofuran	ND	1.0	2		Phenanthrene	ND	1.0	2	
1,2-Dichlorobenzene	ND	1.0	2		Phenol	ND	1.0	2	
1,3-Dichlorobenzene	ND	1.0	2		Pyrene	ND	1.0	2	
1,4-Dichlorobenzene	ND	1.0	2		Pyridine	ND	1.0	2	
3,3'-Dichlorobenzidine	ND	20	2		1,2,4-Trichlorobenzene	ND	1.0	2	
2,4-Dichlorophenol	ND	1.0	2		2,4,6-Trichlorophenol	ND	1.0	2	
Diethyl Phthalate	ND	1.0	2		2,4,5-Trichlorophenol	ND	1.0	2	
Dimethyl Phthalate	ND	1.0	2						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	54	38-134			2-Fluorophenol	48	42-120		
Nitrobenzene-d5	60	42-150			p-Terphenyl-d14	84	35-167		
Phenol-d6	63	46-118			2,4,6-Tribromophenol	56	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

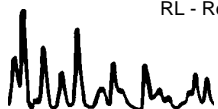
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.5'-0.6'	13-04-0823-8-A	04/09/13 12:05	Solid	GC/MS CCC	04/12/13	04/15/13 19:02	130412L07

Comment(s): -The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	2.5	5		2,4-Dimethylphenol	ND	2.5	5	
Acenaphthylene	ND	2.5	5		4,6-Dinitro-2-Methylphenol	ND	12	5	
Aniline	ND	2.5	5		2,4-Dinitrophenol	ND	12	5	
Anthracene	ND	2.5	5		2,4-Dinitrotoluene	ND	2.5	5	
Azobenzene	ND	2.5	5		2,6-Dinitrotoluene	ND	2.5	5	
Benzdine	ND	50	5		Fluoranthene	ND	2.5	5	
Benzo (a) Anthracene	ND	2.5	5		Fluorene	ND	2.5	5	
Benzo (a) Pyrene	ND	2.5	5		Hexachloro-1,3-Butadiene	ND	2.5	5	
Benzo (b) Fluoranthene	ND	2.5	5		Hexachlorobenzene	ND	2.5	5	
Benzo (g,h,i) Perylene	ND	2.5	5		Hexachlorocyclopentadiene	ND	12	5	
Benzo (k) Fluoranthene	ND	2.5	5		Hexachloroethane	ND	2.5	5	
Benzoic Acid	ND	12	5		Indeno (1,2,3-c,d) Pyrene	ND	2.5	5	
Benzyl Alcohol	ND	2.5	5		Isophorone	ND	2.5	5	
Bis(2-Chloroethoxy) Methane	ND	2.5	5		2-Methylnaphthalene	ND	2.5	5	
Bis(2-Chloroethyl) Ether	ND	12	5		1-Methylnaphthalene	ND	2.5	5	
Bis(2-Chloroisopropyl) Ether	ND	2.5	5		2-Methylphenol	ND	2.5	5	
Bis(2-Ethylhexyl) Phthalate	ND	2.5	5		3/4-Methylphenol	ND	2.5	5	
4-Bromophenyl-Phenyl Ether	ND	2.5	5		N-Nitroso-di-n-propylamine	ND	2.5	5	
Butyl Benzyl Phthalate	ND	2.5	5		N-Nitrosodimethylamine	ND	2.5	5	
4-Chloro-3-Methylphenol	ND	2.5	5		N-Nitrosodiphenylamine	ND	2.5	5	
4-Chloroaniline	ND	2.5	5		Naphthalene	ND	2.5	5	
2-Chloronaphthalene	ND	2.5	5		4-Nitroaniline	ND	2.5	5	
2-Chlorophenol	ND	2.5	5		3-Nitroaniline	ND	2.5	5	
4-Chlorophenyl-Phenyl Ether	ND	2.5	5		2-Nitroaniline	ND	2.5	5	
Chrysene	ND	2.5	5		Nitrobenzene	ND	12	5	
Di-n-Butyl Phthalate	ND	2.5	5		4-Nitrophenol	ND	2.5	5	
Di-n-Octyl Phthalate	ND	2.5	5		2-Nitrophenol	ND	2.5	5	
Dibenz (a,h) Anthracene	ND	2.5	5		Pentachlorophenol	ND	12	5	
Dibenzofuran	ND	2.5	5		Phenanthrene	ND	2.5	5	
1,2-Dichlorobenzene	ND	2.5	5		Phenol	ND	2.5	5	
1,3-Dichlorobenzene	ND	2.5	5		Pyrene	ND	2.5	5	
1,4-Dichlorobenzene	ND	2.5	5		Pyridine	ND	2.5	5	
3,3'-Dichlorobenzidine	ND	50	5		1,2,4-Trichlorobenzene	ND	2.5	5	
2,4-Dichlorophenol	ND	2.5	5		2,4,6-Trichlorophenol	ND	2.5	5	
Diethyl Phthalate	ND	2.5	5		2,4,5-Trichlorophenol	ND	2.5	5	
Dimethyl Phthalate	ND	2.5	5						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	72	38-134			2-Fluorophenol	69	42-120		
Nitrobenzene-d5	65	42-150			p-Terphenyl-d14	106	35-167		
Phenol-d6	74	46-118			2,4,6-Tribromophenol	52	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg


Project: Tire Fire Property

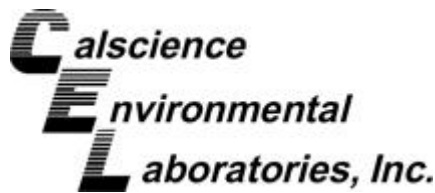
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-2,450	N/A	Solid	GC/MS CCC	04/12/13	04/15/13 12:54	130412L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	79	38-134			2-Fluorophenol	79	42-120		
Nitrobenzene-d5	82	42-150			p-Terphenyl-d14	88	35-167		
Phenol-d6	89	46-118			2,4,6-Tribromophenol	57	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

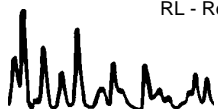
Project: Tire Fire Property

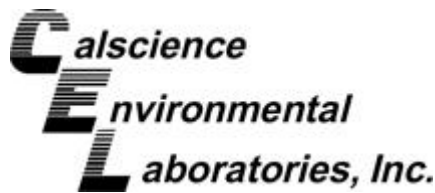
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-G	04/09/13 11:00	Solid	GC/MS W	04/09/13	04/17/13 14:20	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	65	1.3		c-1,3-Dichloropropene	ND	1.3	1.3	
Benzene	ND	1.3	1.3		t-1,3-Dichloropropene	ND	2.6	1.3	
Bromobenzene	ND	1.3	1.3		Ethylbenzene	ND	1.3	1.3	
Bromochloromethane	ND	2.6	1.3		2-Hexanone	ND	26	1.3	
Bromodichloromethane	ND	1.3	1.3		Isopropylbenzene	ND	1.3	1.3	
Bromoform	ND	6.5	1.3		p-Isopropyltoluene	ND	1.3	1.3	
Bromomethane	ND	26	1.3		Methylene Chloride	ND	13	1.3	
2-Butanone	ND	26	1.3		4-Methyl-2-Pentanone	ND	26	1.3	
n-Butylbenzene	ND	1.3	1.3		Naphthalene	ND	13	1.3	
sec-Butylbenzene	ND	1.3	1.3		n-Propylbenzene	ND	2.6	1.3	
tert-Butylbenzene	ND	1.3	1.3		Styrene	ND	1.3	1.3	
Carbon Disulfide	ND	13	1.3		1,1,1,2-Tetrachloroethane	ND	1.3	1.3	
Carbon Tetrachloride	ND	1.3	1.3		1,1,2,2-Tetrachloroethane	ND	2.6	1.3	
Chlorobenzene	ND	1.3	1.3		Tetrachloroethene	ND	1.3	1.3	
Chloroethane	ND	2.6	1.3		Toluene	ND	1.3	1.3	
Chloroform	ND	1.3	1.3		1,2,3-Trichlorobenzene	ND	2.6	1.3	
Chloromethane	ND	26	1.3		1,2,4-Trichlorobenzene	ND	2.6	1.3	
2-Chlorotoluene	ND	1.3	1.3		1,1,1-Trichloroethane	ND	1.3	1.3	
4-Chlorotoluene	ND	1.3	1.3		1,1,2-Trichloroethane	ND	1.3	1.3	
Dibromochloromethane	ND	2.6	1.3		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	13	1.3	
1,2-Dibromo-3-Chloropropane	ND	6.5	1.3		Trichloroethene	ND	2.6	1.3	
1,2-Dibromoethane	ND	1.3	1.3		Trichlorofluoromethane	ND	13	1.3	
Dibromomethane	ND	1.3	1.3		1,2,3-Trichloropropane	ND	2.6	1.3	
1,2-Dichlorobenzene	ND	1.3	1.3		1,2,4-Trimethylbenzene	ND	2.6	1.3	
1,3-Dichlorobenzene	ND	1.3	1.3		1,3,5-Trimethylbenzene	ND	2.6	1.3	
1,4-Dichlorobenzene	ND	1.3	1.3		Vinyl Acetate	ND	13	1.3	
Dichlorodifluoromethane	ND	2.6	1.3		Vinyl Chloride	ND	1.3	1.3	
1,1-Dichloroethane	ND	1.3	1.3		p/m-Xylene	ND	2.6	1.3	
1,2-Dichloroethane	ND	1.3	1.3		o-Xylene	ND	1.3	1.3	
1,1-Dichloroethene	ND	1.3	1.3		Methyl-t-Butyl Ether (MTBE)	ND	2.6	1.3	
c-1,2-Dichloroethene	ND	1.3	1.3		Tert-Butyl Alcohol (TBA)	ND	26	1.3	
t-1,2-Dichloroethene	ND	1.3	1.3		Diisopropyl Ether (DIPE)	ND	1.3	1.3	
1,2-Dichloropropane	ND	1.3	1.3		Ethyl-t-Butyl Ether (ETBE)	ND	1.3	1.3	
1,3-Dichloropropane	ND	1.3	1.3		Tert-Amyl-Methyl Ether (TAME)	ND	1.3	1.3	
2,2-Dichloropropane	ND	6.5	1.3		Ethanol	ND	650	1.3	
1,1-Dichloropropene	ND	2.6	1.3						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	87	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	114	71-155			Toluene-d8	98	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

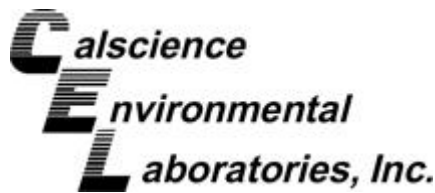
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.5'-0.6'	13-04-0823-2-C	04/09/13 11:20	Solid	GC/MS W	04/09/13	04/17/13 16:32	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	42	0.833		c-1,3-Dichloropropene	ND	0.83	0.833	
Benzene	ND	0.83	0.833		t-1,3-Dichloropropene	ND	1.7	0.833	
Bromobenzene	ND	0.83	0.833		Ethylbenzene	ND	0.83	0.833	
Bromochloromethane	ND	1.7	0.833		2-Hexanone	ND	17	0.833	
Bromodichloromethane	ND	0.83	0.833		Isopropylbenzene	ND	0.83	0.833	
Bromoform	ND	4.2	0.833		p-Isopropyltoluene	ND	0.83	0.833	
Bromomethane	ND	17	0.833		Methylene Chloride	ND	8.3	0.833	
2-Butanone	ND	17	0.833		4-Methyl-2-Pentanone	ND	17	0.833	
n-Butylbenzene	ND	0.83	0.833		Naphthalene	ND	8.3	0.833	
sec-Butylbenzene	ND	0.83	0.833		n-Propylbenzene	ND	1.7	0.833	
tert-Butylbenzene	ND	0.83	0.833		Styrene	ND	0.83	0.833	
Carbon Disulfide	ND	8.3	0.833		1,1,1,2-Tetrachloroethane	ND	0.83	0.833	
Carbon Tetrachloride	ND	0.83	0.833		1,1,2,2-Tetrachloroethane	ND	1.7	0.833	
Chlorobenzene	ND	0.83	0.833		Tetrachloroethene	ND	0.83	0.833	
Chloroethane	ND	1.7	0.833		Toluene	ND	0.83	0.833	
Chloroform	ND	0.83	0.833		1,2,3-Trichlorobenzene	ND	1.7	0.833	
Chloromethane	ND	17	0.833		1,2,4-Trichlorobenzene	ND	1.7	0.833	
2-Chlorotoluene	ND	0.83	0.833		1,1,1-Trichloroethane	ND	0.83	0.833	
4-Chlorotoluene	ND	0.83	0.833		1,1,2-Trichloroethane	ND	0.83	0.833	
Dibromochloromethane	ND	1.7	0.833		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.3	0.833	
1,2-Dibromo-3-Chloropropane	ND	4.2	0.833		Trichloroethene	ND	1.7	0.833	
1,2-Dibromoethane	ND	0.83	0.833		Trichlorofluoromethane	ND	8.3	0.833	
Dibromomethane	ND	0.83	0.833		1,2,3-Trichloropropane	ND	1.7	0.833	
1,2-Dichlorobenzene	ND	0.83	0.833		1,2,4-Trimethylbenzene	ND	1.7	0.833	
1,3-Dichlorobenzene	ND	0.83	0.833		1,3,5-Trimethylbenzene	ND	1.7	0.833	
1,4-Dichlorobenzene	ND	0.83	0.833		Vinyl Acetate	ND	8.3	0.833	
Dichlorodifluoromethane	ND	1.7	0.833		Vinyl Chloride	ND	0.83	0.833	
1,1-Dichloroethane	ND	0.83	0.833		p/m-Xylene	ND	1.7	0.833	
1,2-Dichloroethane	ND	0.83	0.833		o-Xylene	ND	0.83	0.833	
1,1-Dichloroethene	ND	0.83	0.833		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.833	
c-1,2-Dichloroethene	ND	0.83	0.833		Tert-Butyl Alcohol (TBA)	ND	17	0.833	
t-1,2-Dichloroethene	ND	0.83	0.833		Diisopropyl Ether (DIPE)	ND	0.83	0.833	
1,2-Dichloropropane	ND	0.83	0.833		Ethyl-t-Butyl Ether (ETBE)	ND	0.83	0.833	
1,3-Dichloropropane	ND	0.83	0.833		Tert-Amyl-Methyl Ether (TAME)	ND	0.83	0.833	
2,2-Dichloropropane	ND	4.2	0.833		Ethanol	ND	420	0.833	
1,1-Dichloropropene	ND	1.7	0.833						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	106	79-133		
1,2-Dichloroethane-d4	120	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

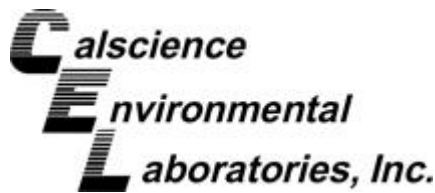
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.0'-0.1'	13-04-0823-3-C	04/09/13 12:10	Solid	GC/MS W	04/09/13	04/17/13 17:01	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	67	42	0.839		c-1,3-Dichloropropene	ND	0.84	0.839	
Benzene	ND	0.84	0.839		t-1,3-Dichloropropene	ND	1.7	0.839	
Bromobenzene	ND	0.84	0.839		Ethylbenzene	ND	0.84	0.839	
Bromochloromethane	ND	1.7	0.839		2-Hexanone	ND	17	0.839	
Bromodichloromethane	ND	0.84	0.839		Isopropylbenzene	ND	0.84	0.839	
Bromoform	ND	4.2	0.839		p-Isopropyltoluene	ND	0.84	0.839	
Bromomethane	ND	17	0.839		Methylene Chloride	ND	8.4	0.839	
2-Butanone	ND	17	0.839		4-Methyl-2-Pentanone	ND	17	0.839	
n-Butylbenzene	ND	0.84	0.839		Naphthalene	ND	8.4	0.839	
sec-Butylbenzene	ND	0.84	0.839		n-Propylbenzene	ND	1.7	0.839	
tert-Butylbenzene	ND	0.84	0.839		Styrene	ND	0.84	0.839	
Carbon Disulfide	ND	8.4	0.839		1,1,1,2-Tetrachloroethane	ND	0.84	0.839	
Carbon Tetrachloride	ND	0.84	0.839		1,1,2,2-Tetrachloroethane	ND	1.7	0.839	
Chlorobenzene	ND	0.84	0.839		Tetrachloroethene	ND	0.84	0.839	
Chloroethane	ND	1.7	0.839		Toluene	ND	0.84	0.839	
Chloroform	ND	0.84	0.839		1,2,3-Trichlorobenzene	ND	1.7	0.839	
Chloromethane	ND	17	0.839		1,2,4-Trichlorobenzene	ND	1.7	0.839	
2-Chlorotoluene	ND	0.84	0.839		1,1,1-Trichloroethane	ND	0.84	0.839	
4-Chlorotoluene	ND	0.84	0.839		1,1,2-Trichloroethane	ND	0.84	0.839	
Dibromochloromethane	ND	1.7	0.839		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.4	0.839	
1,2-Dibromo-3-Chloropropane	ND	4.2	0.839		Trichloroethene	ND	1.7	0.839	
1,2-Dibromoethane	ND	0.84	0.839		Trichlorofluoromethane	ND	8.4	0.839	
Dibromomethane	ND	0.84	0.839		1,2,3-Trichloropropane	ND	1.7	0.839	
1,2-Dichlorobenzene	ND	0.84	0.839		1,2,4-Trimethylbenzene	ND	1.7	0.839	
1,3-Dichlorobenzene	ND	0.84	0.839		1,3,5-Trimethylbenzene	ND	1.7	0.839	
1,4-Dichlorobenzene	ND	0.84	0.839		Vinyl Acetate	ND	8.4	0.839	
Dichlorodifluoromethane	ND	1.7	0.839		Vinyl Chloride	ND	0.84	0.839	
1,1-Dichloroethane	ND	0.84	0.839		p/m-Xylene	ND	1.7	0.839	
1,2-Dichloroethane	ND	0.84	0.839		o-Xylene	ND	0.84	0.839	
1,1-Dichloroethene	ND	0.84	0.839		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.839	
c-1,2-Dichloroethene	ND	0.84	0.839		Tert-Butyl Alcohol (TBA)	ND	17	0.839	
t-1,2-Dichloroethene	ND	0.84	0.839		Diisopropyl Ether (DIPE)	ND	0.84	0.839	
1,2-Dichloropropane	ND	0.84	0.839		Ethyl-t-Butyl Ether (ETBE)	ND	0.84	0.839	
1,3-Dichloropropane	ND	0.84	0.839		Tert-Amyl-Methyl Ether (TAME)	ND	0.84	0.839	
2,2-Dichloropropane	ND	4.2	0.839		Ethanol	ND	420	0.839	
1,1-Dichloropropene	ND	1.7	0.839						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	80-120			Dibromofluoromethane	107	79-133		
1,2-Dichloroethane-d4	119	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

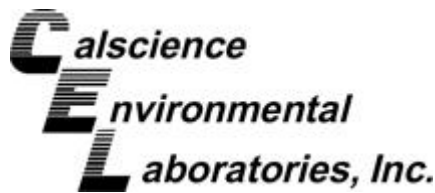
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.5'-0.6'	13-04-0823-4-C	04/09/13 12:20	Solid	GC/MS W	04/09/13	04/17/13 17:31	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	47	0.947		c-1,3-Dichloropropene	ND	0.95	0.947	
Benzene	ND	0.95	0.947		t-1,3-Dichloropropene	ND	1.9	0.947	
Bromobenzene	ND	0.95	0.947		Ethylbenzene	ND	0.95	0.947	
Bromochloromethane	ND	1.9	0.947		2-Hexanone	ND	19	0.947	
Bromodichloromethane	ND	0.95	0.947		Isopropylbenzene	ND	0.95	0.947	
Bromoform	ND	4.7	0.947		p-Isopropyltoluene	ND	0.95	0.947	
Bromomethane	ND	19	0.947		Methylene Chloride	ND	9.5	0.947	
2-Butanone	ND	19	0.947		4-Methyl-2-Pentanone	ND	19	0.947	
n-Butylbenzene	ND	0.95	0.947		Naphthalene	ND	9.5	0.947	
sec-Butylbenzene	ND	0.95	0.947		n-Propylbenzene	ND	1.9	0.947	
tert-Butylbenzene	ND	0.95	0.947		Styrene	ND	0.95	0.947	
Carbon Disulfide	ND	9.5	0.947		1,1,1,2-Tetrachloroethane	ND	0.95	0.947	
Carbon Tetrachloride	ND	0.95	0.947		1,1,2,2-Tetrachloroethane	ND	1.9	0.947	
Chlorobenzene	ND	0.95	0.947		Tetrachloroethene	ND	0.95	0.947	
Chloroethane	ND	1.9	0.947		Toluene	ND	0.95	0.947	
Chloroform	ND	0.95	0.947		1,2,3-Trichlorobenzene	ND	1.9	0.947	
Chloromethane	ND	19	0.947		1,2,4-Trichlorobenzene	ND	1.9	0.947	
2-Chlorotoluene	ND	0.95	0.947		1,1,1-Trichloroethane	ND	0.95	0.947	
4-Chlorotoluene	ND	0.95	0.947		1,1,2-Trichloroethane	ND	0.95	0.947	
Dibromochloromethane	ND	1.9	0.947		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.5	0.947	
1,2-Dibromo-3-Chloropropane	ND	4.7	0.947		Trichloroethene	ND	1.9	0.947	
1,2-Dibromoethane	ND	0.95	0.947		Trichlorofluoromethane	ND	9.5	0.947	
Dibromomethane	ND	0.95	0.947		1,2,3-Trichloropropane	ND	1.9	0.947	
1,2-Dichlorobenzene	ND	0.95	0.947		1,2,4-Trimethylbenzene	ND	1.9	0.947	
1,3-Dichlorobenzene	ND	0.95	0.947		1,3,5-Trimethylbenzene	ND	1.9	0.947	
1,4-Dichlorobenzene	ND	0.95	0.947		Vinyl Acetate	ND	9.5	0.947	
Dichlorodifluoromethane	ND	1.9	0.947		Vinyl Chloride	ND	0.95	0.947	
1,1-Dichloroethane	ND	0.95	0.947		p/m-Xylene	ND	1.9	0.947	
1,2-Dichloroethane	ND	0.95	0.947		o-Xylene	ND	0.95	0.947	
1,1-Dichloroethene	ND	0.95	0.947		Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.947	
c-1,2-Dichloroethene	ND	0.95	0.947		Tert-Butyl Alcohol (TBA)	ND	19	0.947	
t-1,2-Dichloroethene	ND	0.95	0.947		Diisopropyl Ether (DIPE)	ND	0.95	0.947	
1,2-Dichloropropane	ND	0.95	0.947		Ethyl-t-Butyl Ether (ETBE)	ND	0.95	0.947	
1,3-Dichloropropane	ND	0.95	0.947		Tert-Amyl-Methyl Ether (TAME)	ND	0.95	0.947	
2,2-Dichloropropane	ND	4.7	0.947		Ethanol	ND	470	0.947	
1,1-Dichloropropene	ND	1.9	0.947						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	120	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

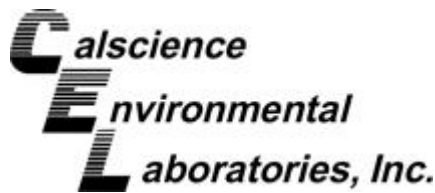
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-C	04/09/13 11:35	Solid	GC/MS W	04/09/13	04/17/13 18:00	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	150	45	0.898		c-1,3-Dichloropropene	ND	0.90	0.898	
Benzene	ND	0.90	0.898		t-1,3-Dichloropropene	ND	1.8	0.898	
Bromobenzene	ND	0.90	0.898		Ethylbenzene	ND	0.90	0.898	
Bromochloromethane	ND	1.8	0.898		2-Hexanone	ND	18	0.898	
Bromodichloromethane	ND	0.90	0.898		Isopropylbenzene	ND	0.90	0.898	
Bromoform	ND	4.5	0.898		p-Isopropyltoluene	ND	0.90	0.898	
Bromomethane	ND	18	0.898		Methylene Chloride	ND	9.0	0.898	
2-Butanone	35	18	0.898		4-Methyl-2-Pentanone	ND	18	0.898	
n-Butylbenzene	ND	0.90	0.898		Naphthalene	ND	9.0	0.898	
sec-Butylbenzene	ND	0.90	0.898		n-Propylbenzene	ND	1.8	0.898	
tert-Butylbenzene	ND	0.90	0.898		Styrene	ND	0.90	0.898	
Carbon Disulfide	ND	9.0	0.898		1,1,1,2-Tetrachloroethane	ND	0.90	0.898	
Carbon Tetrachloride	ND	0.90	0.898		1,1,2,2-Tetrachloroethane	ND	1.8	0.898	
Chlorobenzene	ND	0.90	0.898		Tetrachloroethene	ND	0.90	0.898	
Chloroethane	ND	1.8	0.898		Toluene	ND	0.90	0.898	
Chloroform	ND	0.90	0.898		1,2,3-Trichlorobenzene	ND	1.8	0.898	
Chloromethane	ND	18	0.898		1,2,4-Trichlorobenzene	ND	1.8	0.898	
2-Chlorotoluene	ND	0.90	0.898		1,1,1-Trichloroethane	ND	0.90	0.898	
4-Chlorotoluene	ND	0.90	0.898		1,1,2-Trichloroethane	ND	0.90	0.898	
Dibromochloromethane	ND	1.8	0.898		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.0	0.898	
1,2-Dibromo-3-Chloropropane	ND	4.5	0.898		Trichloroethene	ND	1.8	0.898	
1,2-Dibromoethane	ND	0.90	0.898		Trichlorofluoromethane	ND	9.0	0.898	
Dibromomethane	ND	0.90	0.898		1,2,3-Trichloropropane	ND	1.8	0.898	
1,2-Dichlorobenzene	ND	0.90	0.898		1,2,4-Trimethylbenzene	ND	1.8	0.898	
1,3-Dichlorobenzene	ND	0.90	0.898		1,3,5-Trimethylbenzene	ND	1.8	0.898	
1,4-Dichlorobenzene	ND	0.90	0.898		Vinyl Acetate	ND	9.0	0.898	
Dichlorodifluoromethane	ND	1.8	0.898		Vinyl Chloride	ND	0.90	0.898	
1,1-Dichloroethane	ND	0.90	0.898		p/m-Xylene	ND	1.8	0.898	
1,2-Dichloroethane	ND	0.90	0.898		o-Xylene	ND	0.90	0.898	
1,1-Dichloroethene	ND	0.90	0.898		Methyl-t-Butyl Ether (MTBE)	ND	1.8	0.898	
c-1,2-Dichloroethene	ND	0.90	0.898		Tert-Butyl Alcohol (TBA)	ND	18	0.898	
t-1,2-Dichloroethene	ND	0.90	0.898		Diisopropyl Ether (DIPE)	ND	0.90	0.898	
1,2-Dichloropropane	ND	0.90	0.898		Ethyl-t-Butyl Ether (ETBE)	ND	0.90	0.898	
1,3-Dichloropropane	ND	0.90	0.898		Tert-Amyl-Methyl Ether (TAME)	ND	0.90	0.898	
2,2-Dichloropropane	ND	4.5	0.898		Ethanol	ND	450	0.898	
1,1-Dichloropropene	ND	1.8	0.898						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	94	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	117	71-155			Toluene-d8	97	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

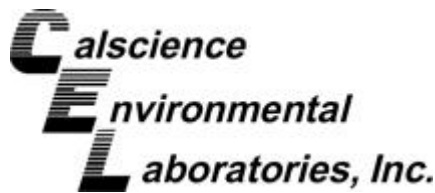
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.5'-0.6'	13-04-0823-6-C	04/09/13 11:45	Solid	GC/MS W	04/09/13	04/17/13 18:30	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	100	48	0.963		c-1,3-Dichloropropene	ND	0.96	0.963	
Benzene	ND	0.96	0.963		t-1,3-Dichloropropene	ND	1.9	0.963	
Bromobenzene	ND	0.96	0.963		Ethylbenzene	ND	0.96	0.963	
Bromochloromethane	ND	1.9	0.963		2-Hexanone	ND	19	0.963	
Bromodichloromethane	ND	0.96	0.963		Isopropylbenzene	ND	0.96	0.963	
Bromoform	ND	4.8	0.963		p-Isopropyltoluene	ND	0.96	0.963	
Bromomethane	ND	19	0.963		Methylene Chloride	ND	9.6	0.963	
2-Butanone	ND	19	0.963		4-Methyl-2-Pentanone	ND	19	0.963	
n-Butylbenzene	ND	0.96	0.963		Naphthalene	ND	9.6	0.963	
sec-Butylbenzene	ND	0.96	0.963		n-Propylbenzene	ND	1.9	0.963	
tert-Butylbenzene	ND	0.96	0.963		Styrene	ND	0.96	0.963	
Carbon Disulfide	ND	9.6	0.963		1,1,1,2-Tetrachloroethane	ND	0.96	0.963	
Carbon Tetrachloride	ND	0.96	0.963		1,1,2,2-Tetrachloroethane	ND	1.9	0.963	
Chlorobenzene	ND	0.96	0.963		Tetrachloroethene	ND	0.96	0.963	
Chloroethane	ND	1.9	0.963		Toluene	ND	0.96	0.963	
Chloroform	ND	0.96	0.963		1,2,3-Trichlorobenzene	ND	1.9	0.963	
Chloromethane	ND	19	0.963		1,2,4-Trichlorobenzene	ND	1.9	0.963	
2-Chlorotoluene	ND	0.96	0.963		1,1,1-Trichloroethane	ND	0.96	0.963	
4-Chlorotoluene	ND	0.96	0.963		1,1,2-Trichloroethane	ND	0.96	0.963	
Dibromochloromethane	ND	1.9	0.963		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.6	0.963	
1,2-Dibromo-3-Chloropropane	ND	4.8	0.963		Trichloroethene	ND	1.9	0.963	
1,2-Dibromoethane	ND	0.96	0.963		Trichlorofluoromethane	ND	9.6	0.963	
Dibromomethane	ND	0.96	0.963		1,2,3-Trichloropropane	ND	1.9	0.963	
1,2-Dichlorobenzene	ND	0.96	0.963		1,2,4-Trimethylbenzene	ND	1.9	0.963	
1,3-Dichlorobenzene	ND	0.96	0.963		1,3,5-Trimethylbenzene	ND	1.9	0.963	
1,4-Dichlorobenzene	ND	0.96	0.963		Vinyl Acetate	ND	9.6	0.963	
Dichlorodifluoromethane	ND	1.9	0.963		Vinyl Chloride	ND	0.96	0.963	
1,1-Dichloroethane	ND	0.96	0.963		p/m-Xylene	ND	1.9	0.963	
1,2-Dichloroethane	ND	0.96	0.963		o-Xylene	ND	0.96	0.963	
1,1-Dichloroethene	ND	0.96	0.963		Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.963	
c-1,2-Dichloroethene	ND	0.96	0.963		Tert-Butyl Alcohol (TBA)	ND	19	0.963	
t-1,2-Dichloroethene	ND	0.96	0.963		Diisopropyl Ether (DIPE)	ND	0.96	0.963	
1,2-Dichloropropane	ND	0.96	0.963		Ethyl-t-Butyl Ether (ETBE)	ND	0.96	0.963	
1,3-Dichloropropane	ND	0.96	0.963		Tert-Amyl-Methyl Ether (TAME)	ND	0.96	0.963	
2,2-Dichloropropane	ND	4.8	0.963		Ethanol	ND	480	0.963	
1,1-Dichloropropene	ND	1.9	0.963						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	80-120			Dibromofluoromethane	106	79-133		
1,2-Dichloroethane-d4	122	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

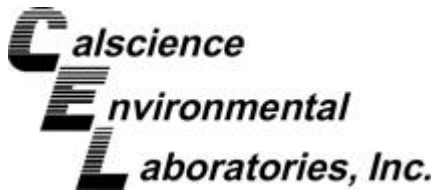
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-C	04/09/13 12:00	Solid	GC/MS W	04/09/13	04/17/13 18:59	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	110	44	0.87		c-1,3-Dichloropropene	ND	0.87	0.87	
Benzene	ND	0.87	0.87		t-1,3-Dichloropropene	ND	1.7	0.87	
Bromobenzene	ND	0.87	0.87		Ethylbenzene	ND	0.87	0.87	
Bromochloromethane	ND	1.7	0.87		2-Hexanone	ND	17	0.87	
Bromodichloromethane	ND	0.87	0.87		Isopropylbenzene	ND	0.87	0.87	
Bromoform	ND	4.4	0.87		p-Isopropyltoluene	ND	0.87	0.87	
Bromomethane	ND	17	0.87		Methylene Chloride	ND	8.7	0.87	
2-Butanone	ND	17	0.87		4-Methyl-2-Pentanone	ND	17	0.87	
n-Butylbenzene	ND	0.87	0.87		Naphthalene	ND	8.7	0.87	
sec-Butylbenzene	ND	0.87	0.87		n-Propylbenzene	ND	1.7	0.87	
tert-Butylbenzene	ND	0.87	0.87		Styrene	ND	0.87	0.87	
Carbon Disulfide	ND	8.7	0.87		1,1,1,2-Tetrachloroethane	ND	0.87	0.87	
Carbon Tetrachloride	ND	0.87	0.87		1,1,2,2-Tetrachloroethane	ND	1.7	0.87	
Chlorobenzene	ND	0.87	0.87		Tetrachloroethene	ND	0.87	0.87	
Chloroethane	ND	1.7	0.87		Toluene	ND	0.87	0.87	
Chloroform	ND	0.87	0.87		1,2,3-Trichlorobenzene	ND	1.7	0.87	
Chloromethane	ND	17	0.87		1,2,4-Trichlorobenzene	ND	1.7	0.87	
2-Chlorotoluene	ND	0.87	0.87		1,1,1-Trichloroethane	ND	0.87	0.87	
4-Chlorotoluene	ND	0.87	0.87		1,1,2-Trichloroethane	ND	0.87	0.87	
Dibromochloromethane	ND	1.7	0.87		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.7	0.87	
1,2-Dibromo-3-Chloropropane	ND	4.4	0.87		Trichloroethene	ND	1.7	0.87	
1,2-Dibromoethane	ND	0.87	0.87		Trichlorofluoromethane	ND	8.7	0.87	
Dibromomethane	ND	0.87	0.87		1,2,3-Trichloropropane	ND	1.7	0.87	
1,2-Dichlorobenzene	ND	0.87	0.87		1,2,4-Trimethylbenzene	ND	1.7	0.87	
1,3-Dichlorobenzene	ND	0.87	0.87		1,3,5-Trimethylbenzene	ND	1.7	0.87	
1,4-Dichlorobenzene	ND	0.87	0.87		Vinyl Acetate	ND	8.7	0.87	
Dichlorodifluoromethane	ND	1.7	0.87		Vinyl Chloride	ND	0.87	0.87	
1,1-Dichloroethane	ND	0.87	0.87		p/m-Xylene	ND	1.7	0.87	
1,2-Dichloroethane	ND	0.87	0.87		o-Xylene	ND	0.87	0.87	
1,1-Dichloroethene	ND	0.87	0.87		Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.87	
c-1,2-Dichloroethene	ND	0.87	0.87		Tert-Butyl Alcohol (TBA)	ND	17	0.87	
t-1,2-Dichloroethene	ND	0.87	0.87		Diisopropyl Ether (DIPE)	ND	0.87	0.87	
1,2-Dichloropropane	ND	0.87	0.87		Ethyl-t-Butyl Ether (ETBE)	ND	0.87	0.87	
1,3-Dichloropropane	ND	0.87	0.87		Tert-Amyl-Methyl Ether (TAME)	ND	0.87	0.87	
2,2-Dichloropropane	ND	4.4	0.87		Ethanol	ND	440	0.87	
1,1-Dichloropropene	ND	1.7	0.87						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	107	79-133		
1,2-Dichloroethane-d4	121	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

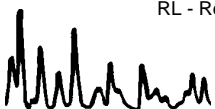
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.5'-0.6'	13-04-0823-8-C	04/09/13 12:05	Solid	GC/MS W	04/09/13	04/17/13 19:29	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	52	44	0.877		c-1,3-Dichloropropene	ND	0.88	0.877	
Benzene	ND	0.88	0.877		t-1,3-Dichloropropene	ND	1.8	0.877	
Bromobenzene	ND	0.88	0.877		Ethylbenzene	ND	0.88	0.877	
Bromochloromethane	ND	1.8	0.877		2-Hexanone	ND	18	0.877	
Bromodichloromethane	ND	0.88	0.877		Isopropylbenzene	ND	0.88	0.877	
Bromoform	ND	4.4	0.877		p-Isopropyltoluene	ND	0.88	0.877	
Bromomethane	ND	18	0.877		Methylene Chloride	ND	8.8	0.877	
2-Butanone	ND	18	0.877		4-Methyl-2-Pentanone	ND	18	0.877	
n-Butylbenzene	ND	0.88	0.877		Naphthalene	ND	8.8	0.877	
sec-Butylbenzene	ND	0.88	0.877		n-Propylbenzene	ND	1.8	0.877	
tert-Butylbenzene	ND	0.88	0.877		Styrene	ND	0.88	0.877	
Carbon Disulfide	ND	8.8	0.877		1,1,1,2-Tetrachloroethane	ND	0.88	0.877	
Carbon Tetrachloride	ND	0.88	0.877		1,1,2,2-Tetrachloroethane	ND	1.8	0.877	
Chlorobenzene	ND	0.88	0.877		Tetrachloroethene	ND	0.88	0.877	
Chloroethane	ND	1.8	0.877		Toluene	ND	0.88	0.877	
Chloroform	ND	0.88	0.877		1,2,3-Trichlorobenzene	ND	1.8	0.877	
Chloromethane	ND	18	0.877		1,2,4-Trichlorobenzene	ND	1.8	0.877	
2-Chlorotoluene	ND	0.88	0.877		1,1,1-Trichloroethane	ND	0.88	0.877	
4-Chlorotoluene	ND	0.88	0.877		1,1,2-Trichloroethane	ND	0.88	0.877	
Dibromochloromethane	ND	1.8	0.877		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.8	0.877	
1,2-Dibromo-3-Chloropropane	ND	4.4	0.877		Trichloroethene	ND	1.8	0.877	
1,2-Dibromoethane	ND	0.88	0.877		Trichlorofluoromethane	ND	8.8	0.877	
Dibromomethane	ND	0.88	0.877		1,2,3-Trichloropropane	ND	1.8	0.877	
1,2-Dichlorobenzene	ND	0.88	0.877		1,2,4-Trimethylbenzene	ND	1.8	0.877	
1,3-Dichlorobenzene	ND	0.88	0.877		1,3,5-Trimethylbenzene	ND	1.8	0.877	
1,4-Dichlorobenzene	ND	0.88	0.877		Vinyl Acetate	ND	8.8	0.877	
Dichlorodifluoromethane	ND	1.8	0.877		Vinyl Chloride	ND	0.88	0.877	
1,1-Dichloroethane	ND	0.88	0.877		p/m-Xylene	ND	1.8	0.877	
1,2-Dichloroethane	ND	0.88	0.877		o-Xylene	ND	0.88	0.877	
1,1-Dichloroethene	ND	0.88	0.877		Methyl-t-Butyl Ether (MTBE)	ND	1.8	0.877	
c-1,2-Dichloroethene	ND	0.88	0.877		Tert-Butyl Alcohol (TBA)	ND	18	0.877	
t-1,2-Dichloroethene	ND	0.88	0.877		Diisopropyl Ether (DIPE)	ND	0.88	0.877	
1,2-Dichloropropane	ND	0.88	0.877		Ethyl-t-Butyl Ether (ETBE)	ND	0.88	0.877	
1,3-Dichloropropane	ND	0.88	0.877		Tert-Amyl-Methyl Ether (TAME)	ND	0.88	0.877	
2,2-Dichloropropane	ND	4.4	0.877		Ethanol	ND	440	0.877	
1,1-Dichloropropene	ND	1.8	0.877						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	97	80-120			Dibromofluoromethane	107	79-133		
1,2-Dichloroethane-d4	122	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: Tire Fire Property

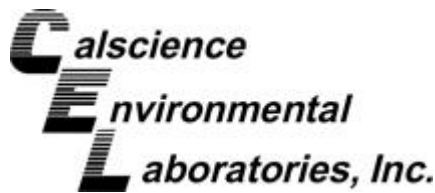
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-C	04/09/13 11:30	Solid	GC/MS W	04/09/13	04/17/13 19:58	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	160	47	0.942		c-1,3-Dichloropropene	ND	0.94	0.942	
Benzene	2.7	0.94	0.942		t-1,3-Dichloropropene	ND	1.9	0.942	
Bromobenzene	ND	0.94	0.942		Ethylbenzene	ND	0.94	0.942	
Bromochloromethane	ND	1.9	0.942		2-Hexanone	ND	19	0.942	
Bromodichloromethane	ND	0.94	0.942		Isopropylbenzene	ND	0.94	0.942	
Bromoform	ND	4.7	0.942		p-Isopropyltoluene	ND	0.94	0.942	
Bromomethane	ND	19	0.942		Methylene Chloride	ND	9.4	0.942	
2-Butanone	26	19	0.942		4-Methyl-2-Pentanone	ND	19	0.942	
n-Butylbenzene	ND	0.94	0.942		Naphthalene	ND	9.4	0.942	
sec-Butylbenzene	ND	0.94	0.942		n-Propylbenzene	ND	1.9	0.942	
tert-Butylbenzene	ND	0.94	0.942		Styrene	ND	0.94	0.942	
Carbon Disulfide	ND	9.4	0.942		1,1,1,2-Tetrachloroethane	ND	0.94	0.942	
Carbon Tetrachloride	ND	0.94	0.942		1,1,2,2-Tetrachloroethane	ND	1.9	0.942	
Chlorobenzene	ND	0.94	0.942		Tetrachloroethene	ND	0.94	0.942	
Chloroethane	ND	1.9	0.942		Toluene	1.8	0.94	0.942	
Chloroform	ND	0.94	0.942		1,2,3-Trichlorobenzene	ND	1.9	0.942	
Chloromethane	ND	19	0.942		1,2,4-Trichlorobenzene	ND	1.9	0.942	
2-Chlorotoluene	ND	0.94	0.942		1,1,1-Trichloroethane	ND	0.94	0.942	
4-Chlorotoluene	ND	0.94	0.942		1,1,2-Trichloroethane	ND	0.94	0.942	
Dibromochloromethane	ND	1.9	0.942		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.4	0.942	
1,2-Dibromo-3-Chloropropane	ND	4.7	0.942		Trichloroethene	ND	1.9	0.942	
1,2-Dibromoethane	ND	0.94	0.942		Trichlorofluoromethane	ND	9.4	0.942	
Dibromomethane	ND	0.94	0.942		1,2,3-Trichloropropane	ND	1.9	0.942	
1,2-Dichlorobenzene	ND	0.94	0.942		1,2,4-Trimethylbenzene	ND	1.9	0.942	
1,3-Dichlorobenzene	ND	0.94	0.942		1,3,5-Trimethylbenzene	ND	1.9	0.942	
1,4-Dichlorobenzene	ND	0.94	0.942		Vinyl Acetate	ND	9.4	0.942	
Dichlorodifluoromethane	ND	1.9	0.942		Vinyl Chloride	ND	0.94	0.942	
1,1-Dichloroethane	ND	0.94	0.942		p/m-Xylene	ND	1.9	0.942	
1,2-Dichloroethane	ND	0.94	0.942		o-Xylene	ND	0.94	0.942	
1,1-Dichloroethene	ND	0.94	0.942		Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.942	
c-1,2-Dichloroethene	ND	0.94	0.942		Tert-Butyl Alcohol (TBA)	ND	19	0.942	
t-1,2-Dichloroethene	ND	0.94	0.942		Diisopropyl Ether (DIPE)	ND	0.94	0.942	
1,2-Dichloropropane	ND	0.94	0.942		Ethyl-t-Butyl Ether (ETBE)	ND	0.94	0.942	
1,3-Dichloropropane	ND	0.94	0.942		Tert-Amyl-Methyl Ether (TAME)	ND	0.94	0.942	
2,2-Dichloropropane	ND	4.7	0.942		Ethanol	ND	470	0.942	
1,1-Dichloropropene	ND	1.9	0.942						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	105	79-133		
1,2-Dichloroethane-d4	119	71-155			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

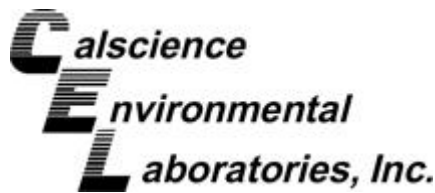
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-025-23,748	N/A	Solid	GC/MS W	04/17/13	04/17/13 13:51	130417L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	1.0	1	
Benzene	ND	1.0	1		t-1,3-Dichloropropene	ND	2.0	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	2.0	1		2-Hexanone	ND	20	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	20	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	20	1		4-Methyl-2-Pentanone	ND	20	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	2.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	2.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	2.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	2.0	1	
Chloromethane	ND	20	1		1,2,4-Trichlorobenzene	ND	2.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
Dibromochloromethane	ND	2.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	2.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	2.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	2.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	2.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	2.0	1		Vinyl Chloride	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	2.0	1	
1,2-Dichloroethane	ND	1.0	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	20	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	500	1	
1,1-Dichloropropene	ND	2.0	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	95	80-120			Dibromofluoromethane	101	79-133		
1,2-Dichloroethane-d4	104	71-155			Toluene-d8	97	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

Page 1 of 6

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	ICP/MS 03	04/12/13	04/15/13 18:46	130412L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	32.4	1.00	1	
Arsenic	1.01	1.00	1		Selenium	ND	1.00	1	
Barium	31.4	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	24.5	2.00	1	
Chromium	27.1	2.00	1		Zinc	1440	5.00	1	
Cobalt	19.4	1.00	1		Aluminum	7920	25.0	1	
Copper	82.1	1.00	1		Magnesium	8210	25.0	1	
Lead	30.0	1.00	1		Manganese	349	2.50	1	
Molybdenum	ND	1.00	1						

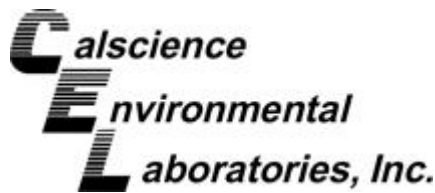
Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	ICP/MS 03	04/12/13	04/15/13 18:49	130412L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	27.7	1.00	1	
Arsenic	ND	1.00	1		Selenium	ND	1.00	1	
Barium	9.63	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	27.1	2.00	1	
Chromium	31.8	2.00	1		Zinc	72.9	5.00	1	
Cobalt	12.4	1.00	1		Aluminum	8810	25.0	1	
Copper	146	1.00	1		Manganese	604	2.50	1	
Lead	ND	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	ICP/MS 03	04/12/13	04/19/13 16:04	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	8990	25.0	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

Page 2 of 6

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	ICP/MS 03	04/12/13	04/15/13 18:52	130412L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	30.3	1.00	1	
Arsenic	1.04	1.00	1		Selenium	ND	1.00	1	
Barium	58.4	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	24.7	2.00	1	
Chromium	24.5	2.00	1		Zinc	429	5.00	1	
Cobalt	10.5	1.00	1		Aluminum	9020	25.0	1	
Copper	102	1.00	1		Manganese	335	2.50	1	
Lead	19.9	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	ICP/MS 03	04/12/13	04/19/13 16:06	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	7720	25.0	1	

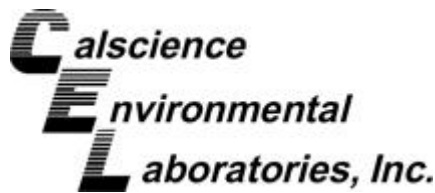
Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	ICP/MS 03	04/12/13	04/15/13 18:55	130412L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	28.3	1.00	1	
Arsenic	ND	1.00	1		Selenium	ND	1.00	1	
Barium	11.8	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	32.5	2.00	1	
Chromium	28.1	2.00	1		Zinc	48.4	5.00	1	
Cobalt	13.8	1.00	1		Aluminum	9680	25.0	1	
Copper	181	1.00	1		Manganese	402	2.50	1	
Lead	1.03	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	ICP/MS 03	04/12/13	04/19/13 16:08	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	10800	25.0	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	ICP/MS 03	04/12/13	04/15/13 18:58	130412L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	4.43	2.00	1		Nickel	86.8	1.00	1	
Arsenic	10.8	1.00	1		Selenium	ND	1.00	1	
Barium	109	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	1.91	1.00	1		Vanadium	26.1	2.00	1	
Chromium	44.0	2.00	1		Zinc	1270	5.00	1	
Cobalt	15.9	1.00	1		Aluminum	10800	25.0	1	
Copper	988	1.00	1		Manganese	341	2.50	1	
Lead	230	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	ICP/MS 03	04/12/13	04/19/13 16:10	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	10500	25.0	1	

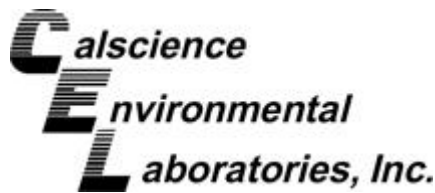
Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	ICP/MS 03	04/12/13	04/15/13 19:01	130412L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	268	1.00	1	
Arsenic	2.20	1.00	1		Selenium	ND	1.00	1	
Barium	29.1	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	33.1	2.00	1	
Chromium	51.1	2.00	1		Zinc	84.9	5.00	1	
Cobalt	22.0	1.00	1		Aluminum	8440	25.0	1	
Copper	70.3	1.00	1		Manganese	391	2.50	1	
Lead	14.0	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	ICP/MS 03	04/12/13	04/19/13 16:12	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	24100	25.0	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	ICP/MS 03	04/12/13	04/15/13 19:04	130412L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	64.8	1.00	1	
Arsenic	26.8	1.00	1		Selenium	ND	1.00	1	
Barium	329	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	2.58	1.00	1		Vanadium	28.6	2.00	1	
Chromium	52.6	2.00	1		Zinc	2830	5.00	1	
Cobalt	13.2	1.00	1		Aluminum	39700	25.0	1	
Copper	2430	1.00	1		Manganese	447	2.50	1	
Lead	74.4	1.00	1		Molybdenum	1.21	1.00	1	

Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	ICP/MS 03	04/12/13	04/19/13 16:14	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	7590	25.0	1	

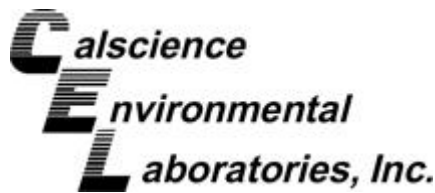
Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	ICP/MS 03	04/12/13	04/15/13 19:13	130412L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	95.9	1.00	1	
Arsenic	2.54	1.00	1		Selenium	ND	1.00	1	
Barium	37.5	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	40.8	2.00	1	
Chromium	36.3	2.00	1		Zinc	185	5.00	1	
Cobalt	16.5	1.00	1		Aluminum	9830	25.0	1	
Copper	144	1.00	1		Manganese	412	2.50	1	
Lead	7.64	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	ICP/MS 03	04/12/13	04/19/13 16:16	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	14300	25.0	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	ICP/MS 03	04/12/13	04/15/13 19:16	130412L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	29.1	1.00	1	
Arsenic	ND	1.00	1		Selenium	ND	1.00	1	
Barium	28.2	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	20.4	2.00	1	
Chromium	24.6	2.00	1		Zinc	1950	5.00	1	
Cobalt	23.7	1.00	1		Aluminum	6470	25.0	1	
Copper	97.3	1.00	1		Manganese	311	2.50	1	
Lead	23.3	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	ICP/MS 03	04/12/13	04/19/13 16:17	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	6620	25.0	1	

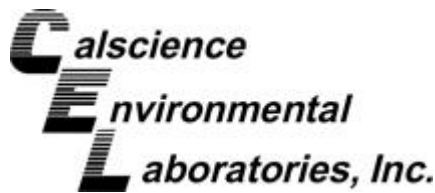
Tire-Fire-Background-Metals-0.0'-0.1'	13-04-0823-10-B	04/09/13 12:35	Solid	ICP/MS 03	04/12/13	04/15/13 19:19	130412L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	52.8	1.00	1	
Arsenic	4.33	1.00	1		Selenium	ND	1.00	1	
Barium	122	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	26.6	2.00	1	
Chromium	43.5	2.00	1		Zinc	60.6	5.00	1	
Cobalt	12.9	1.00	1		Aluminum	12300	25.0	1	
Copper	30.5	1.00	1		Manganese	538	2.50	1	
Lead	11.0	1.00	1		Molybdenum	ND	1.00	1	

Tire-Fire-Background-Metals-0.0'-0.1'	13-04-0823-10-B	04/09/13 12:35	Solid	ICP/MS 03	04/12/13	04/19/13 16:19	130412L01
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Parameter	Result	RL	DF	Qual
Magnesium	7290	25.0	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-621-200	N/A	Solid	ICP/MS 03	04/12/13	04/12/13 20:45	130412L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	2.00	1		Nickel	ND	1.00	1	
Arsenic	ND	1.00	1		Selenium	ND	1.00	1	
Barium	ND	1.00	1		Silver	ND	1.00	1	
Beryllium	ND	1.00	1		Thallium	ND	1.00	1	
Cadmium	ND	1.00	1		Vanadium	ND	2.00	1	
Chromium	ND	2.00	1		Zinc	ND	5.00	1	
Cobalt	ND	1.00	1		Aluminum	ND	25.0	1	
Copper	ND	1.00	1		Magnesium	ND	25.0	1	
Lead	ND	1.00	1		Manganese	ND	2.50	1	
Molybdenum	ND	1.00	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 7471A Total
 Method: EPA 7471A

Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-0.0'-0.1'	13-04-0823-1-D	04/09/13 11:00	Solid	Mercury	04/12/13	04/12/13 14:19	130412L03

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-1-0.5'-0.6'	13-04-0823-2-B	04/09/13 11:20	Solid	Mercury	04/12/13	04/12/13 14:30	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-2-0.0'-0.1'	13-04-0823-3-B	04/09/13 12:10	Solid	Mercury	04/12/13	04/12/13 14:33	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-2-0.5'-0.6'	13-04-0823-4-B	04/09/13 12:20	Solid	Mercury	04/12/13	04/12/13 14:35	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-3-0.0'-0.1'	13-04-0823-5-B	04/09/13 11:35	Solid	Mercury	04/12/13	04/12/13 14:37	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-3-0.5'-0.6'	13-04-0823-6-B	04/09/13 11:45	Solid	Mercury	04/12/13	04/12/13 14:39	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 7471A Total
 Method: EPA 7471A

Project: Tire Fire Property

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-0.0'-0.1'	13-04-0823-7-B	04/09/13 12:00	Solid	Mercury	04/12/13	04/12/13 14:41	130412L03

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-4-0.5'-0.6'	13-04-0823-8-B	04/09/13 12:05	Solid	Mercury	04/12/13	04/12/13 14:44	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Tire-Fire-5-0.0'-0.1'	13-04-0823-9-B	04/09/13 11:30	Solid	Mercury	04/12/13	04/12/13 14:46	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

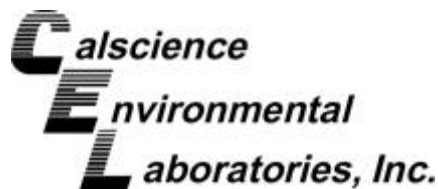
Tire-Fire-Background-Metals-0.0'-0.1'	13-04-0823-10-B	04/09/13 12:35	Solid	Mercury	04/12/13	04/12/13 14:52	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Method Blank	099-04-007-9,225	N/A	Solid	Mercury	04/12/13	04/12/13 12:41	130412L03
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

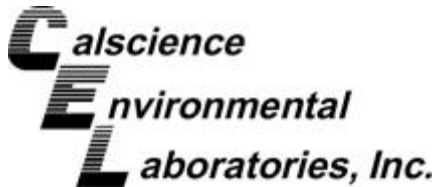
Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020

Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	ICP/MS 03	04/12/13	04/12/13	130412S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	10.84	43	11.43	46	1-97	5	0-39	
Arsenic	1.013	25.00	25.61	98	25.65	99	72-132	0	0-13	
Barium	31.43	25.00	53.44	88	51.75	81	50-152	3	0-41	
Beryllium	ND	25.00	27.12	108	27.42	110	61-121	1	0-13	
Cadmium	ND	25.00	25.61	102	25.94	104	85-121	1	0-12	
Chromium	27.10	25.00	49.65	90	49.28	89	20-182	1	0-15	
Cobalt	19.40	25.00	41.47	88	42.58	93	40-166	3	0-14	
Copper	82.09	25.00	101.6	78	116.8	139	25-157	14	0-22	
Lead	29.96	25.00	54.54	98	50.38	82	62-134	8	0-23	
Molybdenum	ND	25.00	23.77	95	24.24	97	69-123	2	0-13	
Nickel	32.43	25.00	57.45	100	57.56	100	46-154	0	0-15	
Selenium	ND	25.00	25.03	100	25.27	101	54-132	1	0-14	
Silver	ND	12.50	35.62	285	30.84	247	78-126	14	0-15	3
Thallium	ND	25.00	24.67	99	25.36	101	79-115	3	0-11	
Vanadium	24.45	25.00	50.54	104	48.10	95	28-178	5	0-28	
Zinc	1441	25.00	1131	4X	1819	4X	23-173	4X	0-18	Q
Aluminum	7922	25.00	9230	4X	8462	4X	80-120	4X	0-20	Q
Magnesium	8209	25.00	8829	4X	8034	4X	80-120	4X	0-20	Q
Manganese	348.7	25.00	323.0	4X	329.4	4X	80-120	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - PDS / PDSO



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020

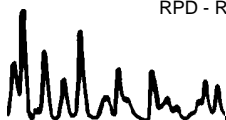
Project Tire Fire Property

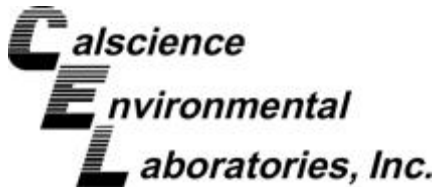
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSO Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	ICP/MS 03	04/12/13	04/12/13	130412S01

Analysis Comment: Mg was analyzed 04/19/2013 15:53:12.

Parameter	SAMPLE CONC	SPIKE ADDED	PDS CONC	PDS %REC	%REC CL	Qualifiers
Antimony	ND	25.00	25.65	103	75-125	
Arsenic	1.013	25.00	25.59	98	75-125	
Barium	31.43	25.00	55.44	96	75-125	
Beryllium	ND	25.00	26.82	107	75-125	
Cadmium	ND	25.00	25.45	102	75-125	
Chromium	27.10	25.00	48.94	87	75-125	
Cobalt	19.40	25.00	42.24	91	75-125	
Copper	82.09	25.00	103.5	86	75-125	
Lead	29.96	25.00	54.03	96	75-125	
Molybdenum	ND	25.00	23.62	94	75-125	
Nickel	32.43	25.00	55.25	91	75-125	
Selenium	ND	25.00	25.33	101	75-125	
Silver	ND	12.50	22.05	176	75-125	5
Thallium	ND	25.00	24.59	98	75-125	
Vanadium	24.45	25.00	48.34	96	75-125	
Zinc	1441	25.00	1439	4X	75-125	Q
Aluminum	7922	25.00	8729	4X	75-125	Q
Magnesium	8209	25.00	8070	4X	75-125	Q
Manganese	348.7	25.00	366.7	4X	75-125	Q

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Freshwater Environmental Services
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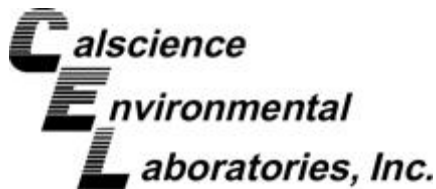
Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B

Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC 45	04/12/13	04/18/13	130412S03A

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Diesel Range Organics	24.95	400.0	602.3	144	595.8	143	64-130	1	0-15	3

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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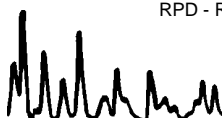
Date Received: 04/11/13
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

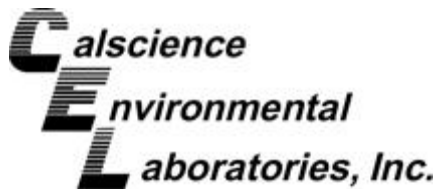
Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC 45	04/12/13	04/18/13	130412S04A

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	86.41	400.0	491.9	101	581.9	124	64-130	17	0-15	4

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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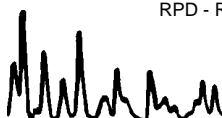
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 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

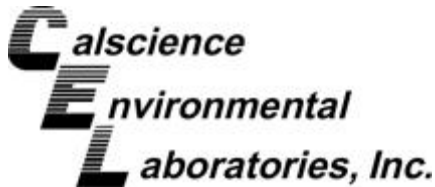
Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC 22	04/12/13	04/12/13	130412S01

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	10.00	3.757	38	3.858	39	66-108	3	0-18	3

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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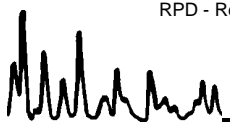
Date Received: 04/11/13
Work Order No: 13-04-0823
Preparation: EPA 7471A Total
Method: EPA 7471A

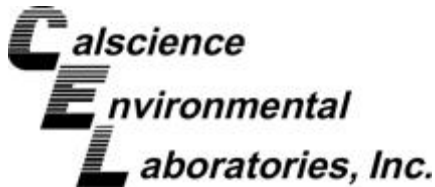
Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	Mercury	04/12/13	04/12/13	130412S03

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7386	88	0.7368	88	71-137	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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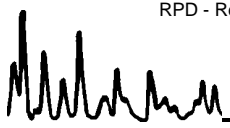
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Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C

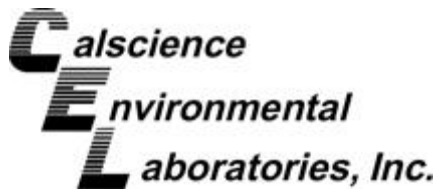
Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC/MS CCC	04/12/13	04/15/13	130412S07

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	8.816	88	8.386	84	49-133	5	0-18	
Acenaphthylene	ND	10.00	8.905	89	8.525	85	50-150	4	0-20	
Butyl Benzyl Phthalate	ND	10.00	9.259	93	8.832	88	50-150	5	0-20	
4-Chloro-3-Methylphenol	ND	10.00	9.291	93	8.752	88	50-128	6	0-17	
2-Chlorophenol	ND	10.00	8.937	89	9.373	94	57-111	5	0-17	
1,4-Dichlorobenzene	ND	10.00	7.485	75	8.721	87	49-127	15	0-20	
Dimethyl Phthalate	ND	10.00	9.613	96	9.114	91	50-150	5	0-20	
2,4-Dinitrotoluene	ND	10.00	9.625	96	8.724	87	50-128	10	0-18	
Fluorene	ND	10.00	9.389	94	8.913	89	50-150	5	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	9.287	93	9.567	96	54-144	3	0-17	
Naphthalene	ND	10.00	7.824	78	8.176	82	50-150	4	0-20	
4-Nitrophenol	ND	10.00	8.769	88	7.138	71	30-144	21	0-21	
Pentachlorophenol	ND	10.00	7.545	75	5.854	59	29-113	25	0-22	4
Phenol	ND	10.00	9.096	91	9.382	94	57-123	3	0-16	
Pyrene	ND	10.00	8.333	83	7.697	77	47-149	8	0-20	
1,2,4-Trichlorobenzene	ND	10.00	7.548	75	8.037	80	42-132	6	0-20	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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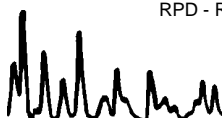
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Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B

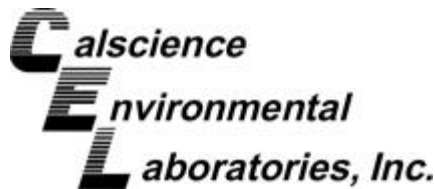
Project Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tire-Fire-1-0.0'-0.1'	Solid	GC/MS W	04/09/13	04/17/13	130417S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.87	88	36.35	73	31-145	19	0-41	
Carbon Tetrachloride	ND	50.00	54.41	109	43.79	88	49-133	22	0-48	
Chlorobenzene	ND	50.00	46.94	94	33.75	68	54-126	33	0-50	
1,2-Dibromoethane	ND	50.00	46.04	92	38.47	77	57-153	18	0-39	
1,2-Dichlorobenzene	ND	50.00	52.41	105	27.02	54	38-128	64	0-62	4
1,2-Dichloroethane	ND	50.00	48.20	96	41.66	83	80-120	15	0-20	
1,1-Dichloroethene	ND	50.00	43.70	87	35.67	71	55-133	20	0-41	
Ethylbenzene	ND	50.00	50.96	102	34.33	69	32-146	39	0-61	
Toluene	ND	50.00	42.81	86	34.87	70	39-141	20	0-52	
Trichloroethene	ND	50.00	43.18	86	35.84	72	57-129	19	0-47	
Vinyl Chloride	ND	50.00	36.65	73	29.08	58	47-137	23	0-58	
p/m-Xylene	ND	100.0	102.8	103	69.61	70	70-130	39	0-30	4
o-Xylene	ND	50.00	51.22	102	35.04	70	70-130	38	0-30	4
Methyl-t-Butyl Ether (MTBE)	ND	50.00	51.17	102	42.80	86	61-145	18	0-33	
Tert-Butyl Alcohol (TBA)	ND	250.0	204.3	82	196.7	79	44-152	4	0-54	
Diisopropyl Ether (DIPE)	ND	50.00	46.55	93	38.65	77	59-137	19	0-36	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	51.55	103	42.99	86	56-140	18	0-36	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	48.46	97	40.30	81	57-141	18	0-35	
Ethanol	ND	500.0	335.4	67	341.6	68	8-170	2	0-77	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



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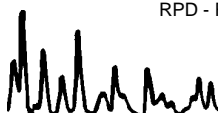
Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 3050B
Method: EPA 6020

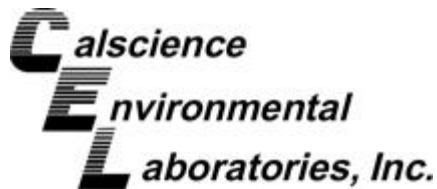
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number					
099-15-621-200	Solid	ICP/MS 03	04/12/13	04/15/13	130412L01					
Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Antimony	25.00	25.27	101	25.57	102	80-120	73-127	1	0-20	
Arsenic	25.00	24.97	100	25.47	102	80-120	73-127	2	0-20	
Barium	25.00	25.57	102	25.75	103	80-120	73-127	1	0-20	
Beryllium	25.00	23.47	94	23.51	94	80-120	73-127	0	0-20	
Cadmium	25.00	25.49	102	25.45	102	80-120	73-127	0	0-20	
Chromium	25.00	24.79	99	25.00	100	80-120	73-127	1	0-20	
Cobalt	25.00	25.34	101	25.35	101	80-120	73-127	0	0-20	
Copper	25.00	26.83	107	26.78	107	80-120	73-127	0	0-20	
Lead	25.00	24.66	99	24.80	99	80-120	73-127	1	0-20	
Molybdenum	25.00	24.52	98	25.13	101	80-120	73-127	2	0-20	
Nickel	25.00	25.69	103	25.59	102	80-120	73-127	0	0-20	
Selenium	25.00	24.30	97	24.48	98	80-120	73-127	1	0-20	
Silver	12.50	11.16	89	11.00	88	80-120	73-127	2	0-20	
Thallium	25.00	24.64	99	24.33	97	80-120	73-127	1	0-20	
Vanadium	25.00	24.89	100	24.76	99	80-120	73-127	1	0-20	
Zinc	25.00	26.21	105	26.96	108	80-120	73-127	3	0-20	
Aluminum	25.00	24.30	97	23.68	95	80-120	73-127	3	0-20	
Magnesium	25.00	23.64	95	23.28	93	80-120	73-127	2	0-20	
Manganese	25.00	24.88	100	24.71	99	80-120	73-127	1	0-20	

Total number of LCS compounds : 19
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



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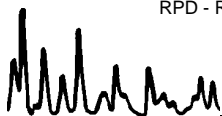
Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B

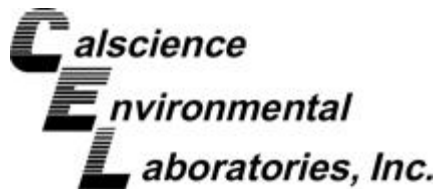
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-414-214	Solid	GC 45	04/12/13	04/18/13	130412B03A

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Diesel Range Organics	400.0	370.3	93	399.1	100	75-123	7	0-12	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



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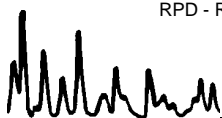
Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

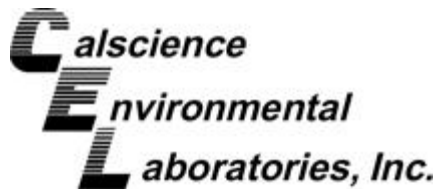
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-420-402	Solid	GC 45	04/12/13	04/18/13	130412B04A

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	400.0	377.7	94	368.7	92	75-123	2	0-12	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



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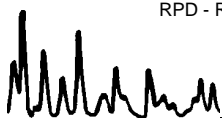
Date Received: N/A
 Work Order No: 13-04-0823
 Preparation: EPA 5030C
 Method: EPA 8015B

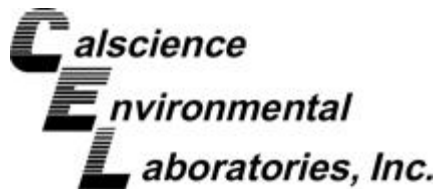
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-024-704	Solid	GC 22	04/12/13	04/12/13	130412B01

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics	10.00	8.339	83	8.797	88	70-118	5	0-28	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



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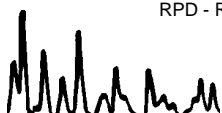
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 Preparation: EPA 7471A Total
 Method: EPA 7471A

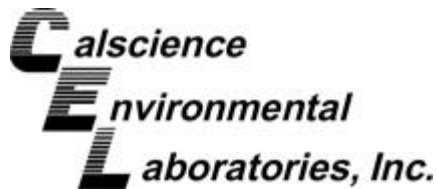
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-007-9,225	Solid	Mercury	04/12/13	04/12/13	130412L03

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	0.8350	0.8115	97	0.8128	97	85-121	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



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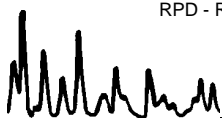
Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C

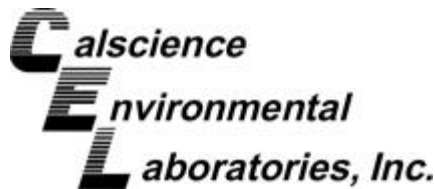
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-009-87	Solid	GC/MS CCC	04/23/13	04/24/13	130423L06

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	0.4000	0.3959	99	0.3888	97	58-112	2	0-15	
2-Chlorophenol	0.4000	0.3937	98	0.3933	98	59-107	0	0-17	
4-Chloro-3-Methylphenol	0.4000	0.3648	91	0.3525	88	58-124	3	0-15	
4-Nitrophenol	0.4000	0.3310	83	0.3383	85	44-134	2	0-19	
Pentachlorophenol	0.4000	0.2276	57	0.2583	65	24-138	13	0-21	
Acenaphthene	0.4000	0.3471	87	0.3444	86	55-121	1	0-15	
Pyrene	0.4000	0.4003	100	0.4167	104	45-129	4	0-15	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

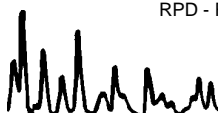
Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 3545
Method: EPA 8270C

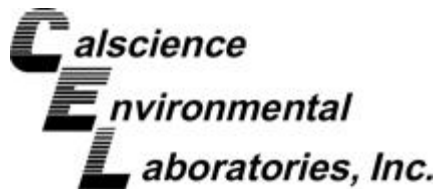
Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument		Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-549-2,450	Solid	GC/MS CCC		04/12/13	04/15/13	130412L07				
Parameter	<u>SPIKE</u> <u>ADDED</u>	<u>LCS</u> <u>CONC</u>	<u>LCS</u> <u>%REC</u>	<u>LCSD</u> <u>CONC</u>	<u>LCSD</u> <u>%REC</u>	<u>%REC</u> CL	<u>ME</u> CL	RPD	RPD CL	Qualifiers
Acenaphthene	10.00	8.747	87	8.672	87	59-125	48-136	1	0-15	
Acenaphthylene	10.00	8.653	87	8.271	83	33-145	14-164	5	0-20	
Butyl Benzyl Phthalate	10.00	9.198	92	9.006	90	0-152	0-177	2	0-20	
4-Chloro-3-Methylphenol	10.00	9.259	93	9.122	91	61-121	51-131	1	0-14	
2-Chlorophenol	10.00	9.536	95	9.456	95	60-114	51-123	1	0-15	
1,4-Dichlorobenzene	10.00	9.292	93	9.149	91	61-121	51-131	2	0-21	
Dimethyl Phthalate	10.00	8.974	90	9.037	90	0-112	0-131	1	0-20	
2,4-Dinitrotoluene	10.00	9.718	97	9.921	99	51-141	36-156	2	0-16	
Fluorene	10.00	9.352	94	9.264	93	59-121	49-131	1	0-20	
N-Nitroso-di-n-propylamine	10.00	8.485	85	8.494	85	64-136	52-148	0	0-15	
Naphthalene	10.00	8.605	86	8.455	85	21-133	2-152	2	0-20	
4-Nitrophenol	10.00	8.159	82	9.136	91	38-152	19-171	11	0-31	
Pentachlorophenol	10.00	4.041	40	4.815	48	38-116	25-129	17	0-20	
Phenol	10.00	9.474	95	9.368	94	59-125	48-136	1	0-15	
Pyrene	10.00	8.568	86	8.421	84	51-141	36-156	2	0-14	
1,2,4-Trichlorobenzene	10.00	8.606	86	8.610	86	58-118	48-128	0	0-18	

Total number of LCS compounds : 16
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

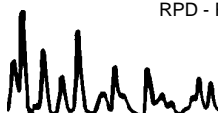
Date Received: N/A
Work Order No: 13-04-0823
Preparation: EPA 5035
Method: EPA 8260B

Project: Tire Fire Property

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number					
095-01-025-23,748	Solid	GC/MS W	04/17/13	04/17/13	130417L01					
Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	47.98	96	49.42	99	80-120	73-127	3	0-20	
Carbon Tetrachloride	50.00	59.24	118	61.11	122	65-137	53-149	3	0-20	
Chlorobenzene	50.00	53.10	106	55.27	111	80-120	73-127	4	0-20	
1,2-Dibromoethane	50.00	50.68	101	53.40	107	80-120	73-127	5	0-20	
1,2-Dichlorobenzene	50.00	53.55	107	54.54	109	80-120	73-127	2	0-20	
1,2-Dichloroethane	50.00	50.53	101	52.61	105	80-120	73-127	4	0-20	
1,1-Dichloroethene	50.00	46.83	94	47.64	95	68-128	58-138	2	0-20	
Ethylbenzene	50.00	51.88	104	53.82	108	80-120	73-127	4	0-20	
Toluene	50.00	49.65	99	51.47	103	80-120	73-127	4	0-20	
Trichloroethene	50.00	50.71	101	52.12	104	80-120	73-127	3	0-20	
Vinyl Chloride	50.00	40.84	82	41.09	82	67-127	57-137	1	0-20	
p/m-Xylene	100.0	105.5	105	110.1	110	75-125	67-133	4	0-25	
o-Xylene	50.00	54.45	109	55.83	112	75-125	67-133	3	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	47.74	95	49.85	100	70-124	61-133	4	0-20	
Tert-Butyl Alcohol (TBA)	250.0	260.3	104	263.7	105	73-121	65-129	1	0-20	
Diisopropyl Ether (DIPE)	50.00	47.11	94	49.51	99	69-129	59-139	5	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	51.06	102	53.46	107	70-124	61-133	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	47.89	96	50.25	101	74-122	66-130	5	0-20	
Ethanol	500.0	437.4	87	435.1	87	51-135	37-149	1	0-27	

Total number of LCS compounds : 19
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Work Order Number: 13-04-0823

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

For any analysis identified as a "field" test with a holding time (HT) \leq 15 minutes where the sample is received outside of HT, CalScience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet CalScience's internal HT, results will be appropriately qualified.



Don Burley

From: Stan Thiesen [stan@freshwaterenvironmentalservices.com]
Sent: Friday, April 19, 2013 2:10 PM
To: Don Burley
Subject: RE: Tire Fire Property / CEL 13-04-0823
Attachments: image001.jpg; image002.jpg

Please proceed with the reanalysis of all samples from the Tire-Fire site for magnesium.

Stan Thiesen, P.G.
Geologist
Freshwater Environmental Services
stan@freshwaterenvironmentalservices.com
78 Sunny Brae Center
Arcata, CA 95521
Office: 707 839-0091
Cell: 707 498-0793

From: Don Burley [mailto:dburley@calscience.com]
Sent: Friday, April 19, 2013 2:06 PM
To: Stan Thiesen
Subject: RE: Tire Fire Property / CEL 13-04-0823

Stan,

I took the metals data package back to the lab, They will evaluate the aluminum data; if OK, they will re-process the data.

Please reply with authorization to re-analyze the 10 samples for magnesium. We will get a change order started as soon as it is received.

Unless directed otherwise, we will re-issue the entire report when the analysis for magnesium is completed.

Thanks.

Don

From: Stan Thiesen [mailto:stan@freshwaterenvironmentalservices.com]
Sent: Friday, April 19, 2013 1:51 PM
To: Don Burley
Subject: RE: Tire Fire Property / CEL 13-04-0823

Don,

Please proceed with the aluminum reprocessing but we probably will not want to reanalyze. I would prefer to have the report reissued to include the aluminum but if it is simpler for you go ahead and generate a separate report whichever is easier.

Thanks for your prompt service.

Stan Thiesen, P.G.
Geologist
Freshwater Environmental Services
stan@freshwaterenvironmentalservices.com
78 Sunny Brae Center

Arcata, CA 95521
Office: 707 839-0091
Cell: 707 498-0793

From: Don Burley [mailto:dburley@calscience.com]
Sent: Friday, April 19, 2013 1:36 PM
To: Stan Thiesen
Subject: RE: Tire Fire Property / CEL 13-04-0823

Stan,

For the subject analytical batch, the instrument was calibrated for aluminum but not magnesium. If the QC is OK for aluminum, we can re-process the data to report aluminum on Monday for an extra cost of \$50 (\$5/sample). If the QC is not within control limits, we would need to re-analyze for aluminum.

In order to report magnesium, we will need to re-analyze the digest. Results would be available next Friday on NTAT for an extra cost of \$100 (\$10/sample).

Please advise as to how, or if, you want to proceed. Thanks.

Don

From: Stan Thiesen [mailto:stan@freshwaterenvironmentalservices.com]
Sent: Friday, April 19, 2013 1:17 PM
To: Don Burley
Subject: RE: Tire Fire Property / CEL 13-04-0823

Hi Don,

Thanks for the report. Can you report aluminum and magnesium for the samples and if so how much extra would that cost?

Stan

Stan Thiesen, P.G.
Geologist
Freshwater Environmental Services
stan@freshwaterenvironmentalservices.com
78 Sunny Brae Center
Arcata, CA 95521
Office: 707 839-0091
Cell: 707 498-0793

From: Don Burley [mailto:dburley@calscience.com]
Sent: Friday, April 19, 2013 11:19 AM
To: stan@freshwaterenvironmentalservices.com
Subject: Tire Fire Property / CEL 13-04-0823

Stan,

Attached are the following items:

Report
Invoice
Credit card payment receipt

WO # / LAB USE ONLY

13-04-0823

DATE: 04/10/13
PAGE: 1 OF 1

LABORATORY CLIENT: Freshwater Environmental Services		CLIENT PROJECT NAME / NUMBER: Tire Fire Property		P.O. NO.:	
ADDRESS: 78 Sunny Brae Center		PROJECT CONTACT: Stan Thiesen		SAMPLER(S): (PRINT) Orrin Plocheer	
CITY: Arcata	STATE: CA	ZIP: 95521			
TEL: 707 839-0091	E-MAIL: stan@freshwaterenvironmentalservices.com				

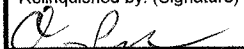
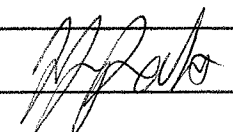
REQUESTED ANALYSES

TURNAROUND TIME:
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS 10 DAYS

COELT EDF GLOBAL ID: NA LOG CODE: NA

SPECIAL INSTRUCTIONS:
 Please Homogenize Samples prior to Analysis.
 Metals Include: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc.
 No percent moisture container was filled for Tire-Fire-2-0.5'-0.6'.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) or GRO	TPH(d) or DRO or (C6-C36) or (C6-C44)	TPH (Diesel and Motor Oil EPA 8015B)	BTEX / MTBE (8260) or (	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	CAM: 17 Metals + manganese (EPA 6020 and 7471)	MS/MSD	
		DATE	TIME																					
1	Tire-Fire-1-0.0'-0.1'	4/9/2013	11:00	Soil	11	2	9	NA	X		X		X		X	X							X	X
2	Tire-Fire-1-0.5'-0.6'	4/9/2013	11:20	Soil	4	1	3	NA	X		X		X		X	X							X	
3	Tire-Fire-2-0.0'-0.1'	4/9/2013	12:10	Soil	4	1	3	NA	X		X		X		X	X							X	
4	Tire-Fire-2-0.5'-0.6'	4/9/2013	12:20	Soil	4	1	3	NA	X		X		X		X	X							X	
5	Tire-Fire-3-0.0'-0.1'	4/9/2013	11:35	Soil	4	1	3	NA	X		X		X		X	X							X	
6	Tire-Fire-3-0.5'-0.6'	4/9/2013	11:45	Soil	4	1	3	NA	X		X		X		X	X							X	
7	Tire-Fire-4-0.0'-0.1'	4/9/2013	12:00	Soil	4	1	3	NA	X		X		X		X	X							X	
8	Tire-Fire-4-0.5'-0.6'	4/9/2013	12:05	Soil	4	1	3	NA	X		X		X		X	X							X	
9	Tire-Fire-5-0.0'-0.1'	4/9/2013	11:30	Soil	4	1	3	NA	X		X		X		X	X							X	
10	Tire-Fire-Background-Metals-0.0'-0.1'	4/9/2013	12:35	Soil	1	1	NA	NA															X	

Relinquished by: (Signature) 	Received by: (Signature/Affiliation) 	Date: 4/10/13	Time: 1400
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 4/11/13	Time: 1130
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

From: (707) 839-0091
Stan Thiesen
Freshwater Environmental
78 Sunny Brae Center

Origin ID: EKAA



Ship Date: 10APR13
ActWgt: 50.0 LB
CAD: 4822189/INET3370

Dims: 26 X 15 X 15 IN

0823

Arcata, CA 95521

J13111302120326

SHIP TO: (714) 895-5494

BILL SENDER

Alan Kemp
Calscience Environmental Laboratory
7440 Lincoln Way

Garden Grove, CA 92841

Delivery Address Bar Code



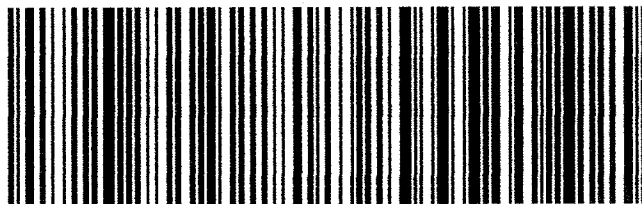
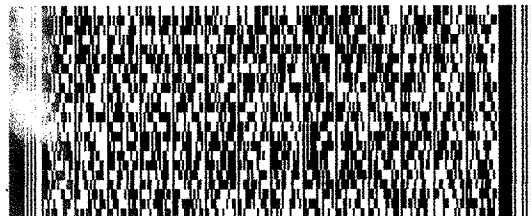
Ref # YTEP Projects
Invoice #
PO #
Dept #

THU - 11 APR 3:00P
STANDARD OVERNIGHT

TRK# 7994 9452 5989
0201

DSR
92841
CA-US
SNA

92 APVA



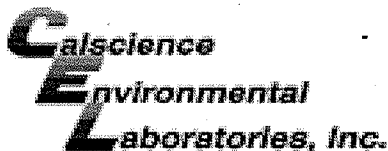
518G164BE93AB

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



WORK ORDER #: 13-04-0823

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Freshwater Env.

DATE: 04/11/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.2 °C (CF) = 2.0 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: AP

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: AP

Sample _____ No (Not Intact) Not Present Initial: TN

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours...	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® 2oz.PJ

Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

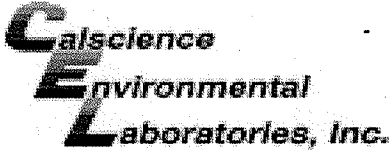
500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Canister Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: TN

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: AP

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered Scanned by: AP



WORK ORDER #: 13-04-0823

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments
 - Sample ID
 - Date and/or Time Collected
 - Project Information
 - # of Container(s)
 - Analysis
- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

Comments:

(-1) Received 19 containers instead of 11.
 9 x terracores.
 1 x 8 oz. clear glass jar
 1 x 4 oz. clear glass jar
 3 x 2 oz. plastic jar

(2-3,5-9) Received 5 containers instead of 4.
 3 x terracores
 1 x 4 oz. clear glass jar
 1 x 2 oz. plastic jar.

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request. Initial / Date: TN 04/11/13

APPENDIX E

Laboratory Report and Chain-of-Custody Record - 3



CALSCIENCE

WORK ORDER NUMBER: 13-07-1674

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Freshwater Environmental Services

Client Project Name: Tire Fire Property

Attention: Stan Thiesen
78 Sunny Brae Center
Arcata, CA 95521-6742

Approved for release on 08/01/2013 by:
Don Burley
Project Manager

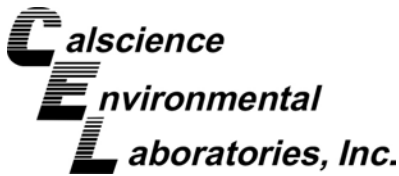
ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.





Contents

Client Project Name: Tire Fire Property
Work Order Number: 13-07-1674

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2	Sample Summary.	4
3	Client Sample Data.	5
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	3.2 EPA 8015B (M) TPH Motor Oil (Soil).	7
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Work Order Narrative

Work Order: 13-07-1674

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 07/25/13. They were assigned to Work Order 13-07-1674.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

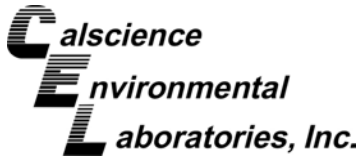
All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



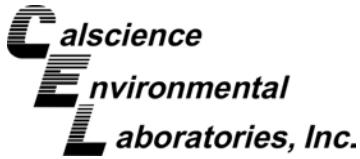
Sample Summary

Client: Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Work Order: 13-07-1674
 Project Name: Tire Fire Property
 PO Number:
 Date Received: 07/25/13

Attn: Stan Thiesen

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
Tire-Fire-1-(1.2')	13-07-1674-1	07/24/13 10:30	1	Soil
Tire-Fire-2-(1.3')	13-07-1674-2	07/24/13 11:00	1	Soil
Tire-Fire-3-(1.5')	13-07-1674-3	07/24/13 11:40	2	Soil
Tire-Fire-4-(1.0')	13-07-1674-4	07/24/13 11:20	1	Soil
Tire-Fire-6-(0.0'-0.1')	13-07-1674-5	07/24/13 11:51	1	Soil
Tire-Fire-7-(0.0'-0.1')	13-07-1674-6	07/24/13 12:05	1	Soil
Tire-Fire-8-(1.3')	13-07-1674-7	07/24/13 11:50	1	Soil



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B
Units: mg/kg

Project: Tire Fire Property

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-(1.5')	13-07-1674-3-B	07/24/13 11:40	Soil	GC 45	07/29/13	07/30/13 16:36	130729B13

Parameter	Result	RL	DF	Qualifiers
Diesel Range Organics	13	5.0	1	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-(1.0')	13-07-1674-4-A	07/24/13 11:20	Soil	GC 45	07/29/13	07/30/13 16:52	130729B13

Parameter	Result	RL	DF	Qualifiers
Diesel Range Organics	ND	5.0	1	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	84	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-6-(0.0'-0.1')	13-07-1674-5-B	07/24/13 11:51	Soil	GC 45	07/29/13	07/30/13 17:46	130729B13

Parameter	Result	RL	DF	Qualifiers
Diesel Range Organics	14	5.0	1	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-7-(0.0'-0.1')	13-07-1674-6-B	07/24/13 12:05	Soil	GC 45	07/29/13	07/30/13 17:11	130729B13

Parameter	Result	RL	DF	Qualifiers
Diesel Range Organics	33	10	2	SG,HD

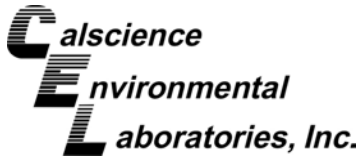
Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-8-(1.3')	13-07-1674-7-B	07/24/13 11:50	Soil	GC 45	07/29/13	07/30/13 17:27	130729B13

Parameter	Result	RL	DF	Qualifiers
Diesel Range Organics	15	5.0	1	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B
Units: mg/kg

Project: Tire Fire Property

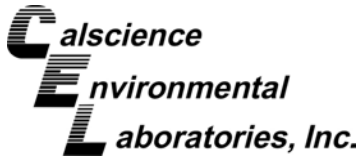
Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-414-258	N/A	Soil	GC 45	07/29/13	07/30/13 14:33	130729B13

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Diesel Range Organics	ND	5.0	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	88	61-145		

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

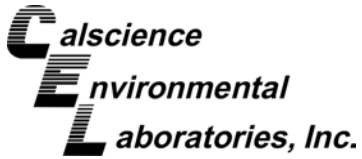
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: Tire Fire Property

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-(1.5')	13-07-1674-3-B	07/24/13 11:40	Soil	GC 45	07/29/13	07/30/13 16:36	130729B14
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Motor Oil		81		25		1	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		85		61-145			
Tire-Fire-4-(1.0')	13-07-1674-4-B	07/24/13 11:20	Soil	GC 45	07/29/13	07/30/13 16:52	130729B14
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Motor Oil		ND		25		1	SG
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		84		61-145			
Tire-Fire-6-(0.0'-0.1')	13-07-1674-5-B	07/24/13 11:51	Soil	GC 45	07/29/13	07/30/13 17:46	130729B14
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Motor Oil		150		25		1	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		90		61-145			
Tire-Fire-7-(0.0'-0.1')	13-07-1674-6-B	07/24/13 12:05	Soil	GC 45	07/29/13	07/30/13 17:11	130729B14
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Motor Oil		170		50		2	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		85		61-145			
Tire-Fire-8-(1.3')	13-07-1674-7-B	07/24/13 11:50	Soil	GC 45	07/29/13	07/30/13 17:27	130729B14
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Motor Oil		88		25		1	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		91		61-145			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

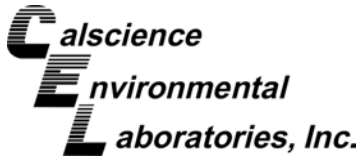
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: Tire Fire Property

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-420-526	N/A	Soil	GC 45	07/29/13	07/30/13 14:33	130729B14

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
TPH as Motor Oil	ND	25	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
n-Octacosane	88	61-145		



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

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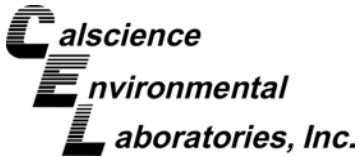
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-(1.5')	13-07-1674-3-B	07/24/13 11:40	Soil	ICP/MS 03	07/26/13	07/29/13 12:26	130726L04E

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	1.00	1	
Barium	12.1	1.00	1	
Cadmium	ND	1.00	1	
Chromium	12.2	2.00	1	
Cobalt	14.4	1.00	1	
Copper	204	1.00	1	
Lead	ND	1.00	1	
Nickel	28.3	1.00	1	
Vanadium	41.0	2.00	1	
Zinc	55.1	5.00	1	
Aluminum	11800	25.0	1	
Magnesium	12400	25.0	1	
Manganese	358	2.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-6-(0.0'-0.1')	13-07-1674-5-B	07/24/13 11:51	Soil	ICP/MS 03	07/26/13	07/29/13 17:20	130726L04E

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	1.00	1	
Barium	15.5	1.00	1	
Cadmium	ND	1.00	1	
Chromium	12.9	2.00	1	
Cobalt	10.7	1.00	1	
Copper	104	1.00	1	
Lead	3.96	1.00	1	
Nickel	20.4	1.00	1	
Vanadium	28.1	2.00	1	
Zinc	90.2	5.00	1	
Aluminum	8650	25.0	1	
Magnesium	9080	25.0	1	
Manganese	304	2.50	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

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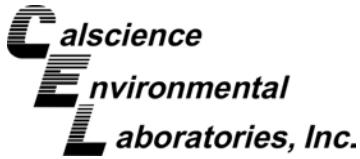
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-7-(0.0'-0.1')	13-07-1674-6-B	07/24/13 12:05	Soil	ICP/MS 03	07/26/13	07/29/13 17:23	130726L04E

Parameter	Result	RL	DF	Qualifiers
Arsenic	13.1	1.00	1	
Barium	142	1.00	1	
Cadmium	1.41	1.00	1	
Chromium	95.8	2.00	1	
Cobalt	22.8	1.00	1	
Copper	234	1.00	1	
Lead	147	1.00	1	
Nickel	85.5	1.00	1	
Vanadium	50.9	2.00	1	
Zinc	1130	5.00	1	
Aluminum	25400	25.0	1	
Magnesium	15700	25.0	1	
Manganese	694	2.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-8-(1.3')	13-07-1674-7-B	07/24/13 11:50	Soil	ICP/MS 03	07/26/13	07/29/13 17:26	130726L04E

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	1.00	1	
Barium	14.5	1.00	1	
Cadmium	ND	1.00	1	
Chromium	14.5	2.00	1	
Cobalt	17.7	1.00	1	
Copper	240	1.00	1	
Lead	1.04	1.00	1	
Nickel	39.2	1.00	1	
Vanadium	47.6	2.00	1	
Zinc	64.4	5.00	1	
Aluminum	14100	25.0	1	
Magnesium	15600	25.0	1	
Manganese	414	2.50	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: Tire Fire Property

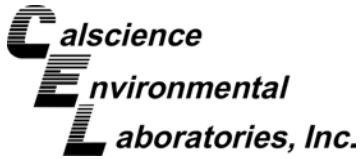
Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-621-269	N/A	Soil	ICP/MS 03	07/26/13	07/29/13 16:29	130726L04E

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	1.00	1	
Barium	ND	1.00	1	
Cadmium	ND	1.00	1	
Chromium	ND	2.00	1	
Cobalt	ND	1.00	1	
Copper	ND	1.00	1	
Lead	ND	1.00	1	
Nickel	ND	1.00	1	
Vanadium	ND	2.00	1	
Zinc	ND	5.00	1	
Aluminum	ND	25.0	1	
Magnesium	ND	25.0	1	
Manganese	ND	2.50	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

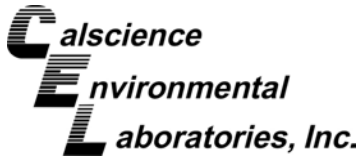
Project: Tire Fire Property

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-(1.5')	13-07-1674-3-A	07/24/13 11:40	Soil	Mercury	07/29/13	07/29/13 12:50	130729L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0835		1	
Tire-Fire-6-(0.0'-0.1')	13-07-1674-5-A	07/24/13 11:51	Soil	Mercury	07/29/13	07/29/13 12:57	130729L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0835		1	
Tire-Fire-7-(0.0'-0.1')	13-07-1674-6-A	07/24/13 12:05	Soil	Mercury	07/29/13	07/29/13 12:59	130729L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0835		1	
Tire-Fire-8-(1.3')	13-07-1674-7-A	07/24/13 11:50	Soil	Mercury	07/29/13	07/29/13 13:02	130729L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0835		1	
Method Blank	099-04-007-9486	N/A	Soil	Mercury	07/29/13	07/29/13 12:46	130729L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
Mercury		ND		0.0835		1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

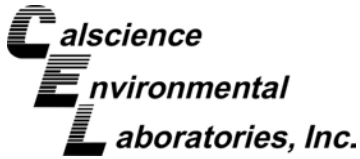
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-1-(1.2')	13-07-1674-1-A	07/24/13 10:30	Soil	GC/MS CCC	07/29/13	07/31/13 23:29	130729L10

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.020	1	
2-Chlorophenol	ND	0.020	1	
2-Methylphenol	ND	0.020	1	
3/4-Methylphenol	ND	0.020	1	
2-Nitrophenol	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1	
4-Nitrophenol	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1	
Pentachlorophenol	ND	0.020	1	
Dimethyl Phthalate	ND	0.010	1	
Diethyl Phthalate	ND	0.010	1	
Di-n-Butyl Phthalate	ND	0.010	1	
Butyl Benzyl Phthalate	ND	0.010	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1	
Di-n-Octyl Phthalate	ND	0.010	1	
Naphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1	
Acenaphthene	ND	0.020	1	
Fluorene	ND	0.020	1	
Phenanthrene	ND	0.020	1	
Anthracene	ND	0.020	1	
Fluoranthene	ND	0.016	1	
Pyrene	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1	
Chrysene	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

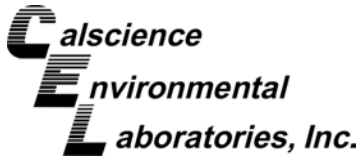
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzo (g,h,i) Perylene	ND	0.020	1	
N-Nitrosodimethylamine	ND	0.020	1	
Aniline	ND	0.020	1	
Bis(2-Chloroethyl) Ether	ND	0.10	1	
1,3-Dichlorobenzene	ND	0.020	1	
1,4-Dichlorobenzene	ND	0.020	1	
Benzyl Alcohol	ND	0.020	1	
1,2-Dichlorobenzene	ND	0.020	1	
Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
N-Nitroso-di-n-propylamine	ND	0.020	1	
Hexachloroethane	ND	0.020	1	
Nitrobenzene	ND	0.10	1	
Isophorone	ND	0.020	1	
Benzoic Acid	ND	0.10	1	
Bis(2-Chloroethoxy) Methane	ND	0.020	1	
1,2,4-Trichlorobenzene	ND	0.020	1	
4-Chloroaniline	ND	0.020	1	
Hexachloro-1,3-Butadiene	ND	0.020	1	
2-Methylnaphthalene	ND	0.020	1	
1-Methylnaphthalene	ND	0.020	1	
Hexachlorocyclopentadiene	ND	0.020	1	
2-Chloronaphthalene	ND	0.020	1	
2-Nitroaniline	ND	0.020	1	
3-Nitroaniline	ND	0.020	1	
Dibenzofuran	ND	0.020	1	
2,4-Dinitrotoluene	ND	0.020	1	
2,6-Dinitrotoluene	ND	0.020	1	
4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
4-Nitroaniline	ND	0.020	1	
Azobenzene	ND	0.020	1	
N-Nitrosodiphenylamine	ND	0.020	1	
4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Hexachlorobenzene	ND	0.020	1	
Benzidine	ND	0.10	1	
Pyridine	ND	0.020	1	
3,3'-Dichlorobenzidine	ND	0.020	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
2-Fluorophenol	30	25-121		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

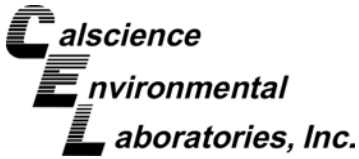
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Phenol-d6	34	24-113	
Nitrobenzene-d5	38	23-120	
2-Fluorobiphenyl	57	30-115	
2,4,6-Tribromophenol	45	19-122	
p-Terphenyl-d14	80	18-137	



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

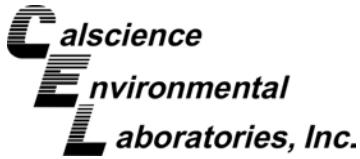
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-2-(1.3')	13-07-1674-2-A	07/24/13 11:00	Soil	GC/MS CCC	07/29/13	07/31/13 23:55	130729L10

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.020	1	
2-Chlorophenol	ND	0.020	1	
2-Methylphenol	ND	0.020	1	
3/4-Methylphenol	ND	0.020	1	
2-Nitrophenol	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1	
4-Nitrophenol	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1	
Pentachlorophenol	ND	0.020	1	
Dimethyl Phthalate	0.011	0.010	1	
Diethyl Phthalate	ND	0.010	1	
Di-n-Butyl Phthalate	ND	0.010	1	
Butyl Benzyl Phthalate	ND	0.010	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1	
Di-n-Octyl Phthalate	ND	0.010	1	
Naphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1	
Acenaphthene	ND	0.020	1	
Fluorene	ND	0.020	1	
Phenanthrene	ND	0.020	1	
Anthracene	ND	0.020	1	
Fluoranthene	ND	0.016	1	
Pyrene	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1	
Chrysene	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

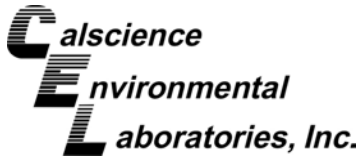
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzo (g,h,i) Perylene	ND	0.020	1	
N-Nitrosodimethylamine	ND	0.020	1	
Aniline	ND	0.020	1	
Bis(2-Chloroethyl) Ether	ND	0.10	1	
1,3-Dichlorobenzene	ND	0.020	1	
1,4-Dichlorobenzene	ND	0.020	1	
Benzyl Alcohol	ND	0.020	1	
1,2-Dichlorobenzene	ND	0.020	1	
Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
N-Nitroso-di-n-propylamine	ND	0.020	1	
Hexachloroethane	ND	0.020	1	
Nitrobenzene	ND	0.10	1	
Isophorone	ND	0.020	1	
Benzoic Acid	ND	0.10	1	
Bis(2-Chloroethoxy) Methane	ND	0.020	1	
1,2,4-Trichlorobenzene	ND	0.020	1	
4-Chloroaniline	ND	0.020	1	
Hexachloro-1,3-Butadiene	ND	0.020	1	
2-Methylnaphthalene	ND	0.020	1	
1-Methylnaphthalene	ND	0.020	1	
Hexachlorocyclopentadiene	ND	0.020	1	
2-Chloronaphthalene	ND	0.020	1	
2-Nitroaniline	ND	0.020	1	
3-Nitroaniline	ND	0.020	1	
Dibenzofuran	ND	0.020	1	
2,4-Dinitrotoluene	ND	0.020	1	
2,6-Dinitrotoluene	ND	0.020	1	
4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
4-Nitroaniline	ND	0.020	1	
Azobenzene	ND	0.020	1	
N-Nitrosodiphenylamine	ND	0.020	1	
4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Hexachlorobenzene	ND	0.020	1	
Benzidine	ND	0.10	1	
Pyridine	ND	0.020	1	
3,3'-Dichlorobenzidine	ND	0.020	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
2-Fluorophenol	54	25-121		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

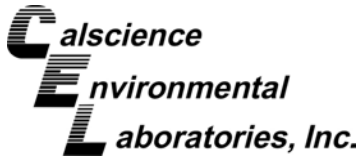
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Phenol-d6	63	24-113	
Nitrobenzene-d5	60	23-120	
2-Fluorobiphenyl	83	30-115	
2,4,6-Tribromophenol	78	19-122	
p-Terphenyl-d14	118	18-137	



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

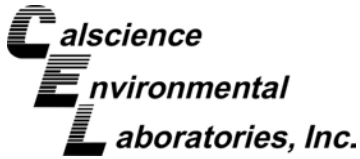
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-3-(1.5')	13-07-1674-3-A	07/24/13 11:40	Soil	GC/MS CCC	07/29/13	08/01/13 00:21	130729L10

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.020	1	
2-Chlorophenol	ND	0.020	1	
2-Methylphenol	ND	0.020	1	
3/4-Methylphenol	ND	0.020	1	
2-Nitrophenol	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1	
4-Nitrophenol	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1	
Pentachlorophenol	ND	0.020	1	
Dimethyl Phthalate	ND	0.010	1	
Diethyl Phthalate	ND	0.010	1	
Di-n-Butyl Phthalate	ND	0.010	1	
Butyl Benzyl Phthalate	ND	0.010	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1	
Di-n-Octyl Phthalate	ND	0.010	1	
Naphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1	
Acenaphthene	ND	0.020	1	
Fluorene	ND	0.020	1	
Phenanthrene	ND	0.020	1	
Anthracene	ND	0.020	1	
Fluoranthene	ND	0.016	1	
Pyrene	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1	
Chrysene	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

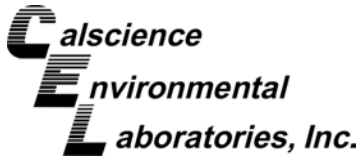
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzo (g,h,i) Perylene	ND	0.020	1	
N-Nitrosodimethylamine	ND	0.020	1	
Aniline	ND	0.020	1	
Bis(2-Chloroethyl) Ether	ND	0.10	1	
1,3-Dichlorobenzene	ND	0.020	1	
1,4-Dichlorobenzene	ND	0.020	1	
Benzyl Alcohol	ND	0.020	1	
1,2-Dichlorobenzene	ND	0.020	1	
Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
N-Nitroso-di-n-propylamine	ND	0.020	1	
Hexachloroethane	ND	0.020	1	
Nitrobenzene	ND	0.10	1	
Isophorone	ND	0.020	1	
Benzoic Acid	ND	0.10	1	
Bis(2-Chloroethoxy) Methane	ND	0.020	1	
1,2,4-Trichlorobenzene	ND	0.020	1	
4-Chloroaniline	ND	0.020	1	
Hexachloro-1,3-Butadiene	ND	0.020	1	
2-Methylnaphthalene	ND	0.020	1	
1-Methylnaphthalene	ND	0.020	1	
Hexachlorocyclopentadiene	ND	0.020	1	
2-Chloronaphthalene	ND	0.020	1	
2-Nitroaniline	ND	0.020	1	
3-Nitroaniline	ND	0.020	1	
Dibenzofuran	ND	0.020	1	
2,4-Dinitrotoluene	ND	0.020	1	
2,6-Dinitrotoluene	ND	0.020	1	
4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
4-Nitroaniline	ND	0.020	1	
Azobenzene	ND	0.020	1	
N-Nitrosodiphenylamine	ND	0.020	1	
4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Hexachlorobenzene	ND	0.020	1	
Benzidine	ND	0.10	1	
Pyridine	ND	0.020	1	
3,3'-Dichlorobenzidine	ND	0.020	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
2-Fluorophenol	51	25-121		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

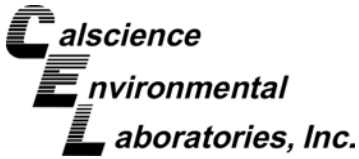
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Phenol-d6	57	24-113	
Nitrobenzene-d5	62	23-120	
2-Fluorobiphenyl	83	30-115	
2,4,6-Tribromophenol	71	19-122	
p-Terphenyl-d14	152	18-137	2,7



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

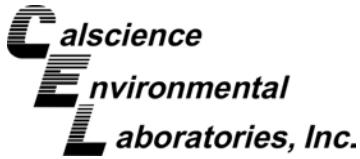
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-4-(1.0')	13-07-1674-4-A	07/24/13 11:20	Soil	GC/MS CCC	07/29/13	08/01/13 00:47	130729L10

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.020	1	
2-Chlorophenol	ND	0.020	1	
2-Methylphenol	ND	0.020	1	
3/4-Methylphenol	ND	0.020	1	
2-Nitrophenol	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1	
4-Nitrophenol	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1	
Pentachlorophenol	ND	0.020	1	
Dimethyl Phthalate	ND	0.010	1	
Diethyl Phthalate	ND	0.010	1	
Di-n-Butyl Phthalate	ND	0.010	1	
Butyl Benzyl Phthalate	ND	0.010	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1	
Di-n-Octyl Phthalate	ND	0.010	1	
Naphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1	
Acenaphthene	ND	0.020	1	
Fluorene	ND	0.020	1	
Phenanthrene	ND	0.020	1	
Anthracene	ND	0.020	1	
Fluoranthene	ND	0.016	1	
Pyrene	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1	
Chrysene	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

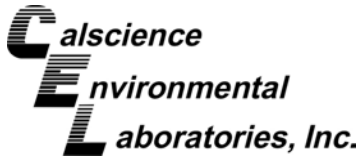
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzo (g,h,i) Perylene	ND	0.020	1	
N-Nitrosodimethylamine	ND	0.020	1	
Aniline	ND	0.020	1	
Bis(2-Chloroethyl) Ether	ND	0.10	1	
1,3-Dichlorobenzene	ND	0.020	1	
1,4-Dichlorobenzene	ND	0.020	1	
Benzyl Alcohol	ND	0.020	1	
1,2-Dichlorobenzene	ND	0.020	1	
Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
N-Nitroso-di-n-propylamine	ND	0.020	1	
Hexachloroethane	ND	0.020	1	
Nitrobenzene	ND	0.10	1	
Isophorone	ND	0.020	1	
Benzoic Acid	ND	0.10	1	
Bis(2-Chloroethoxy) Methane	ND	0.020	1	
1,2,4-Trichlorobenzene	ND	0.020	1	
4-Chloroaniline	ND	0.020	1	
Hexachloro-1,3-Butadiene	ND	0.020	1	
2-Methylnaphthalene	ND	0.020	1	
1-Methylnaphthalene	ND	0.020	1	
Hexachlorocyclopentadiene	ND	0.020	1	
2-Chloronaphthalene	ND	0.020	1	
2-Nitroaniline	ND	0.020	1	
3-Nitroaniline	ND	0.020	1	
Dibenzofuran	ND	0.020	1	
2,4-Dinitrotoluene	ND	0.020	1	
2,6-Dinitrotoluene	ND	0.020	1	
4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
4-Nitroaniline	ND	0.020	1	
Azobenzene	ND	0.020	1	
N-Nitrosodiphenylamine	ND	0.020	1	
4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Hexachlorobenzene	ND	0.020	1	
Benzidine	ND	0.10	1	
Pyridine	ND	0.020	1	
3,3'-Dichlorobenzidine	ND	0.020	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
2-Fluorophenol	34	25-121		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

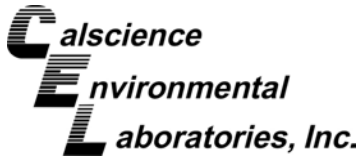
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Phenol-d6	40	24-113	
Nitrobenzene-d5	39	23-120	
2-Fluorobiphenyl	48	30-115	
2,4,6-Tribromophenol	39	19-122	
p-Terphenyl-d14	81	18-137	



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

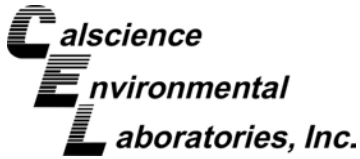
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-6-(0.0'-0.1')	13-07-1674-5-A	07/24/13 11:51	Soil	GC/MS CCC	07/29/13	08/01/13 01:12	130729L10

Comment(s): - The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.16	7.92	
2-Chlorophenol	ND	0.16	7.92	
2-Methylphenol	ND	0.16	7.92	
3/4-Methylphenol	ND	0.16	7.92	
2-Nitrophenol	ND	0.16	7.92	
2,4-Dimethylphenol	ND	0.16	7.92	
2,4-Dichlorophenol	ND	0.16	7.92	
4-Chloro-3-Methylphenol	ND	0.16	7.92	
2,4-Dinitrophenol	ND	0.79	7.92	
4-Nitrophenol	ND	0.16	7.92	
4,6-Dinitro-2-Methylphenol	ND	0.79	7.92	
2,4,6-Trichlorophenol	ND	0.16	7.92	
2,4,5-Trichlorophenol	ND	0.16	7.92	
Pentachlorophenol	ND	0.16	7.92	
Dimethyl Phthalate	ND	0.079	7.92	
Diethyl Phthalate	ND	0.079	7.92	
Di-n-Butyl Phthalate	ND	0.079	7.92	
Butyl Benzyl Phthalate	0.23	0.079	7.92	
Bis(2-Ethylhexyl) Phthalate	0.16	0.079	7.92	
Di-n-Octyl Phthalate	ND	0.079	7.92	
Naphthalene	ND	0.16	7.92	
Acenaphthylene	ND	0.16	7.92	
Acenaphthene	ND	0.16	7.92	
Fluorene	ND	0.16	7.92	
Phenanthrene	ND	0.16	7.92	
Anthracene	ND	0.16	7.92	
Fluoranthene	ND	0.13	7.92	
Pyrene	ND	0.16	7.92	
Benzo (a) Anthracene	ND	0.16	7.92	
Chrysene	ND	0.16	7.92	
Benzo (k) Fluoranthene	ND	0.16	7.92	
Benzo (b) Fluoranthene	ND	0.16	7.92	
Benzo (a) Pyrene	ND	0.16	7.92	
Indeno (1,2,3-c,d) Pyrene	ND	0.16	7.92	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

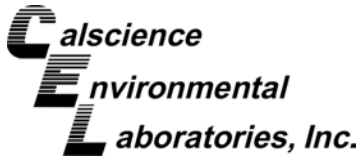
Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dibenz (a,h) Anthracene	ND	0.16	7.92	
Benzo (g,h,i) Perylene	ND	0.16	7.92	
N-Nitrosodimethylamine	ND	0.16	7.92	
Aniline	ND	0.16	7.92	
Bis(2-Chloroethyl) Ether	ND	0.79	7.92	
1,3-Dichlorobenzene	ND	0.16	7.92	
1,4-Dichlorobenzene	ND	0.16	7.92	
Benzyl Alcohol	ND	0.16	7.92	
1,2-Dichlorobenzene	ND	0.16	7.92	
Bis(2-Chloroisopropyl) Ether	ND	0.16	7.92	
N-Nitroso-di-n-propylamine	ND	0.16	7.92	
Hexachloroethane	ND	0.16	7.92	
Nitrobenzene	ND	0.79	7.92	
Isophorone	ND	0.16	7.92	
Benzoic Acid	ND	0.79	7.92	
Bis(2-Chloroethoxy) Methane	ND	0.16	7.92	
1,2,4-Trichlorobenzene	ND	0.16	7.92	
4-Chloroaniline	ND	0.16	7.92	
Hexachloro-1,3-Butadiene	ND	0.16	7.92	
2-Methylnaphthalene	ND	0.16	7.92	
1-Methylnaphthalene	ND	0.16	7.92	
Hexachlorocyclopentadiene	ND	0.16	7.92	
2-Chloronaphthalene	ND	0.16	7.92	
2-Nitroaniline	ND	0.16	7.92	
3-Nitroaniline	ND	0.16	7.92	
Dibenzofuran	ND	0.16	7.92	
2,4-Dinitrotoluene	ND	0.16	7.92	
2,6-Dinitrotoluene	ND	0.16	7.92	
4-Chlorophenyl-Phenyl Ether	ND	0.16	7.92	
4-Nitroaniline	ND	0.16	7.92	
Azobenzene	ND	0.16	7.92	
N-Nitrosodiphenylamine	ND	0.16	7.92	
4-Bromophenyl-Phenyl Ether	ND	0.16	7.92	
Hexachlorobenzene	ND	0.16	7.92	
Benzydine	ND	0.79	7.92	
Pyridine	ND	0.16	7.92	
3,3'-Dichlorobenzidine	ND	0.16	7.92	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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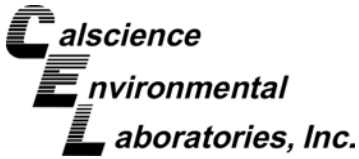
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	86	25-121	
Phenol-d6	75	24-113	
Nitrobenzene-d5	95	23-120	
2-Fluorobiphenyl	96	30-115	
2,4,6-Tribromophenol	89	19-122	
p-Terphenyl-d14	223	18-137	1,2,7



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

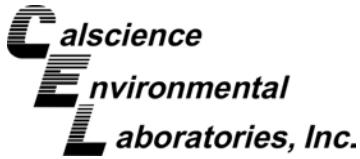
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-7-(0.0'-0.1')	13-07-1674-6-A	07/24/13 12:05	Soil	GC/MS CCC	07/29/13	08/01/13 01:39	130729L10

Comment(s): - The sample volume received was less than required resulting in an elevated reporting limit.

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.20	10	
2-Chlorophenol	ND	0.20	10	
2-Methylphenol	ND	0.20	10	
3/4-Methylphenol	ND	0.20	10	
2-Nitrophenol	ND	0.20	10	
2,4-Dimethylphenol	ND	0.20	10	
2,4-Dichlorophenol	ND	0.20	10	
4-Chloro-3-Methylphenol	ND	0.20	10	
2,4-Dinitrophenol	ND	1.0	10	
4-Nitrophenol	ND	0.20	10	
4,6-Dinitro-2-Methylphenol	ND	1.0	10	
2,4,6-Trichlorophenol	ND	0.20	10	
2,4,5-Trichlorophenol	ND	0.20	10	
Pentachlorophenol	ND	0.20	10	
Dimethyl Phthalate	ND	0.10	10	
Diethyl Phthalate	ND	0.10	10	
Di-n-Butyl Phthalate	ND	0.10	10	
Butyl Benzyl Phthalate	ND	0.10	10	
Bis(2-Ethylhexyl) Phthalate	0.27	0.10	10	
Di-n-Octyl Phthalate	ND	0.10	10	
Naphthalene	ND	0.20	10	
Acenaphthylene	ND	0.20	10	
Acenaphthene	ND	0.20	10	
Fluorene	ND	0.20	10	
Phenanthrene	ND	0.20	10	
Anthracene	ND	0.20	10	
Fluoranthene	ND	0.16	10	
Pyrene	ND	0.20	10	
Benzo (a) Anthracene	ND	0.20	10	
Chrysene	ND	0.20	10	
Benzo (k) Fluoranthene	ND	0.20	10	
Benzo (b) Fluoranthene	ND	0.20	10	
Benzo (a) Pyrene	ND	0.20	10	
Indeno (1,2,3-c,d) Pyrene	ND	0.20	10	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

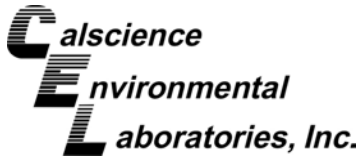
Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Dibenz (a,h) Anthracene	ND	0.20	10	
Benzo (g,h,i) Perylene	ND	0.20	10	
N-Nitrosodimethylamine	ND	0.20	10	
Aniline	ND	0.20	10	
Bis(2-Chloroethyl) Ether	ND	1.0	10	
1,3-Dichlorobenzene	ND	0.20	10	
1,4-Dichlorobenzene	ND	0.20	10	
Benzyl Alcohol	ND	0.20	10	
1,2-Dichlorobenzene	ND	0.20	10	
Bis(2-Chloroisopropyl) Ether	ND	0.20	10	
N-Nitroso-di-n-propylamine	ND	0.20	10	
Hexachloroethane	ND	0.20	10	
Nitrobenzene	ND	1.0	10	
Isophorone	ND	0.20	10	
Benzoic Acid	ND	1.0	10	
Bis(2-Chloroethoxy) Methane	ND	0.20	10	
1,2,4-Trichlorobenzene	ND	0.20	10	
4-Chloroaniline	ND	0.20	10	
Hexachloro-1,3-Butadiene	ND	0.20	10	
2-Methylnaphthalene	ND	0.20	10	
1-Methylnaphthalene	ND	0.20	10	
Hexachlorocyclopentadiene	ND	0.20	10	
2-Chloronaphthalene	ND	0.20	10	
2-Nitroaniline	ND	0.20	10	
3-Nitroaniline	ND	0.20	10	
Dibenzofuran	ND	0.20	10	
2,4-Dinitrotoluene	ND	0.20	10	
2,6-Dinitrotoluene	ND	0.20	10	
4-Chlorophenyl-Phenyl Ether	ND	0.20	10	
4-Nitroaniline	ND	0.20	10	
Azobenzene	ND	0.20	10	
N-Nitrosodiphenylamine	ND	0.20	10	
4-Bromophenyl-Phenyl Ether	ND	0.20	10	
Hexachlorobenzene	ND	0.20	10	
Benzydine	ND	1.0	10	
Pyridine	ND	0.20	10	
3,3'-Dichlorobenzidine	ND	0.20	10	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

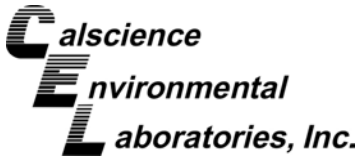
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorophenol	60	25-121	
Phenol-d6	67	24-113	
Nitrobenzene-d5	83	23-120	
2-Fluorobiphenyl	98	30-115	
2,4,6-Tribromophenol	87	19-122	
p-Terphenyl-d14	198	18-137	1,2,7



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

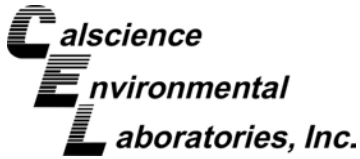
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Tire-Fire-8-(1.3')	13-07-1674-7-A	07/24/13 11:50	Soil	GC/MS CCC	07/29/13	08/01/13 02:05	130729L10

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.020	1	
2-Chlorophenol	ND	0.020	1	
2-Methylphenol	ND	0.020	1	
3/4-Methylphenol	ND	0.020	1	
2-Nitrophenol	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1	
4-Nitrophenol	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1	
Pentachlorophenol	ND	0.020	1	
Dimethyl Phthalate	ND	0.010	1	
Diethyl Phthalate	ND	0.010	1	
Di-n-Butyl Phthalate	ND	0.010	1	
Butyl Benzyl Phthalate	ND	0.010	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1	
Di-n-Octyl Phthalate	ND	0.010	1	
Naphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1	
Acenaphthene	ND	0.020	1	
Fluorene	ND	0.020	1	
Phenanthrene	ND	0.020	1	
Anthracene	ND	0.020	1	
Fluoranthene	ND	0.016	1	
Pyrene	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1	
Chrysene	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

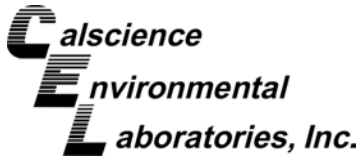
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzo (g,h,i) Perylene	ND	0.020	1	
N-Nitrosodimethylamine	ND	0.020	1	
Aniline	ND	0.020	1	
Bis(2-Chloroethyl) Ether	ND	0.10	1	
1,3-Dichlorobenzene	ND	0.020	1	
1,4-Dichlorobenzene	ND	0.020	1	
Benzyl Alcohol	ND	0.020	1	
1,2-Dichlorobenzene	ND	0.020	1	
Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
N-Nitroso-di-n-propylamine	ND	0.020	1	
Hexachloroethane	ND	0.020	1	
Nitrobenzene	ND	0.10	1	
Isophorone	ND	0.020	1	
Benzoic Acid	ND	0.10	1	
Bis(2-Chloroethoxy) Methane	ND	0.020	1	
1,2,4-Trichlorobenzene	ND	0.020	1	
4-Chloroaniline	ND	0.020	1	
Hexachloro-1,3-Butadiene	ND	0.020	1	
2-Methylnaphthalene	ND	0.020	1	
1-Methylnaphthalene	ND	0.020	1	
Hexachlorocyclopentadiene	ND	0.020	1	
2-Chloronaphthalene	ND	0.020	1	
2-Nitroaniline	ND	0.020	1	
3-Nitroaniline	ND	0.020	1	
Dibenzofuran	ND	0.020	1	
2,4-Dinitrotoluene	ND	0.020	1	
2,6-Dinitrotoluene	ND	0.020	1	
4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
4-Nitroaniline	ND	0.020	1	
Azobenzene	ND	0.020	1	
N-Nitrosodiphenylamine	ND	0.020	1	
4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Hexachlorobenzene	ND	0.020	1	
Benzidine	ND	0.10	1	
Pyridine	ND	0.020	1	
3,3'-Dichlorobenzidine	ND	0.020	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
2-Fluorophenol	58	25-121		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

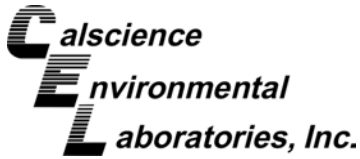
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Phenol-d6	60	24-113	
Nitrobenzene-d5	66	23-120	
2-Fluorobiphenyl	87	30-115	
2,4,6-Tribromophenol	67	19-122	
p-Terphenyl-d14	215	18-137	2,7



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

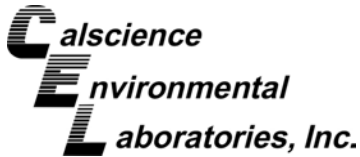
Project: Tire Fire Property

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-009-94	N/A	Soil	GC/MS CCC	07/29/13	07/31/13 16:25	130729L10

Parameter	Result	RL	DF	Qualifiers
Phenol	ND	0.020	1	
2-Chlorophenol	ND	0.020	1	
2-Methylphenol	ND	0.020	1	
3/4-Methylphenol	ND	0.020	1	
2-Nitrophenol	ND	0.020	1	
2,4-Dimethylphenol	ND	0.020	1	
2,4-Dichlorophenol	ND	0.020	1	
4-Chloro-3-Methylphenol	ND	0.020	1	
2,4-Dinitrophenol	ND	0.10	1	
4-Nitrophenol	ND	0.020	1	
4,6-Dinitro-2-Methylphenol	ND	0.10	1	
2,4,6-Trichlorophenol	ND	0.020	1	
2,4,5-Trichlorophenol	ND	0.020	1	
Pentachlorophenol	ND	0.020	1	
Dimethyl Phthalate	ND	0.010	1	
Diethyl Phthalate	ND	0.010	1	
Di-n-Butyl Phthalate	ND	0.010	1	
Butyl Benzyl Phthalate	ND	0.010	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.010	1	
Di-n-Octyl Phthalate	ND	0.010	1	
Naphthalene	ND	0.020	1	
Acenaphthylene	ND	0.020	1	
Acenaphthene	ND	0.020	1	
Fluorene	ND	0.020	1	
Phenanthrene	ND	0.020	1	
Anthracene	ND	0.020	1	
Fluoranthene	ND	0.016	1	
Pyrene	ND	0.020	1	
Benzo (a) Anthracene	ND	0.020	1	
Chrysene	ND	0.020	1	
Benzo (k) Fluoranthene	ND	0.020	1	
Benzo (b) Fluoranthene	ND	0.020	1	
Benzo (a) Pyrene	ND	0.020	1	
Indeno (1,2,3-c,d) Pyrene	ND	0.020	1	
Dibenz (a,h) Anthracene	ND	0.020	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

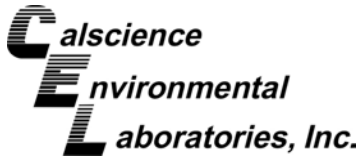
Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C
Units: mg/kg

Project: Tire Fire Property

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzo (g,h,i) Perylene	ND	0.020	1	
N-Nitrosodimethylamine	ND	0.020	1	
Aniline	ND	0.020	1	
Bis(2-Chloroethyl) Ether	ND	0.10	1	
1,3-Dichlorobenzene	ND	0.020	1	
1,4-Dichlorobenzene	ND	0.020	1	
Benzyl Alcohol	ND	0.020	1	
1,2-Dichlorobenzene	ND	0.020	1	
Bis(2-Chloroisopropyl) Ether	ND	0.020	1	
N-Nitroso-di-n-propylamine	ND	0.020	1	
Hexachloroethane	ND	0.020	1	
Nitrobenzene	ND	0.10	1	
Isophorone	ND	0.020	1	
Benzoic Acid	ND	0.10	1	
Bis(2-Chloroethoxy) Methane	ND	0.020	1	
1,2,4-Trichlorobenzene	ND	0.020	1	
4-Chloroaniline	ND	0.020	1	
Hexachloro-1,3-Butadiene	ND	0.020	1	
2-Methylnaphthalene	ND	0.020	1	
1-Methylnaphthalene	ND	0.020	1	
Hexachlorocyclopentadiene	ND	0.020	1	
2-Chloronaphthalene	ND	0.020	1	
2-Nitroaniline	ND	0.020	1	
3-Nitroaniline	ND	0.020	1	
Dibenzofuran	ND	0.020	1	
2,4-Dinitrotoluene	ND	0.020	1	
2,6-Dinitrotoluene	ND	0.020	1	
4-Chlorophenyl-Phenyl Ether	ND	0.020	1	
4-Nitroaniline	ND	0.020	1	
Azobenzene	ND	0.020	1	
N-Nitrosodiphenylamine	ND	0.020	1	
4-Bromophenyl-Phenyl Ether	ND	0.020	1	
Hexachlorobenzene	ND	0.020	1	
Benzidine	ND	0.10	1	
Pyridine	ND	0.020	1	
3,3'-Dichlorobenzidine	ND	0.020	1	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
2-Fluorophenol	67	25-121		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

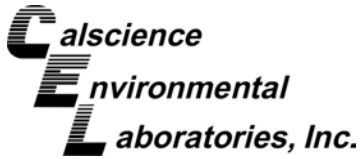
Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3545
 Method: EPA 8270C
 Units: mg/kg

Project: Tire Fire Property

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Phenol-d6	70	24-113	
Nitrobenzene-d5	64	23-120	
2-Fluorobiphenyl	68	30-115	
2,4,6-Tribromophenol	85	19-122	
p-Terphenyl-d14	77	18-137	



Quality Control - Spike/Spike Duplicate

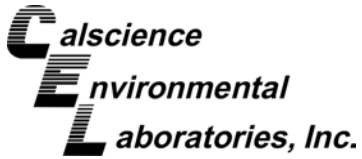
Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B

Project: Tire Fire Property

Page 1 of 5

Quality Control Sample ID	Matrix		Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
Tire-Fire-3-(1.5')	Soil		GC 45	07/29/13	07/30/13 15:26	130729S13				
<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Diesel Range Organics	12.87	400.0	468.9	114	449.1	109	64-130	4	0-15	



Quality Control - Spike/Spike Duplicate

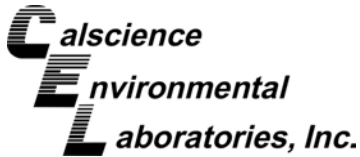
Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Tire Fire Property

Page 2 of 5

Quality Control Sample ID	Matrix		Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
Tire-Fire-3-(1.5')	Soil		GC 45	07/29/13	07/30/13 16:01	130729S14				
<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	81.30	400.0	426.1	86	435.6	89	64-130	2	0-15	



Quality Control - Spike/Spike Duplicate

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3050B
Method: EPA 6020

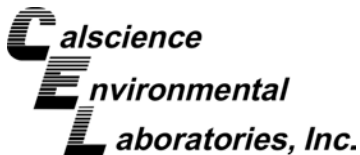
Project: Tire Fire Property

Page 3 of 5

Quality Control Sample ID	Matrix		Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
Tire-Fire-3-(1.5')	Soil		ICP/MS 03	07/26/13	07/29/13 12:27	130726S04A				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	25.00	23.42	94	22.44	90	72-132	4	0-13	
Barium	12.15	25.00	38.29	105	39.92	111	50-152	4	0-41	
Cadmium	ND	25.00	25.34	101	25.00	100	85-121	1	0-12	
Chromium	12.25	25.00	40.21	112	40.41	113	20-182	1	0-15	
Cobalt	14.39	25.00	40.38	104	40.58	105	40-166	0	0-14	
Copper	203.9	25.00	236.5	4X	255.3	4X	25-157	4X	0-22	Q
Lead	ND	25.00	26.67	107	27.33	109	62-134	2	0-23	
Nickel	28.28	25.00	57.35	116	57.35	116	46-154	0	0-15	
Vanadium	41.05	25.00	71.34	121	81.49	162	28-178	13	0-28	
Zinc	55.11	25.00	92.37	149	96.98	167	23-173	5	0-18	
Aluminum	11820	25.00	13630	4X	15900	4X	80-120	4X	0-20	Q
Magnesium	12380	25.00	14670	4X	17110	4X	80-120	4X	0-20	Q
Manganese	357.9	25.00	404.5	4X	457.2	4X	80-120	4X	0-20	Q

Return to Contents 

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 7471A Total
 Method: EPA 7471A

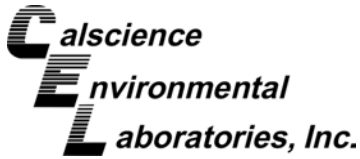
Project: Tire Fire Property

Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number					
Tire-Fire-3-(1.5')	Soil	Mercury	07/29/13	07/29/13 12:52	130729S01					
<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	ND	0.8350	0.8812	106	0.8850	106	71-137	0	0-14	

Return to Contents 

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

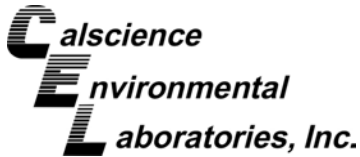
Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C

Project: Tire Fire Property

Page 5 of 5

Quality Control Sample ID	Matrix		Instrument		Date Prepared	Date Analyzed	MS/MSD Batch Number			
Tire-Fire-3-(1.5')	Soil		GC/MS CCC		07/29/13	08/01/13 02:31	130729S10			
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Phenol	ND	0.4000	0.2256	56	0.2389	60	48-114	6	0-18	
2-Chlorophenol	ND	0.4000	0.2616	65	0.2707	68	45-111	3	0-18	
4-Chloro-3-Methylphenol	ND	0.4000	0.2461	62	0.2591	65	52-124	5	0-17	
4-Nitrophenol	ND	0.4000	0.09139	23	0.1187	30	40-130	26	0-20	3,4
Pentachlorophenol	ND	0.4000	0.1035	26	0.1255	31	19-127	19	0-48	
Acenaphthene	ND	0.4000	0.2864	72	0.2959	74	49-121	3	0-20	
Pyrene	ND	0.4000	0.5387	135	0.5742	144	18-168	6	0-22	



Quality Control - PDS/PDSD

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3050B
Method: EPA 6020

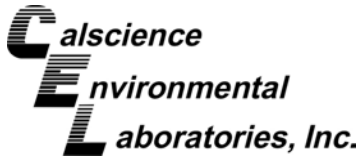
Project: Tire Fire Property

Page 1 of 1

Quality Control Sample ID	Matrix			Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number			
Tire-Fire-3-(1.5')	Soil			ICP/MS 03	07/26/13 00:00	07/29/13 12:34	130726S04A			
Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	25.00	24.20	97	23.06	92	75-125	5	0-20	
Barium	12.15	25.00	39.00	107	38.95	107	75-125	0	0-20	
Cadmium	ND	25.00	25.68	103	25.17	101	75-125	2	0-20	
Chromium	12.25	25.00	37.08	99	35.63	94	75-125	4	0-20	
Cobalt	14.39	25.00	37.22	91	39.00	98	75-125	5	0-20	
Copper	203.9	25.00	222.1	4X	221.5	4X	75-125	4X	0-20	Q
Lead	ND	25.00	26.39	106	26.09	104	75-125	1	0-20	
Nickel	28.28	25.00	51.27	92	52.41	97	75-125	2	0-20	
Vanadium	41.05	25.00	65.22	97	67.28	105	75-125	3	0-20	
Zinc	55.11	25.00	78.15	92	77.85	91	75-125	0	0-20	
Aluminum	11820	25.00	11880	4X	11890	4X	75-125	4X	0-20	Q
Magnesium	12380	25.00	12530	4X	12640	4X	75-125	4X	0-20	Q
Manganese	357.9	25.00	350.7	4X	378.2	4X	75-125	4X	0-20	Q

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

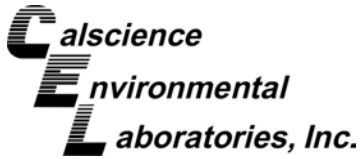
Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B

Project: Tire Fire Property

Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number	
099-15-414-258	Soil	GC 45	07/30/13 14:50	130729B13	
<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Diesel Range Organics	400.0	463.5	116	75-123	



Quality Control - LCS

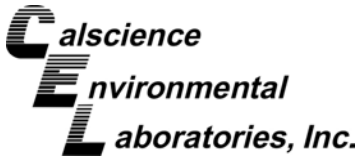
Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: Tire Fire Property

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Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number	
099-15-420-526	Soil	GC 45	07/30/13 15:08	130729B14	
<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	400.0	359.0	90	75-123	



Quality Control - LCS

Freshwater Environmental Services
 78 Sunny Brae Center
 Arcata, CA 95521-6742

Date Received: 07/25/13
 Work Order: 13-07-1674
 Preparation: EPA 3050B
 Method: EPA 6020

Project: Tire Fire Property

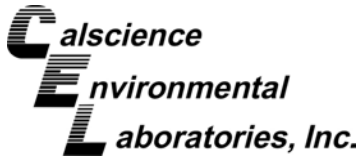
Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number		
099-15-621-269	Soil	ICP/MS 03	07/29/13 16:32	130726L04E		
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Arsenic	25.00	26.56	106	80-120	73-127	
Barium	25.00	26.00	104	80-120	73-127	
Cadmium	25.00	25.08	100	80-120	73-127	
Chromium	25.00	26.23	105	80-120	73-127	
Cobalt	25.00	25.49	102	80-120	73-127	
Copper	25.00	27.31	109	80-120	73-127	
Lead	25.00	25.30	101	80-120	73-127	
Nickel	25.00	26.10	104	80-120	73-127	
Vanadium	25.00	24.10	96	80-120	73-127	
Zinc	25.00	28.01	112	80-120	73-127	
Aluminum	25.00	23.72	95	80-120	73-127	
Magnesium	25.00	23.60	94	80-120	73-127	
Manganese	25.00	24.27	97	80-120	73-127	

Total number of LCS compounds: 13
 Total number of ME compounds: 0
 Total number of ME compounds allowed: 1
 LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

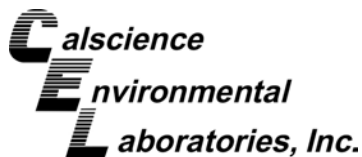
Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Tire Fire Property

Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number	
099-04-007-9486	Soil	Mercury	07/29/13 12:48	130729L01	
<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury	0.8350	0.8577	103	85-121	



Quality Control - LCS

Freshwater Environmental Services
78 Sunny Brae Center
Arcata, CA 95521-6742

Date Received: 07/25/13
Work Order: 13-07-1674
Preparation: EPA 3545
Method: EPA 8270C

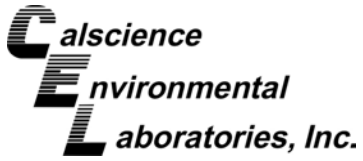
Project: Tire Fire Property

Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number	
097-01-009-94	Soil	GC/MS CCC	08/01/13 12:46	130729L10	
<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Phenol	0.4000	0.2740	69	58-112	
2-Chlorophenol	0.4000	0.2978	74	59-107	
4-Chloro-3-Methylphenol	0.4000	0.3197	80	58-124	
4-Nitrophenol	0.4000	0.2501	63	44-134	
Pentachlorophenol	0.4000	0.2386	60	24-138	
Acenaphthene	0.4000	0.3292	82	55-121	
Pyrene	0.4000	0.3377	84	45-129	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Sample Analysis Summary Report

Work Order: 13-07-1674

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6020	EPA 3050B	598	ICP/MS 03	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B	EPA 3550B	682	GC 45	1
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8270C	EPA 3545	513	GC/MS CCC	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Glossary of Terms and Qualifiers

Work Order: 13-07-1674

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of \leq 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

WO # / LAB USE ONLY

13-07-1674

DATE: 07/24/13
PAGE: 1 OF 1

LABORATORY CLIENT: Freshwater Environmental Services		CLIENT PROJECT NAME / NUMBER: Tire Fire Property		P.O. NO.:	
ADDRESS: 78 Sunny Brae Center		PROJECT CONTACT: Stan Thiesen		SAMPLER(S): (PRINT) Orrin Plocher	
CITY: Arcata	STATE: CA	ZIP: 95521			
TEL: 707 839-0091	E-MAIL: stan@freshwaterenvironmentalservices.com				

REQUESTED ANALYSES

TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> 10 DAYS						TPH-D/MO (EPA 8015B) with silica SVOCs (8270) Metals MS/MSD															
<input type="checkbox"/> COELT EDF	GLOBAL ID: NA	LOG CODE: NA																			
SPECIAL INSTRUCTIONS: Lowest detection limits for SVOCs. Please homogenize samples prior to analysis. Silica Gel Cleanup for TPH-D/MO Metals Include: aluminum, arsenic, barium, cadmium, chromium, cobalt, copper, lead, magnesium, manganese, mercury, nickel, vanadium and zinc.						Unpreserved	Preserved	Field Filtered													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH-D/MO (EPA 8015B) with silica	SVOCs (8270)	Metals	MS/MSD									
		DATE	TIME																		
	Tire-Fire-1-(1.2')	7/24/2013	10:30	Soil	1	1				X											
2	Tire-Fire-2-(1.3')	7/24/2013	11:00	Soil	1	1				X											
3	Tire-Fire-3-(1.5')	7/24/2013	11:40	Soil	2	2			X	X	X	X									
4	Tire-Fire-4-(1.0')	7/24/2013	11:20	Soil	1	1			X	X											
5	Tire-Fire-6-(0.0'-0.1')	7/24/2013	11:51	Soil	1	1			X	X	X										
6	Tire-Fire-7-(0.0'-0.1')	7/24/2013	12:05	Soil	1	1			X	X	X										
7	Tire-Fire-8-(1.3')	7/24/2013	11:50	Soil	1	1			X	X	X										
	Temp Blank	7/24/2013		Water	1	1															

Relinquished by: (Signature) <i>Orrin Plocher</i> FES	Received by: (Signature/Affiliation) <i>Stan Thiesen</i> FES	Date: 7-24-13	Time: 14:52
Relinquished by: (Signature) <i>Stan Thiesen</i> FES	Received by: (Signature/Affiliation) <i>Fed Ex</i>	Date: 7-24-13	Time: 15:30
Relinquished by: (Signature) <i>(FED EX)</i>	Received by: (Signature/Affiliation) <i>PLUCHER, O.</i>	Date: 7/25/13	Time: 10:30

From: (707) 839-0091
Stan Thiesen
Freshwater Environmental
78 Sunny Brae Center

Origin ID: EKAA



J13111302120326

Arcata, CA 95521

Ship Date: 24JUL13
ActWgt: 40.0 LB
CAD: 4822189/INET3370

Dims: 24 X 15 X 15 IN

1674

Delivery Address Bar Code



SHIP TO: (714) 895-5494

BILL SENDER

Don Burley
Calscience Environmental Laboratory
7440 Lincoln Way

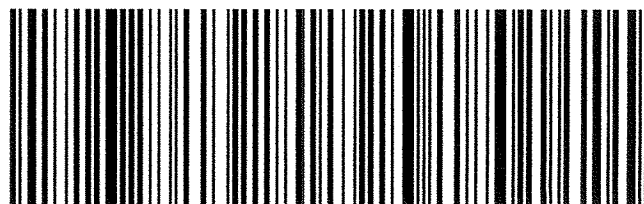
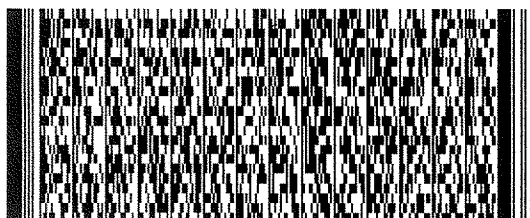
Ref # YTEP Projects
Invoice #
PO #
Dept #

Garden Grove, CA 92841

THU - 25 JUL 3:00P
STANDARD OVERNIGHT
DSR
92841
CA-US
SNA

TRK# 7963 0985 3165
0201

92 APVA



518G1AA04/93AB

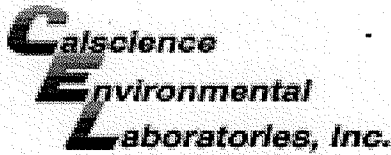
After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.





WORK ORDER #: 13-07-0674

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: FRESHWATER ENV'L. SERVICES

DATE: 07/25/13

TEMPERATURE: Thermometer ID: SC3 (Criteria: 0.0°C - 6.0°C, not frozen except sediment/tissue)

Temperature 2.9°C - 0.2°C (CF) = 2.7°C [] Blank [x] Sample

- [] Sample(s) outside temperature criteria (PM/APM contacted by: _____).
[] Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.
[] Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: [] Air [] Filter

Initial: PS

CUSTODY SEALS INTACT:

- [x] Cooler [] _____ [] No (Not Intact) [] Not Present [] N/A
[] Sample [] _____ [] No (Not Intact) [x] Not Present

Initial: PS

Initial: SH

SAMPLE CONDITION:

Table with 4 columns: Item, Yes, No, N/A. Rows include Chain-Of-Custody (COC) document(s) received with samples, COC document(s) received complete, Sampler's name indicated on COC, etc.

CONTAINER TYPE:

- Solid: [] 4ozCGJ [x] 8ozCGJ [] 16ozCGJ [] Sleeve (____) [] EnCores® [] TerraCores® [] _____
Water: [] VOA [] VOA h [] VOAna2 [] 125AGB [] 125AGBh [] 125AGBp [] 1AGB [] 1AGBna2 [] 1AGBs
[] 500AGB [] 500AGJ [] 500AGJs [] 250AGB [] 250CGB [] 250CGBs [] 1PB [] 1PBna [] 500PB
[] 250PB [] 250PBn [] 125PB [] 125PBzanna [] 100PJ [] 100PJna2 [] _____ [] _____ [] _____

Air: [] Tedlar® [] Canister Other: [] _____ Trip Blank Lot#: _____ Labeled/Checked by: SH
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: SH
Preservative: h: HCL n: HNO3 na2: Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 u: Ultra-pure zanna: ZnAc2+NaOH f: Filtered Scanned by: SH

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APPENDIX F
Approved Cultural Resources Management Permit
Application



Yurok Tribe Cultural Resources Management Permit Application



FOR OFFICIAL USE ONLY

Date Received: 2.11.13

Staff Received: 1/8/13

- Copy Sent To: Tribal Heritage Preservation Officer (THPO)
 Native American Graves Protection and Repatriation Act (NAGPRA) Coordinator
 Tribal Archaeologist
 Permit Applicant

Instructions: Complete and return this application form and necessary supporting documentation to the Yurok Tribal Office in Klamath. All information requested must be completed before the application will be considered. Use separate pages if more space is needed to complete a section and attach.

1. Name of Applicant (Yurok Tribal Department, Corporation, Lead Agency, Individual, or Other Entity)

Ray Martell, YTEP

2. Mailing Address

PO Box 1027, Klamath CA, 95548

3. Telephone Number

707-460-3248

4. Email Address

rmartell@yuroktribe.nsn.us

5. Fax Number

707-482-1722

6. Location of Proposed Work:

a. Description of lands involved using the best available location information (complete all boxes possible).

i. Latitude and Longitude	ii. UTM Coordinates	iii. PLSS (township, range, and section)	iv. APN (parcel) Number	v. Assignment/allotment	vi. Physical Address
See	Below				

b. Attach a map and other relevant supporting documentation identifying the location of proposed work, defined as the Area of Potential Effect, which should include all areas proposed for use in the project, such as staging, implementation, cleanup, or otherwise included in the Proposed Work described below. Location should preferably be mapped on a 1:24,000, 7.5-Minute Series U.S. Geological Survey (USGS) Topographic Quadrangle map. Additional supporting Documentation that may be attached could include photos, parcel maps, site plans, surveys, and engineer drawings.

7. Nature of Proposed Work:

a. Please check all that apply:

- | | | | | |
|-------------------------------------|--------------------------------------------|-----------------------------------|---------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> trenching | <input type="checkbox"/> road construction | <input type="checkbox"/> boring | <input type="checkbox"/> drilling | <input type="checkbox"/> plowing |
| <input type="checkbox"/> excavation | <input type="checkbox"/> road grading | <input type="checkbox"/> digging | <input type="checkbox"/> tunneling | <input type="checkbox"/> topsoil stripping |
| <input type="checkbox"/> auguring | <input type="checkbox"/> backfilling | <input type="checkbox"/> blasting | <input type="checkbox"/> land leveling | <input type="checkbox"/> install utility pole |
| <input type="checkbox"/> quarrying | <input type="checkbox"/> ground clearing | <input type="checkbox"/> grading | <input type="checkbox"/> vegetation removal | <input type="checkbox"/> other (explain below) |



Yurok Tribe Cultural Resources Management Permit Application



Please complete the following additional project contact information as applicable:

12. Project Manager:

- a. Name: Ray Martell
- b. Title: Assistant Director
- c. Organization: Yurok Tribe Environmental Program
- d. Telephone number(s): (707) 482-1822
- e. Email Address: rmartell@yuroktribe.nsn.us
- f. Mailing Address: PO Box 1027, Klamath, CA 95548

13. Project Contractor:

- a. Name: Ray Martell
- b. Title: Assistant Director
- c. Organization: Yurok Tribe Environmental Program
- d. Telephone number(s): (707) 482-1822
- e. Email Address: rmartell@yuroktribe.nsn.us
- f. Mailing Address: PO Box 1027, Klamath, CA 95548

14. Project Inspector:

- a. Name: Ray Martell
- b. Title: Assistant Director
- c. Organization: Yurok Tribe Environmental Program
- d. Telephone number(s): (707) 482-1822
- e. Email Address: rmartell@yuroktribe.nsn.us
- f. Mailing Address: PO Box 1027, Klamath, CA 95548

15. Project Subcontractor:

- a. Name: Ray Martell
- b. Title: Assistant Director
- c. Organization: Yurok Tribe Environmental Program
- d. Telephone number(s): (707) 482-1822
- e. Email Address: rmartell@yuroktribe.nsn.us
- f. Mailing Address: PO Box 1027, Klamath, CA 95548



Yurok Tribe Cultural Resources Management Permit Application



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Application Staff Review and Recommendations (Staff has 15 calendar days to review unless requiring input from Culture and/or NAGPRA Committees, then Staff has 15 calendar days from Committee decision date):

Application Reviewed (provide signature)	Reviewing Tribal Staff	Recommendations (attach additional sheets as necessary)
<i>Robert B. McConell</i> 1-9-12	Tribal Heritage Preservation Officer (THPO)	<i>None</i>
<i>RMC</i> <i>Resue M. G.</i> 1-9-13	Native American Graves Protection and Repatriation Act (NAGPRA) Coordinator	
<i>Resue M. G.</i> 1-9-13	Tribal Archaeologist	

If all reviewing Tribal staff determine that the proposed project will have no impact to cultural resources and provide no recommendations that suggest conditions and/or mitigation measures then the Tribal Chair may authorize the Permit Application without Council Consent.

Council Action (if applicable):

Permit Application	Council Agenda Number	Date of Council Session	With Conditions (if yes, explain below)
<input type="checkbox"/> Approved <input type="checkbox"/> Denied			<input type="checkbox"/> Yes <input type="checkbox"/> No

Permit Conditions: _____

<i>Thomas P. O'Rourke Sr.</i>	1-11-13
Signature of Tribal Chair	Date

Thomas P. O'Rourke Sr
Chairman
Yurok Tribe



Yurok Tribe

PO Box 1027 Klamath • California, 95548

Office: 707.482 1350

November 6, 2012

Robert McConnell
Yurok Tribe Heritage Preservation Officer
P.O. Box 1027
Klamath, CA 95548

RE: Yurok Tribe
On behalf of the U.S. Environmental Protection Agency
Determination of No Adverse Effect
Soils sampling at Tribal allotment at Saints Rest

Dear Mr. McConnell:

Please accept this letter as notification that Yurok Tribe, acting on behalf of US Environmental Protection Agency, determines that the proposed soil sampling activities at Saint's Rest Tribal Allotment APN: 530-053-010-073 (41°11'18.96"N, -123° 41', 11.20" W) S11 T9N R4E will result in No Adverse Effect per 36CFR800 for the National Historic Preservation Act (NHPA).

The Yurok Tribe Environmental Program will be conducting illegal dumpsite cleanup activities on the properties specified above. Please indicate your concurrence with the NHPA determination by signing below:

Concurrence: Robert B. McConnell Date: 1-9-13

Please contact me if require additional information regarding this determination.

Sincerely,

Thomas P. O'Rourke
1-11-13

Thomas P. O'Rourke
Chairman
Yurok Tribe