

April 30, 2019

Mr. Jeremy Johnstone
Federal On-Scene Coordinator
U.S. Environmental Protection Agency
Region 9, Emergency Response Section
75 Hawthorne Street
San Francisco, CA 94105

Subject: Fresno Drum Assessment Emergency Response
Fresno, Fresno County, California
Contract No.: EP-S5-13-02
Technical Direction Document No.: 0002/1302-T2-R9-19-04-0002
Document Control No.: 0227-08-ACDC

Dear Mr. Johnstone:

The U.S. Environmental Protection Agency (EPA) Region 9 tasked the Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START) to assist EPA Federal On-Scene Coordinator (FOSC) Jeremy Johnstone with an Emergency Response (ER) at the Fresno Drum Assessment ER Site (the Site), located at 2761 S. Fruit Avenue in Fresno, Fresno County, California. Under Technical Direction Document (TDD) No. 0002/1302-T2-R9-19-04-0002, the EPA requested that START provide technical support with documentation, air monitoring, hazard categorization (HazCat) analysis using the hazard categorization (HazCat™) kit, level B personal protection equipment (PPE) sampling, and assessment of more than 600 unknown drums from a residential property. The ER was initiated on March 13, 2019, emergency assessment activities were conducted on March 14, 2019.

This letter report includes the Site description, Site history, and ER activities. In addition, this letter report has four attachments. **Attachment A** provides figures for the ER. **Attachment B** provides a photographic log of Site conditions during ER activities. **Attachment C** provides the HazCat Data Sheet for the ER. **Attachment D** provides the analytical data results for the samples collected during the ER at the Site.

SITE DESCRIPTION

The Site is located at 2761 S. Fruit Avenue, approximately 3.0 miles southwest of the City of Fresno, Fresno County, California. The Site is located within an agricultural area but is surrounded by residential homes to the north, east, and west. Each surrounding lot is approximately 4.5 acres in size, mainly comprised of a single-family residential house and open pasture land. The residential home is approximately 250 feet from the nearest pile of drums. The closest school, Wat Lao Dhamma Sacca (Western School), is located 750 feet (ft) northwest of the Site across S. Fruit Avenue. The nearest body of water is an independent unlined agricultural ditch located approximately 490 ft south of the Site.



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The Site encompasses one single-family residential house with attached four-car garage on an approximately 4.5 acre lot. The unknown drums are staged in two separate piles located on the northeast portion of the Site. The Site is predominately open pasture, with a dirt road leading from the residential house to the two drum pile locations. The Site Location and Site Layout maps are provided as **Figure 1 and Figure 2, Attachment A**, respectively.

The geographic coordinates of the Site, Latitude 36.700939 degrees (°) North and Longitude 119.816598° West, were obtained by using a handheld Global Position System (GPS) based on the World Geodetic System – 1984 (WGS-84) datum. A Surface Water Pathway Map is provided as **Figure 3, Attachment A**.

SITE HISTORY

According to the property owner, her deceased husband had an agreement with an unnamed/unknown company to store waste drums on their property for future disposal. Over the years, the collection of unknown drums increased and disposal activities were minimal. Collection of unknown drums stopped after the husband passed away.

A variety of unknown drums are on-site ranging from metal/plastic drums, full/half full/empty in volume, and a variety of colors. No order is apparent to the arrangement of the two piles of drums. Due to the lack of arrangement of the unknown drums, a conservative estimation of 600 drums are on Site distributed between the two piles.

EMERGENCY RESPONSE AND REMOVAL ACTIVITIES

On March 13, 2019, EPA request that START mobilize to the Site to assist in documentation, air monitoring, HazCat analysis using the HazCat™ kit, sampling, and assessment of unknown drums located on the Site.

On March 14, 2019, EPA and START mobilized to the Site to conduct assessment of the approximately 600 unknown drums. Representatives from the Fresno County Department of Public Health (DPH) and the Department of Toxic Substances Control (DTSC) were also in attendance for the assessment. Upon arrival, the property owner granted access to EPA and START, a staging area was delineated near the two piles of drums located in the backyard on the northeast portion of the site. START conducted an assessment of the two piles by collecting photos, air monitoring data, drum quantity estimation, and categorizing drums into 11 waste groups based on visual markings.

Drums were mostly staged on wooden pallets, although some were staged directly on the soil. The drum conditions ranged from good to poor. Some drums were observed to be rusted and decayed, some were found to be without tops, and some were found to be leaking onto the soil.

A photographic log of the Site and drums are provided as **Attachment B**.



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Air monitoring data was collected utilizing a MultiRAE Pro 5-gas meter equipped with sensors for carbon monoxide (CO), oxygen (O₂), lower explosive limit (LEL), hydrogen sulfide (H₂S), and volatile organic compounds (VOCs). Ambient breathing zone surveys never exceeded action levels for CO, O₂, LEL, H₂S, and VOCs. Additionally, radiation readings were collected throughout the assessment with a Ludlum Micro-R meter. No elevated radiation readings were observed on the Site.

The drums were distributed among two piles on the Site, which will henceforth be identified as Pile 1 and Pile 2. Pile 1 consists of an unstacked, single level of drum with an estimate of 177 drums. Pile 2 consists of a double stack of drums with vacant areas spread throughout the pile. Due to the lack of consistency in the arrangement of drums, a conservative estimation of 415 drums was determined for Pile 2. The table below indicates the 8 groups of drums identified within Pile 1. It was determined by EPA and START that an accurate grouping/inventory of Pile 2 would not be feasible, even though Pile 2 contains several groupings similar to Pile 1. Ultimately, three additional drum groups were identified in Pile 2 due to their high visible distinction.

	MD-B- Chev	MD-R- Mob	MD-B- Asph	MD-Y- Chev	MD-R- Penz	MD-G- PC	MD-W	MD- Blk	MD-G	PD-B	PD-W
Group #	1	2	3	4	10	9	7	8	11	5	6
Pile 1	66	80	6	5	0	0	4	10	0	1	5
Pile 2	Unk	Unk	Unk	Unk	2	2	Unk	Unk	1	Unk	Unk

Notes:

MD – Metal Drum; PD – Poly Drum; Unk– Unknown

B – Blue; R – Red; Y – Yellow; W – White; Blk – Black; G – Green

Chev – Chevron; Mob – Mobile 1; Asph – Asphalt Coating; Penz – Pennzoil; PC – Product Caution

Unk – Unknown

EPA and START determined that HazCat testing should be performed on one drum from each identified drum group. No HazCat could be performed on the drums identified as “Product Caution” drums, “Pennzoil” drums, and the “Green” drum due to inaccessibility. All samples were determined to have flammable properties. No additional properties were identified. The HazCat Test Data Sheet is provided as **Attachment C**.

SAMPLING

Based on the determinations above, EPA and START collected five samples for analytical testing of Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP semivolatile organic compounds (SVOCs), TCLP metals, and total petroleum hydrocarbons (TPH) as diesel and motor oil. Drums were sampled from the following categorized groups: 1, 2, 6, 7, and 11.

TCLP barium was found to exceed *Title 40, Code of Federal Regulations* (40 CFR) Part 261, Subpart C, Characteristics of Hazardous Waste screening level of 100 milligrams per liter (mg/L) in sample FDE-DS-001 with a result of 650 mg/L.



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TCLP lead was found to exceed 40 CFR Characteristics of Hazardous Waste screening level of 5.0 mg/L in sample FDE-DS-007 with a result of 2,000 mg/L.

No other exceedances were detected in any of the five samples. Additional sampling of Group 1 and Group 7, is recommended to determine if all drums within those respective groups contain the similar properties before disposal. All investigative-derived waste (IDW) was stored on Site for future disposal upon completion of a removal action. The Analytical Data Report and Data Validation Report are provided as **Attachment D**.

EPA and START demobilized from the Site on March 14, 2019.

SUMMARY

EPA tasked START to provide support for an ER at the Fresno Drum Assessment in Fresno, Fresno County, California, for an unknown drum HazCat and sampling event. START was tasked with conducting an assessment, air monitoring, hazard categorization analysis with a HazCat™ hazard categorization kit, and sampling from drums categorized into 11 groups based on the visual appearance of the unknown drums. Five samples were collected and submitted to an accredited laboratory for analytical testing of TCLP VOCs and SVOCs, TPH metals, TPH-d, and TPH-mo. Sample FDE-DS-001 had levels of TCLP barium exceeding the 40 CFR Characteristics for Hazardous Waste TCLP screening level of 100 mg/L and sample FDE-DS-007 had levels of TCLP lead exceeding the screening level of 5.0 mg/L.

Additional sampling of Group 1 and 7 is recommended to determine if all drums within the group contain the similar properties, and further HazCat hazard categorization analysis of all remaining drums should be performed before removal and disposal activities begin.

If you have any questions or comments regarding this report, please contact me at (956) 466-2149.

Regards,
Weston Solutions, Inc.

A handwritten signature in black ink, appearing to read "Alejandro Lara, Jr.", written over a horizontal line.

Alejandro Lara, Jr.
WESTON START Project Manager

Attachments:

- A – Figures
- B – Photographic Log
- C – HAZCAT Test Data Sheet
- D – Analytical Data Report and Data Validation Report

cc: WESTON START DCN File

ATTACHMENT A
FIGURES





PREPARED BY:
Region 9, START
Weston Solutions, Inc.
2300 Clayton Road
Suite 900
Concord, CA 94520



PREPARED FOR:
EPA Region 9
Pacific
Southwest



FIGURE 2
Site Layout
2761 S. Fruit Avenue
Fresno, Fresno County, CA

Legend

Site Boundary

Drum Pile

Unlined Agricultural Ditch

This aerial photograph shows a site boundary outlined in yellow. Within the boundary, there is a large, dark, rectangular structure labeled 'Residential Building'. To the right of the building, two small, rectangular areas are outlined in orange and labeled 'Pile 1' and 'Pile 2'. A pink line runs horizontally across the bottom of the image, representing an unlined agricultural ditch. The surrounding area is mostly brown and dry, with some green vegetation visible on the left side.

<div> </div>	<div> <p>PREPARED BY: Region 9, START Weston Solutions, Inc. 2300 Clayton Road Suite 900 Concord, CA 94520</p> </div>	<div> <p>PREPARED FOR: EPA Region 9 Pacific Southwest</p> </div>	<div> <p>FIGURE 3 Drum Piles Map 2761 S. Fruit Avenue Fresno, Fresno County, CA</p> </div>
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TDD: 0002/1302/T2-R9-19-04-0002

Document Control Number: 0227-08-ACDC

ATTACHMENT B
PHOTOGRAPHIC LOG

Project Name: ER Mobilization - Fresno Drum Assessment		Site Location: 2761 S Fruit Avenue, Fresno Fresno County, California	TDD No. 0002/1302-T2-R9-19-04-0002
Photo No. 1	Date: 3/14/19		
Direction: NW			
Description: View of Pile 1, single level arrangement with approximately 177 drums.			

Photo No. 2	Date: 3/14/2019	
Direction: SE		
Description: View of Pile 2, double level arrangement with approximately 415 drums.		

Project Name: ER Mobilization - Fresno Drum Assessment		Site Location: 2761 S Fruit Avenue, Fresno Fresno County, California	TDD No. 0002/1302-T2-R9-19-04-0002
Photo No. 3	Date: 3/14/2019		
Direction: W			
Description: View of Group 1 consisting of blue metal drums with Chevron markings.			

Photo No. 4	Date: 3/14/2019	
Direction: E		
Description: View of Group 2 consisting of red metal drums with Mobile 1 markings.		

Project Name:
ER Mobilization - Fresno Drum
Assessment

Site Location:
2761 S Fruit Avenue, Fresno
Fresno County, California

TDD No.
0002/1302-T2-R9-19-04-0002

Photo No.
5

Date:
3/14/2019

Direction:

NE

Description:

View of Group 4
consisting of yellow metal
drums with Chevron
markings.



Photo No.
6

Date:
3/14/2019

Direction:

NW

Description:

View of Group 7
consisting of white metal
drums with no markings
and two sample
containers, and Group 8
consisting of black metal
drums with no markings.



ATTACHMENT C
HAZCAT TEST DATA SHEET

HAZCAT TEST DATA SHEET

Site Name: Fresno Drum EE

TDD #: _____

Analyst: J. Colon

Date: 3/14/19

Page 1 of 1

Sample ID	Description Matrix/Color (SD, L, SL)	pH	Oxidizer (Y, N)	Peroxide (Y, N)	Sulfide (Y, N)	Cyanide (Y, N)	Flammability (FI, C, NF)	Organic (Y, N)	Solubility (S, F, M)		Chlorine (Copper Wire)	Water >1% (Y, N)	Solvent Class	PCB
									Hexane	Water				
01	Sludge / brown	7	N	N	N	N	FI	N	—	N	N	N	N	N
02	Sludge / Amber	7	N	N	N	N	FI	N	—	N	N	N	N	N
03	Sludge / Dark Be	7	N	N	N	N	FI	N	—	N	N	N	N	N
04	Oil / Black	7	N	N	N	N	FI	N	—	N	N	N	N	N
05 (o)	Oil / Black	7	N	N	N	N	FI	N	—	N	N	N	N	N
05 (w)	Water / Brown	7	N	N	N	N	FI	N	—	N	N	N	N	N
06 (o)	Oil / Black	7	N	N	N	N	FI	N	—	N	N	N	N	N
06 (w)	Water / Gray	7	N	N	N	N	FI	N	—	N	N	N	N	N
07	Oil / Black	/	N	N	N	N	.							

S = Sinks FI = Flammable SD = Solid F = Floats C = Combustible L = Liquid M = Mixes NF = Non-flammable SL = Sludge

ATTACHMENT D
ANALYTICAL DATA REPORT AND DATA VALIDATION REPORT

FRESNO DRUM EMERGENCY RESPONSE DATA VALIDATION REPORT

Date: April 22, 2019

Laboratory: Orange Coast Analytical, Inc., Tustin, CA

Laboratory Job Number: WST 24317

Data Validation Performed By: Kelly Luck, Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START)

Data Validation Reviewed By: Tara Johnson, WESTON START

Weston Work Order #: 20409.012.002.0149.24

This data validation report has been prepared by WESTON START under the START IV U.S. Environmental Protection Agency (EPA) Region 9 contract. This report documents the data validation for 5 soil samples collected for the Fresno Drum Emergency Response that were analyzed for the following parameters and EPA methods:

- Total Petroleum Hydrocarbons (TPH) as Diesel Range Organics (DRO) and Motor Oil Range Organics (MRO) by SW-846 Method 8015B
- Toxicity Characteristic Leaching Procedure (TCLP) Volatile Organic Compounds (VOCs) by SW-846 Methods 1311/8260B
- TCLP Semivolatile Organic Compounds (SVOCs) by SW-846 Methods 1311/8270C
- TCLP Metals by SW-846 Methods 1311/6010B/7470A

A level II data package was received from Orange Coast Analytical, Inc., Tustin, CA. The data validation was conducted in general accordance with the EPA “Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review” dated January 2017 and the EPA “Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review” dated January 2017. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

TPH as DRO and MRO by SW-846 METHOD 8015B

The following table summarizes the samples for which this data validation is being conducted.

Sample	Lab ID	Date Collected	Matrix	Date Prepared	Date Analyzed
FDE-DS-001	24317-001	3/19/2019	Oil/grease	4/2/2019	4/3/2019
FDE-DS-002	24317-002	3/19/2019	Oil/grease	4/2/2019	4/3/2019
FDE-DS-006	24317-003	3/19/2019	Oil/grease	4/2/2019	4/3/2019
FDE-DS-007	24317-004	3/19/2019	Oil/grease	4/2/2019	4/3/2019
FDE-DS-011	24317-005	3/19/2019	Oil/grease	4/2/2019	4/3/2019

1. **Data Verification Check**

A data verification and completeness check was performed in accordance with the Stage 1 and 2A verification checks outlined in the EPA “Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use” dated January 13, 2009. For the TPH as DRO and MRO analysis, all analytical data package items were received from the laboratory and the analysis requested was performed.

2. **Holding Times**

The samples were received within the recommended temperature limit of ≤ 6 °C, and extracted and analyzed within the required holding time limits of 14 days from sample collection to extraction and 40 days from extraction to analysis.

3. **Blanks**

One method blank was analyzed with the sample set and was free of target compound contamination above the reporting limits (RLs).

4. **Surrogates**

The surrogate was diluted out for all samples.

5. **Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) Results**

One LCS/LCSD pair containing TPH as DRO was analyzed with the sample set and recoveries and the relative percent difference (RPD) were within laboratory-established quality control (QC) limits.

6. **Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results**

A sample outside the sample set was used for MS/MSD analyses.

7. **Field Duplicate Results**

The sample set did not include a field duplicate pair.

8. **Overall Assessment**

All samples were diluted (250-1250x) due to high concentrations of the target analytes.

The TPH as DRO and MRO data are acceptable for use based on the information received.

TCLP VOCs by SW-846 METHODS 1311/8260B

The following table summarizes the samples for which this data validation is being conducted.

Sample	Lab ID	Date Collected	Matrix	Date Prepared	Date Analyzed
FDE-DS-001	24317-001	3/19/2019	Oil/grease	4/5/2019	4/5/2019
FDE-DS-002	24317-002	3/19/2019	Oil/grease	4/5/2019	4/5/2019
FDE-DS-006	24317-003	3/19/2019	Oil/grease	4/5/2019	4/5/2019
FDE-DS-007	24317-004	3/19/2019	Oil/grease	4/5/2019	4/5/2019
FDE-DS-011	24317-005	3/19/2019	Oil/grease	4/5/2019	4/5/2019

1. Data Verification Check

A data verification and completeness check was performed in accordance with the Stage 1 and 2A verification checks outlined in the EPA “Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use” dated January 13, 2009. For the TCLP VOCs analyses, all analytical data package items were received from the laboratory and the analysis requested was performed.

2. Holding Times

The samples were received within the recommended temperature limit of $\leq 6^{\circ}\text{C}$ and were extracted 17 days after collection, which is outside the recommended holding time limit of 14 days. Extracts were analyzed within the recommended holding time limit of 40 days from extraction to analysis. All sample results were qualified as estimated (J) due to exceeded holding time.

3. Blanks

One method blank was analyzed with the VOC sample set and was free of target compound contamination above the RLs.

4. Surrogate Results

The surrogate recovery results were within the laboratory-established QC limits for all samples.

5. LCS and LCSD Results

One LCS/LCSD pair was analyzed with the sample set. The recoveries and RPDs were within laboratory-established QC limits.

6. MS and MSD Results

Sample FDE-DS-001 was used for MS/MSD analyses. All recoveries and RPDs were within laboratory-established QC limits, except for the MSD recovery for toluene (65%). No qualification of data was necessary as toluene was not a target analyte in sample FDE-DS-001.

7. Field Duplicate Results

The sample set did not include a field duplicate pair.

8. Overall Assessment

The TCLP VOC data are acceptable for use as qualified based on the information received.

TCLP SVOCs by SW-846 METHODS 1311/8270C

The following table summarizes the samples for which this data validation is being conducted.

Sample	Lab ID	Date Collected	Matrix	Date Prepared	Date Analyzed
FDE-DS-001	24317-001	3/19/2019	Oil/grease	4/4/2019	4/5/2019
FDE-DS-002	24317-002	3/19/2019	Oil/grease	4/8/2019	4/9/2019
FDE-DS-006	24317-003	3/19/2019	Oil/grease	4/4/2019	4/5/2019
FDE-DS-007	24317-004	3/19/2019	Oil/grease	4/4/2019	4/5/2019
FDE-DS-011	24317-005	3/19/2019	Oil/grease	4/8/2019	4/9/2019

1. Data Verification Check

A data verification and completeness check was performed in accordance with the Stage 1 and 2A verification checks outlined in the EPA “Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use” dated January 13, 2009. For the TCLP SVOC analyses, all analytical data package items were received from the laboratory and the analysis requested was performed.

2. Holding Times

The samples were received within the recommended temperature limit of ≤ 6 °C and were extracted 16 or 20 days after collection, which is outside the recommended holding time limit of 14 days. Extracts were analyzed within the recommended holding time limit of 40 days from extraction to analysis. All sample results were qualified as estimated (J) due to exceeded holding time.

3. Blanks

Two method blanks were analyzed with the SVOC sample set and were free of target compound contamination above the RLs.

4. Surrogate Results

The surrogate recovery results were within the laboratory-established QC limits for all samples.

5. LCS and LCSD Results

Two LCS/LCSD pairs were analyzed with the sample set and the recoveries and RPDs were within laboratory-established QC limits, with the exception of 2,4-dinitrotoluene (143 and 143% recovery) in the LCS/LCSD pair prepared 4/8/2019. No qualification of data was necessary as the recovery was high and the affected analyte was not detected in the affected samples.

6. MS and MSD Results

Sample FDE-DS-007 was used for MS/MSD analyses. The recoveries and RPDs were within laboratory-established QC limits, with the exceptions of N-nitrosodi-n-propylamine (121%, MS only), acenaphthene (136%, MSD only), and 2,4-dinitrotoluene (143%, MS only). No qualification of data was necessary as the recoveries were high and the affected analytes were not detected in the affected samples.

7. Field Duplicate Results

The sample set did not include a field duplicate pair.

8. Overall Assessment

The TCLP SVOC data are acceptable for use as qualified based on the information received.

TCLP METALS by SW-846 METHODS 1311/6010B/7470A

The following table summarizes the samples for which this data validation is being conducted.

Sample	Lab ID	Date Collected	Matrix	Date Prepared		Date Analyzed	
				Mercury	Metals	Mercury	Metals
FDE-DS-001	24317-001	3/19/2019	Oil/grease	4/8/2019	4/8/2019	4/8/2019	4/9/2019
FDE-DS-002	24317-002	3/19/2019	Oil/grease	4/8/2019	4/8/2019	4/8/2019	4/9/2019
FDE-DS-006	24317-003	3/19/2019	Oil/grease	4/8/2019	4/8/2019	4/8/2019	4/9/2019
FDE-DS-007	24317-004	3/19/2019	Oil/grease	4/8/2019	4/8/2019	4/8/2019	4/9/2019
FDE-DS-011	24317-005	3/19/2019	Oil/grease	4/8/2019	4/8/2019	4/8/2019	4/9/2019

1. Data Verification Check

A data verification and completeness check was performed in accordance with the Stage 1 and 2A verification checks outlined in the EPA “Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use” dated January 13, 2009. For the TCLP metals analyses, all analytical data package items were received from the laboratory and the analysis requested was performed.

2. Holding Times

The samples were received within the recommended temperature limit of ≤ 6 °C, and extracted and analyzed within the required holding time limits: 28 days for mercury and 180 days for all other metals.

3. Blank Results

One method blank was analyzed with the metals and mercury sample set and was free of target compound contamination above the RLs.

4. LCS and LCSD Results

Two LCS/LCSD pairs (one pair each for mercury and metals) were analyzed with the sample set. The recoveries and RPDs were within the QC limits.

5. MS and MSD Results

A sample outside the sample set was used for MS/MSD analyses.

6. Field Duplicate Results

The sample set did not include a field duplicate pair.

7. Overall Assessment

Due to high concentration of the analytes, sample FDE-DS-001 was diluted 10x for the determination of barium and sample FDE-DS-007 was diluted 40x for the determination of lead.

The data validator applied “U” qualifiers to sample results reported by the laboratory as below the RL.

The TCLP metals data are acceptable for use as qualified based on the information received.

ATTACHMENT

**ORANGE COAST ANALYTICAL, INC.
RESULTS SUMMARY WITH QUALIFIERS**

Mr. Jonathan Colomb
Weston Solutions, Inc.
5881 Obispo Ave 101
Long Beach, CA, 90805

Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Diesel Range Organics - DROs (EPA 8015B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid

ANALYTE mg/kg Surrogate: % RC*
DROs 240000 Octacosane Diluted
Dilution Factor: 800 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
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ANALYTE mg/kg Surrogate: % RC*
MROs 650000 Octacosane Diluted
Dilution Factor: 800 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
------------	-----------	----------	-----------	----------	----------	-------

ANALYTE mg/kg Surrogate: % RC*
DROs 140000 Octacosane Diluted
Dilution Factor: 400 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
------------	-----------	----------	-----------	----------	----------	-------

ANALYTE mg/kg Surrogate: % RC*
MROs 430000 Octacosane Diluted
Dilution Factor: 400 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
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ANALYTE mg/kg Surrogate: % RC*
DROs 410000 Octacosane Diluted
Dilution Factor: 1250 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

Mr. Jonathan Colomb
Weston Solutions, Inc.
5881 Obispo Ave 101
Long Beach, CA, 90805

Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Extractable Fuel Hydrocarbons (EPA 8015B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
<hr/>						
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	920000			Octacosane	Diluted	
<u>Dilution Factor:</u> 1250				* Acc Recovery: 38-148 %		
<u>Data Qualifiers:</u> D2, S8,						
FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/2/2019	4/2/2019	Solid
<hr/>						
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	510000			Octacosane	Diluted	
<u>Dilution Factor:</u> 500				* Acc Recovery: 38-148 %		
<u>Data Qualifiers:</u> D2, S8,						
FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/2/2019	4/2/2019	Solid
<hr/>						
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	100000			Octacosane	Diluted	
<u>Dilution Factor:</u> 500				* Acc Recovery: 38-148 %		
<u>Data Qualifiers:</u> D2, S8,						
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
<hr/>						
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	170000			Octacosane	Diluted	
<u>Dilution Factor:</u> 250				* Acc Recovery: 38-148 %		
<u>Data Qualifiers:</u> D2, S8,						
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
<hr/>						
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	310000			Octacosane	Diluted	
<u>Dilution Factor:</u> 250				* Acc Recovery: 38-148 %		
<u>Data Qualifiers:</u> D2, S8,						

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	112	60-130 %
Toluene-d8:	86	58-130 %
4-Bromofluorobenzene:	80	48-130 %

KAL 4/22/19

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TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	112	60-130 %
Toluene-d8:	85	58-130 %
4-Bromofluorobenzene:	79	48-130 %

KAL 4/22/19

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TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	115	60-130 %
Toluene-d8:	87	58-130 %
4-Bromofluorobenzene:	79	48-130 %

KOL 4/22/19

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Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	115	60-130 %
Toluene-d8:	85	58-130 %
4-Bromofluorobenzene:	82	48-130 %

KAL 4/22/19

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Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	116	60-130 %
Toluene-d8:	86	58-130 %
4-Bromofluorobenzene:	78	48-130 %

KRL 4/22/19

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/4/2019	4/5/2019	Solid

ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	8.9	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	6.5	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	27	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	27	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	33	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	31	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100			
Pentachlorophenol:	87-86-5	<400			
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

Dilution Factor: 1
Data Qualifiers: None

FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/8/2019	4/9/2019	Solid
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ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	17	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	11	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	43	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	45	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	44	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	33	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100			
Pentachlorophenol:	87-86-5	<400			
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

Dilution Factor: 1
Data Qualifiers: None

KAL

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/4/2019	4/5/2019	Solid

ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	11	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	7.1	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	28	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	29	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	36	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	33	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/4/2019	4/5/2019	Solid
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ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	18	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	12	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	45	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	44	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	51	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	52	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

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4/22/19

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/8/2019	4/9/2019	Solid

ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	16	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	10	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	43	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	44	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	50	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	50	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100			
Pentachlorophenol:	87-86-5	<400			
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

Dilution Factor: 1

Data Qualifiers: None

Method Blank	MBAV0404192	4/4/2019	4/5/2019	Soil
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ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	16	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	10	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	46	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	45	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	47	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	58	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100			
Pentachlorophenol:	87-86-5	<400			
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix			
FDE-DS-001	24317-001	4/1/2019	3/19/2019	Solid			
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
TCLP Arsenic	6010B	<0.080 u	mg/l	04/08/19	04/09/19	--	1
TCLP Barium	6010B	650	mg/l	04/08/19	04/09/19	D2,	10
TCLP Cadmium	6010B	<0.020 u	mg/l	04/08/19	04/09/19	--	1
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
FDE-DS-002	24317-002	4/1/2019	3/19/2019	Solid			
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
TCLP Arsenic	6010B	<0.080 u	mg/l	04/08/19	04/09/19	--	1
TCLP Barium	6010B	0.14	mg/l	04/08/19	04/09/19	--	1
TCLP Cadmium	6010B	<0.020 u	mg/l	04/08/19	04/09/19	--	1
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix			
FDE-DS-006	24317-003	4/1/2019	3/19/2019	Solid			
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
TCLP Arsenic	6010B	<0.080 u	mg/l	04/08/19	04/09/19	--	1
TCLP Barium	6010B	0.14	mg/l	04/08/19	04/09/19	--	1
TCLP Cadmium	6010B	<0.020 u	mg/l	04/08/19	04/09/19	--	1
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1

FDE-DS-007	24317-004	4/1/2019	3/19/2019	Solid			
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
TCLP Arsenic	6010B	<0.080 u	mg/l	04/08/19	04/09/19	--	1
TCLP Barium	6010B	<0.040	mg/l	04/08/19	04/09/19	--	1
TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
TCLP Lead	6010B	2000	mg/l	04/08/19	04/09/19	D2,	40
TCLP Mercury	7470A	<0.010 u	mg/l	04/08/19	04/08/19	--	1
TCLP Selenium	6010B	<0.20 u	mg/l	04/08/19	04/09/19	--	1
TCLP Silver	6010B	<0.020 u	mg/l	04/08/19	04/09/19	--	1

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
FDE-DS-011	24317-005	4/1/2019	3/19/2019	Solid

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
TCLP Arsenic	6010B	<0.080 <i>u</i>	mg/l	04/08/19	04/09/19	--	1
TCLP Barium	6010B	0.063	mg/l	04/08/19	04/09/19	--	1
TCLP Cadmium	6010B	<0.020 <i>u</i>	mg/l	04/08/19	04/09/19	--	1
TCLP Chromium	6010B	<0.020 <i>u</i>	mg/l	04/08/19	04/09/19	--	1
TCLP Lead	6010B	0.28	mg/l	04/08/19	04/09/19	--	1
TCLP Mercury	7470A	<0.010 <i>u</i>	mg/l	04/08/19	04/08/19	--	1
TCLP Selenium	6010B	<0.20 <i>u</i>	mg/l	04/08/19	04/09/19	--	1
TCLP Silver	6010B	<0.020 <i>u</i>	mg/l	04/08/19	04/09/19	--	1

Method Blank

Solid

<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
MBIR0408191	TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Barium	6010B	<0.040	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
MBJV0408191	TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1
MBIR0408191	TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1

KAL

4/22/19



Orange Coast Analytical, Inc.

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.: 2576

Expiration Date: 2020

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Weston Solutions, Inc.

Laboratory Reference: WST 24317

Project Name: Fresno Drum ER


Project Number: 20409.016.002.0149.24

Date Received: 4/1/2019

Date Reported: 4/10/2019

Chain of Custody Received: ☒

Analytical Method: 8015B, 1311/8260B, 1311/8270C,
1311/6010B, 1311/7470A,



Mark Noorani, Laboratory Director

Mr. Jonathan Colomb
Weston Solutions, Inc.
5881 Obispo Ave 101
Long Beach, CA, 90805

Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 5.4°C, on ice.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. Jonathan Colomb
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Long Beach, CA, 90805

Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	Solid
FDE-DS-002	24317-002	4/1/2019	3/19/2019	Solid
FDE-DS-006	24317-003	4/1/2019	3/19/2019	Solid
FDE-DS-007	24317-004	4/1/2019	3/19/2019	Solid
FDE-DS-011	24317-005	4/1/2019	3/19/2019	Solid

Mr. Jonathan Colomb
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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Diesel Range Organics - DROs (EPA 8015B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid

ANALYTE mg/kg Surrogate: % RC*
DROs 240000 Octacosane Diluted
Dilution Factor: 800 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
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ANALYTE mg/kg Surrogate: % RC*
MROs 650000 Octacosane Diluted
Dilution Factor: 800 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
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ANALYTE mg/kg Surrogate: % RC*
DROs 140000 Octacosane Diluted
Dilution Factor: 400 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
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ANALYTE mg/kg Surrogate: % RC*
MROs 430000 Octacosane Diluted
Dilution Factor: 400 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
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ANALYTE mg/kg Surrogate: % RC*
DROs 410000 Octacosane Diluted
Dilution Factor: 1250 * Acc Recovery: 38-148 %
Data Qualifiers: D2, S8,

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Extractable Fuel Hydrocarbons (EPA 8015B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	920000			Octacosane	Diluted	
<u>Dilution Factor:</u>	1250			* Acc Recovery:	38-148 %	
<u>Data Qualifiers:</u>	D2, S8,					
FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/2/2019	4/2/2019	Solid
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	510000			Octacosane	Diluted	
<u>Dilution Factor:</u>	500			* Acc Recovery:	38-148 %	
<u>Data Qualifiers:</u>	D2, S8,					
FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/2/2019	4/2/2019	Solid
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	100000			Octacosane	Diluted	
<u>Dilution Factor:</u>	500			* Acc Recovery:	38-148 %	
<u>Data Qualifiers:</u>	D2, S8,					
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	170000			Octacosane	Diluted	
<u>Dilution Factor:</u>	250			* Acc Recovery:	38-148 %	
<u>Data Qualifiers:</u>	D2, S8,					
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/2/2019	4/3/2019	Solid
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	310000			Octacosane	Diluted	
<u>Dilution Factor:</u>	250			* Acc Recovery:	38-148 %	
<u>Data Qualifiers:</u>	D2, S8,					

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Project Name: Fresno Drum ER
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Diesel Range Organics - DROs (EPA 8015B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBTS0402192			4/2/2019	4/2/2019	Soil

ANALYTE mg/kg

DROs <10

Surrogate: % RC*

Octacosane 95

Dilution Factor: 1

Data Qualifiers: None

* Acc Recovery: 38-148 %

Method Blank	MBTS0402192			4/2/2019	4/2/2019	Soil
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ANALYTE mg/kg

MROs <50

Surrogate: % RC*

Octacosane 95

Dilution Factor: 1

Data Qualifiers: None

* Acc Recovery: 38-148 %

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Lab Reference #: WST 24317
 Project Name: Fresno Drum ER
 Project #: 20409.016.002.0149.24

TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	112	60-130 %
Toluene-d8:	86	58-130 %
4-Bromofluorobenzene:	80	48-130 %

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TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	112	60-130 %
Toluene-d8:	85	58-130 %
4-Bromofluorobenzene:	79	48-130 %

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TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	115	60-130 %
Toluene-d8:	87	58-130 %
4-Bromofluorobenzene:	79	48-130 %

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TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	115	60-130 %
Toluene-d8:	85	58-130 %
4-Bromofluorobenzene:	82	48-130 %

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 Project Name: Fresno Drum ER
 Project #: 20409.016.002.0149.24

TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/5/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	116	60-130 %
Toluene-d8:	86	58-130 %
4-Bromofluorobenzene:	78	48-130 %

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TCLP Volatile Organics by GC/MS (EPA 1311/8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0404191			4/5/2019	4/5/2019	Water

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Dilution Factor:</u> 1
Acetone	67-64-1	<1000	<u>Data Qualifiers:</u> None
Benzene	71-43-2	<100	
2-Butanone	78-93-3	<500	
Carbon Tetrachloride	56-23-5	<100	
Chlorobenzene	108-90-7	<100	
Chloroform	67-66-3	<100	
1,4-Dichlorobenzene	106-46-7	<100	
1,2-Dichloroethane	107-06-2	<100	
1,1-Dichloroethene	75-35-4	<100	
Tetrachloroethene	127-18-4	<100	
Trichloroethene	79-01-6	<100	
Vinyl Chloride	75-01-4	<100	

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>
Dibromofluoromethane:	106	60-130 %
Toluene-d8:	89	58-130 %
4-Bromofluorobenzene:	82	48-130 %

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Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-001	24317-001	4/1/2019	3/19/2019	4/4/2019	4/5/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Surrogate:</u>	<u>% RC</u>	<u>Acc % RC</u>
o-Cresol:	95-48-7	<100	2-Fluorophenol:	8.9	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	6.5	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	27	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	27	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	33	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	31	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

FDE-DS-002	24317-002	4/1/2019	3/19/2019	4/8/2019	4/9/2019	Solid
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Surrogate:</u>	<u>% RC</u>	<u>Acc % RC</u>
o-Cresol:	95-48-7	<100	2-Fluorophenol:	17	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	11	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	43	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	45	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	44	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	33	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-006	24317-003	4/1/2019	3/19/2019	4/4/2019	4/5/2019	Solid

ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	11	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	7.1	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	28	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	29	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	36	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	33	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

FDE-DS-007	24317-004	4/1/2019	3/19/2019	4/4/2019	4/5/2019	Solid
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ANALYTE	CAS #	µg/L	Surrogate:	% RC	Acc % RC
o-Cresol:	95-48-7	<100	2-Fluorophenol:	18	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	12	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	45	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	44	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	51	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	52	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
FDE-DS-011	24317-005	4/1/2019	3/19/2019	4/8/2019	4/9/2019	Solid

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Surrogate:</u>	<u>% RC</u>	<u>Acc % RC</u>
o-Cresol:	95-48-7	<100	2-Fluorophenol:	16	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	10	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	43	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	44	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	50	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	50	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

Method Blank	MBAV0404192		4/4/2019	4/5/2019	Soil
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Surrogate:</u>	<u>% RC</u>	<u>Acc % RC</u>
o-Cresol:	95-48-7	<100	2-Fluorophenol:	16	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	10	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	46	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	45	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	47	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	58	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

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Lab Reference #: WST 24317
 Project Name: Fresno Drum ER
 Project #: 20409.016.002.0149.24

TCLP Semi Volatile Organics by GC/MS (EPA 1311/8270C)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBAV0408192			4/8/2019	4/9/2019	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/L</u>	<u>Surrogate:</u>	<u>% RC</u>	<u>Acc % RC</u>
o-Cresol:	95-48-7	<100	2-Fluorophenol:	17	D-61 %
m,p-Cresol:	108-39-4, 106-44-5	<100	Phenol-d6:	11	3-37 %
1,4-Dichlorobenzene:	106-46-7	<100	Nitrobenzene-d5:	45	27-98 %
2,4-Dinitrotoluene:	121-14-2	<100	2-Fluorobiphenyl:	45	25-100 %
Hexachlorobenzene:	118-74-1	<100	2,4,6-Tribromophenol:	51	13-119 %
Hexachlorobutadiene:	87-68-3	<100	Terphenyl-d14:	58	23-139 %
Hexachloroethane:	67-72-1	<100			
Nitrobenzene:	98-95-3	<100	<u>Dilution Factor:</u> 1		
Pentachlorophenol:	87-86-5	<400	<u>Data Qualifiers:</u> None		
Pyridine:	110-86-1	<1000			
2,4,5-Trichlorophenol:	95-95-4	<100			
2,4,6-Trichlorophenol:	88-06-2	<100			

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Metals

Client Sample ID	Lab Sample Number		Date Received	Date Sampled		Matrix		
FDE-DS-001	24317-001		4/1/2019	3/19/2019		Solid		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Barium	6010B	650	mg/l	04/08/19	04/09/19	D2,	10	
TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1	
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1	
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
FDE-DS-002	24317-002		4/1/2019	3/19/2019		Solid		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Barium	6010B	0.14	mg/l	04/08/19	04/09/19	--	1	
TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1	
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1	
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	

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Lab Reference #: WST 24317
Project Name: Fresno Drum ER
Project #: 20409.016.002.0149.24

Metals

Client Sample ID	Lab Sample Number		Date Received	Date Sampled		Matrix		
FDE-DS-006	24317-003		4/1/2019	3/19/2019		Solid		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Barium	6010B	0.14	mg/l	04/08/19	04/09/19	--	1	
TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1	
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1	
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
FDE-DS-007	24317-004		4/1/2019	3/19/2019		Solid		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Barium	6010B	<0.040	mg/l	04/08/19	04/09/19	--	1	
TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Lead	6010B	2000	mg/l	04/08/19	04/09/19	D2,	40	
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1	
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1	
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	

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Metals

Client Sample ID	Lab Sample Number		Date Received	Date Sampled		Matrix		
FDE-DS-011	24317-005		4/1/2019	3/19/2019		Solid		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1	
TCLP Barium	6010B	0.063	mg/l	04/08/19	04/09/19	--	1	
TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
TCLP Lead	6010B	0.28	mg/l	04/08/19	04/09/19	--	1	
TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1	
TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1	
TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1	
Method Blank						Solid		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
MBIR0408191	TCLP Arsenic	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Barium	6010B	<0.040	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Cadmium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Chromium	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Lead	6010B	<0.080	mg/l	04/08/19	04/09/19	--	1
MBJV0408191	TCLP Mercury	7470A	<0.010	mg/l	04/08/19	04/08/19	--	1
MBIR0408191	TCLP Selenium	6010B	<0.20	mg/l	04/08/19	04/09/19	--	1
MBIR0408191	TCLP Silver	6010B	<0.020	mg/l	04/08/19	04/09/19	--	1

QA/QC Report
for
Extactable Fuel Hydrocarbons (EPA 8015B/8015M)
Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 4/2/2019

Date of Analysis: 4/2/2019

Dup Date of Analysis: 4/2/2019

Laboratory Sample #: 24312-001

MS/MSD Qualifiers: None

Reference #: WST 24317

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	0.00	1000	1190	1140	119	114	4	59-152	23	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	92	85	<input type="checkbox"/>	95	88	<input type="checkbox"/>	38-148

Laboratory Control Sample

Date of Extraction: 4/2/2019

Date of Analysis: 4/2/2019

Dup Date of Analysis: 4/2/2019

Laboratory Sample #: TS0402192

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	1170	1120	117	112	4	70-130	20	<input type="checkbox"/>

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 4/5/2019

Date of Analysis: 4/5/2019

Dup Date of Analysis: 4/5/2019

Laboratory Sample #: 24317-001

MS/MSD Qualifiers: M2,

Reference #: WST 24317

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloroethene	0.00	10.0	7.20	7.80	72	78	8	57-137	20	<input type="checkbox"/>
Benzene	0.00	10.0	8.93	8.64	89	86	3	68-139	20	<input type="checkbox"/>
Trichloroethene	0.00	10.0	8.95	9.12	89	91	2	70-136	20	<input type="checkbox"/>
Toluene	0.00	10.0	6.75	6.53	68	65	3	67-137	20	<input checked="" type="checkbox"/>
Chlorobenzene	0.00	10.0	8.46	8.64	85	86	2	70-137	20	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	112	114	<input type="checkbox"/>	108	109	<input type="checkbox"/>	60-130
Toluene-d8	84	86	<input type="checkbox"/>	86	87	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	78	80	<input type="checkbox"/>	82	81	<input type="checkbox"/>	48-130

Laboratory Control Sample

Date of Extraction: 4/5/2019

Date of Analysis: 4/5/2019

Dup Date of Analysis: 4/5/2019

Laboratory Sample #: HT0405192

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
1,1-Dichloroethene	10.0	8.12	8.11	81	81	0	62-130	20	<input type="checkbox"/>
Benzene	10.0	10.2	10.0	102	100	2	69-133	20	<input type="checkbox"/>
Trichloroethene	10.0	9.63	9.54	96	95	1	70-132	20	<input type="checkbox"/>
Toluene	10.0	8.64	8.39	86	84	3	67-130	20	<input type="checkbox"/>
Chlorobenzene	10.0	9.80	9.76	98	98	0	70-132	20	<input type="checkbox"/>

QA/QC Report
for
Semi-Volatile Organic Compounds (EPA 8270C)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 4/4/2019

Date of Analysis: 4/5/2019

Dup Date of Analysis: 4/5/2019

Laboratory Sample #: 24317-004

MS/MSD Qualifiers: M1,

Reference #: WST 24317

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Phenol	0.00	400	130	130	32	32	0	12-42	20	<input type="checkbox"/>
2-Chlorophenol	0.00	400	349	347	87	87	1	34-109	20	<input type="checkbox"/>
1,4-Dichlorobenzene	0.00	200	133	135	67	68	1	28-87	20	<input type="checkbox"/>
N-Nitrosodi-n-propylamine	0.00	200	242	237	121	118	2	43-119	20	<input checked="" type="checkbox"/>
1,2,4-Trichlorobenzene	0.00	200	136	144	68	72	6	30-90	20	<input type="checkbox"/>
4-Chloro-3-methylphenol	0.00	400	88.0	84.0	22	21	5	19-134	20	<input type="checkbox"/>
Acenaphthene	0.00	200	259	272	129	136	5	28-131	20	<input checked="" type="checkbox"/>
4-Nitrophenol	0.00	400	117	121	29	30	3	5-59	20	<input type="checkbox"/>
2,4-Dinitrotoluene	0.00	200	286	280	143	140	2	32-141	20	<input checked="" type="checkbox"/>
Pentachlorophenol	0.00	400	585	591	146	148	1	15-154	20	<input type="checkbox"/>
Pyrene	0.00	200	249	258	125	129	4	19-157	20	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
2-Fluorophenol	17	17	<input type="checkbox"/>
Phenol-d6	11	12	<input type="checkbox"/>
Nitrobenzene-d5	47	48	<input type="checkbox"/>
2-Fluorobiphenyl	45	45	<input type="checkbox"/>
2,4,6-Tribromophenol	49	54	<input type="checkbox"/>
Terphenyl-d14	52	53	<input type="checkbox"/>

LCS	LCSD	Qual
17	17	<input type="checkbox"/>
11	11	<input type="checkbox"/>
44	43	<input type="checkbox"/>
46	46	<input type="checkbox"/>
48	49	<input type="checkbox"/>
57	57	<input type="checkbox"/>

ACP % RC
D-61
3-37
27-98
25-100
13-119
23-139

Laboratory Control Sample

Date of Extraction: 4/4/2019

Date of Analysis: 4/5/2019

Dup Date of Analysis: 4/5/2019

Laboratory Sample #: AV0404192

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Phenol	400	120	121	30	30	1	12-42	20	<input type="checkbox"/>
2-Chlorophenol	400	321	322	80	81	0	34-109	20	<input type="checkbox"/>
1,4-Dichlorobenzene	200	139	141	69	70	1	28-87	20	<input type="checkbox"/>
N-Nitrosodi-n-propylamine	200	215	217	108	109	1	43-119	20	<input type="checkbox"/>
1,2,4-Trichlorobenzene	200	151	153	75	76	1	30-90	20	<input type="checkbox"/>
4-Chloro-3-methylphenol	400	409	410	102	102	0	19-134	20	<input type="checkbox"/>
Acenaphthene	200	253	251	126	125	1	28-131	20	<input type="checkbox"/>
4-Nitrophenol	400	150	150	38	38	0	5-59	20	<input type="checkbox"/>
2,4-Dinitrotoluene	200	278	277	139	138	0	32-141	20	<input type="checkbox"/>
Pentachlorophenol	400	441	453	110	113	3	15-154	20	<input type="checkbox"/>
Pyrene	200	262	260	131	130	1	19-157	20	<input type="checkbox"/>

QA/QC Report
for
Semi-Volatile Organic Compounds (EPA 8270C)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 4/8/2019

Date of Analysis: 4/9/2019

Dup Date of Analysis: 4/9/2019

Laboratory Sample #: 24325-005

MS/MSD Qualifiers: None

Reference #: WST 24317

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Phenol	0.00	400	118	121	29	30	3	12-42	20	<input type="checkbox"/>
2-Chlorophenol	0.00	400	344	333	86	83	3	34-109	20	<input type="checkbox"/>
1,4-Dichlorobenzene	0.00	200	152	145	76	73	5	28-87	20	<input type="checkbox"/>
N-Nitrosodi-n-propylamine	0.00	200	224	219	112	110	2	43-119	20	<input type="checkbox"/>
1,2,4-Trichlorobenzene	0.00	200	165	159	82	80	4	30-90	20	<input type="checkbox"/>
4-Chloro-3-methylphenol	0.00	400	434	417	109	104	4	19-134	20	<input type="checkbox"/>
Acenaphthene	0.00	200	262	262	131	131	0	28-131	20	<input type="checkbox"/>
4-Nitrophenol	0.00	400	121	122	30	31	1	5-59	20	<input type="checkbox"/>
2,4-Dinitrotoluene	0.00	200	248	241	124	121	3	32-141	20	<input type="checkbox"/>
Pentachlorophenol	0.00	400	487	485	122	121	0	15-154	20	<input type="checkbox"/>
Pyrene	0.00	200	254	257	127	128	1	19-157	20	<input type="checkbox"/>

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
2-Fluorophenol	17	17	<input type="checkbox"/>
Phenol-d6	11	11	<input type="checkbox"/>
Nitrobenzene-d5	47	46	<input type="checkbox"/>
2-Fluorobiphenyl	45	46	<input type="checkbox"/>
2,4,6-Tribromophenol	50	47	<input type="checkbox"/>
Terphenyl-d14	54	55	<input type="checkbox"/>

LCS	LCSD	Qual
17	17	<input type="checkbox"/>
11	11	<input type="checkbox"/>
51	47	<input type="checkbox"/>
48	48	<input type="checkbox"/>
50	50	<input type="checkbox"/>
58	57	<input type="checkbox"/>

ACP % RC
D-61
3-37
27-98
25-100
13-119
23-139

Laboratory Control Sample

Date of Extraction: 4/8/2019

Date of Analysis: 4/9/2019

Dup Date of Analysis: 4/9/2019

Laboratory Sample #: AV0408192

LCS Qualifiers: L1,

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Phenol	400	116	116	29	29	0	12-42	20	<input type="checkbox"/>
2-Chlorophenol	400	332	333	83	83	0	34-109	20	<input type="checkbox"/>
1,4-Dichlorobenzene	200	146	147	73	74	1	28-87	20	<input type="checkbox"/>
N-Nitrosodi-n-propylamine	200	228	227	114	113	0	43-119	20	<input type="checkbox"/>
1,2,4-Trichlorobenzene	200	164	162	82	81	1	30-90	20	<input type="checkbox"/>
4-Chloro-3-methylphenol	400	467	434	117	109	7	19-134	20	<input type="checkbox"/>
Acenaphthene	200	258	261	129	130	1	28-131	20	<input type="checkbox"/>
4-Nitrophenol	400	143	140	36	35	2	5-59	20	<input type="checkbox"/>
2,4-Dinitrotoluene	200	286	287	143	143	0	32-141	20	<input checked="" type="checkbox"/>
Pentachlorophenol	400	468	468	117	117	0	15-154	20	<input type="checkbox"/>
Pyrene	200	266	266	133	133	0	19-157	20	<input type="checkbox"/>

**QA/QC Report
for
Metals**

Reference #: WST 24317

Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

1311/ 6010B/7470A

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
TCLP Arsenic	4/8/2019	4/9/2019	4/9/2019	24325-005	0.00	0.400	0.404	0.391	101	98	3	75-125	20	--
TCLP Barium	4/8/2019	4/9/2019	4/9/2019	24325-005	0.420	0.400	0.826	0.827	101	102	0	75-125	20	--
TCLP Cadmium	4/8/2019	4/9/2019	4/9/2019	24325-005	0.00	0.400	0.409	0.407	102	102	0	75-125	20	--
TCLP Chromium	4/8/2019	4/9/2019	4/9/2019	24325-005	0.00	0.400	0.407	0.401	102	100	1	75-125	20	--
TCLP Lead	4/8/2019	4/9/2019	4/9/2019	24325-005	0.00	0.400	0.382	0.381	95	95	0	75-125	20	--
TCLP Mercury	4/8/2019	4/8/2019	4/8/2019	24325-005	0.00	0.0500	0.0557	0.0552	111	110	1	80-120	20	--
TCLP Selenium	4/8/2019	4/9/2019	4/9/2019	24325-005	0.00	0.400	0.405	0.376	101	94	7	75-125	20	--
TCLP Silver	4/8/2019	4/9/2019	4/9/2019	24325-005	0.00	0.400	0.392	0.385	98	96	2	75-125	20	--

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
TCLP Arsenic	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.373	0.372	93	93	0	80-120	20	--
TCLP Barium	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.392	0.405	98	101	3	80-120	20	--
TCLP Cadmium	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.392	0.390	98	97	1	80-120	20	--
TCLP Chromium	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.390	0.382	97	95	2	80-120	20	--
TCLP Lead	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.404	0.399	101	100	1	80-120	20	--
TCLP Selenium	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.399	0.342	100	86	15	80-120	20	--
TCLP Silver	4/8/2019	4/9/2019	4/9/2019	IR0408191	0.400	0.384	0.379	96	95	1	80-120	20	--
TCLP Mercury	4/8/2019	4/8/2019	4/8/2019	JV0408191	0.0500	0.0515	0.0508	103	102	1	80-120	20	--

Data Qualifier Definitions

Qualifier

D2 = Sample required dilution due to high concentration of target analyte.

L1 = The associated blank spike recovery was above laboratory acceptance limits.

AV0408192	TCLP	2,4-Dinitrotoluene	LCS/LCSD
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M1 = Matrix spike recovery was high, the associated blank spike recovery was acceptable.

24317-004	TCLP	2,4-Dinitrotoluene	MS
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24317-004	TCLP	Acenaphthene	MSD
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24317-004	TCLP	N-Nitrosodi-n-propylamine	MS
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M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

24317-001	TCLP 8260B	Toluene	MSD
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S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The associated blank spike recovery was acceptable.

Definition of terms:

R1	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected



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CHAIN OF CUSTODY RECOR

24317 No 98535

COMPANY <u>Weston Solutions, Inc.</u>				PROJECT MANAGER <u>Jon Colomb</u>			AETL JOB No.				Page <u>1</u> of <u>1</u>	
COMPANY ADDRESS <u>5881 N. Obispo Ave</u>				PHONE <u>773-947-4064</u>			ANALYSIS REQUESTED				TEST INSTRUCTIONS & COMMENT	
PROJECT NAME <u>Fresno Drum ER</u>				FAX <u>773-947-4064</u>								
SITE NAME AND ADDRESS <u>Fresno, Ca</u>				PROJECT # <u>20409.016.002.0149.24</u>								
				PO #								

SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	TCLP VOCs	TCLP SVOCs	TCLP d.m.o	TCLP Metals								
1 FDE-DS-001		3/19/19	1115	oil/gum	1/402	None	X	X	X	X								
2 FDE-DS-002		↓	↓	↓	↓	↓	X	X	X	X								
3 FDE-DS-006		↓	↓	↓	↓	↓	X	X	X	X								
4 FDE-DS-007		↓	↓	↓	↓	↓	X	X	X	X								
5 FDE-DS-011		↓	↓	↓	↓	↓	X	X	X	X								
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	PROPERLY COOLED <input checked="" type="checkbox"/> Y / N / NA
CUSTODY SEALS Y / N / NA	SAMPLES INTACT Y / N / NA
RECEIVED IN GOOD COND. Y / N	SAMPLES ACCEPTED Y / N

TURN AROUND TIME	DATA DELIVERABLE REQUIRED
<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> RUSH <input type="checkbox"/> SAME DAY <input type="checkbox"/> NEXT DAY <input type="checkbox"/> 2 DAYS <input type="checkbox"/> 3 DAYS	<input type="checkbox"/> HARD COPY <input type="checkbox"/> PDF <input type="checkbox"/> GEOTRACKER (GLOBAL ID) <input type="checkbox"/> OTHER (PLEASE SPECIFY)

RELINQUISHED BY SAMPLER: 1. Jon Colomb

Signature: [Signature]
 Printed Name: Jon Colomb
 Date: 4/1/19 Time: 1115

RECEIVED BY: 1. MARK NOORANT

Signature: [Signature]
 Printed Name: Mark Noorant
 Date: 4-1-19 Time: 1115

RELINQUISHED BY: 2. _____

Signature: _____
 Printed Name: _____
 Date: _____ Time: _____

RECEIVED BY: 2. _____

Signature: _____
 Printed Name: _____
 Date: _____ Time: _____

RELINQUISHED BY: 3. _____

Signature: _____
 Printed Name: _____
 Date: _____ Time: _____

RECEIVED BY: 3. _____

Signature: _____
 Printed Name: _____
 Date: _____ Time: _____

Sample Receipt Report

Laboratory Reference WST 24317

Logged in by MN

Received: 04/01/19 11:15

Company Name: Weston Solutions, Inc.

Method of Shipment: Hand Delivered

Project Manager: Mr. Jonathan Colomb

Shipping Container: Cooler

Project Name: Fresno Drum ER

Shipping Containers: 1

Project #: 20409.016.002.0149.24

Sample Quantity

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>5.3</u>	Thermometer ID: <u>IR#1</u>	Adjusted Temp.: <u>5.3+0.1=5.4</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headpace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

Notes

Client Notified

By

On