# Breitburn Operating, LP AKA Maverick Natural Resources LLC Jalmat Field Yates Unit 225

**Closure Report** 

Section 10, 22S, 35E Lea County, New Mexico

1RP-5365

September 6, 2019



**Prepared for:** 

Maverick Resources PO Box 678 Andrews, TX

By:

Safety & Environmental Solutions, Inc. 703 East Clinton Hobbs, New Mexico 88240 (575) 397-0510

# **TABLE OF CONTENTS**

II.	BACKGROUND	.
		• -
III.	SURFACE AND GROUND WATER	.1
VI.	CONCLUSIONS	.4
VII.	FIGURES & APPENDICES	.4
F	igure 1 – Site Map	.2
Α	ppendix A – Site Photographs	. 3
Α	ppendix B – C-141	.2
	ppendix C – Analytical Data	

#### I. Company Contacts

Representative Company		Telephone	E-mail
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#### II. Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Maverick Resources to assess a spill area on the Jalmat #225 Flowline location, concerning a seventeen (17) bbl. release comprised of crude oil and produced water. This site is situated in Lea County, Section 10, Township 22S and Range 35E.

According to the C-141: A bullet struck the poly flow line that originates from the Jalmat #225 Flowing to the production facility, there was an approximate 17 bbl release of produced water. A Trimble Juno 3B handheld was used to map the spill area. Whereby, the total area of impact was estimated to be 18,000 sq. ft.

#### II. Surface and Ground Water

According to research of the website for the New Mexico Office of the State Engineer records; there is no record of groundwater in the immediate vicinity of the site location. However, the records indicated an average depth to water of 185' bgs. for Township 22S and Range 35E.

#### IV. Characterization

The site has been remediated according to the NMOCD NMAC 19.15.29 published guidelines (July 24, 2018). The site ranking and soil screening levels as presented in the table below:

Clo	Table 1 sure Criteria for Soils Im		
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l		Method*	Limit**
TDS			
<50 feet	Chloride***	EPA 300.0 or SM4500 CI B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015B	0 0
	втех	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 CI B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015B	2,500 mg/kg
	втех	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
>100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015B	2,500 mg/kg
	втех	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

#### V. Work Performed

On February 08, 2019 Maverick personnel took proactive measures to prevent further impact to the spill site. TMI services was contracted excavate approximately 46 yards of saturated soil and transport for disposal at Sundance Disposal facility.

On March 14, 2019 SESI personnel together with equipment and personnel from Custom Welding of Hobbs, NM were on site to advance test trenches for purposes of soil delineation and screening. The impacted area was assessed for proper placement of test trenches, mapped and photographed. It was determined that 5 Test Trenches would be adequate for horizontal and vertical delineation of the impacted area. Soil samples were retrieved at surface and advanced in 1 ft. increments. The samples were properly packaged, preserved, and transported to Hall Laboratories for analyses of Chloride (CL Method 300.0 Anions), Total Petroleum Hydrocarbons (TPH Method 8015), and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX Method 8021B). The table below is a recap of the results from the hall Laboratory Analyses (Appendix C)

Hall Laboratory, Inc 3-14-19									
SAMPLE ID	Chloride	DRO	DRO GRO B						
TT-1 Surface	730	21000	9000	ND					
TT1 @ 1ft	640	6600	710	ND					
TT-1 @ 2ft	1000	29	ND	ND					
TT-1 @ 3ft	560	ND	ND	ND					
TT-1 @ 4ft	520	14	ND	ND					
TT-2 Surface	150	25000	11000	ND					
TT-2 @ 1ft	210	14	ND	ND					
TT-2 @ 2ft	130	61	ND	ND					
TT-3 Surface	960	19000	190	ND					
TT-3 @ 1ft	410	ND	ND	ND					
TT-4 Surface	300	36000	81	ND					
TT-4 @ 1ft	ND	31	ND	ND					
TT-5 Surface	210	32000	12	ND					
TT-5 @ 1ft	860	110	ND	ND					
TT-5 @ 2ft	300	150	ND	ND					
Background	ND	ND	ND	ND					

On June 25, 2019: based on the above soil analyses, and depth to groundwater: NMOCD representatives approved the following remediation protocol:

The impacted area was excavated to depths whereby soil screening levels for chloride constituency >600 ppm., and TPH screening levels of >1,000 ppm. All impacted soil transported to Sundance Landfill (an NMOCD approved facility). The area backfilled with 4 ft of clean topsoil and reseeded.

On July 29<sup>th</sup> thru July 31, 2019 SESI personnel, together with personnel and equipment excavated the impacted area until no visual signs or odor of petroleum could be ascertained. All impacted soil was stockpiled for removal, and transport of impacted soil to Sundance Disposal commences. Sidewall, and bottom soil samples are grabbed. A composite sample of the spoils pile is retrieved, packaged, preserved, and transported to Hall Laboratories for analyses of Chloride (CL Method 300.0 Anions), and Total Petroleum Hydrocarbons (TPH Method 8015). The table below is a recap of the results from the Hall Laboratory Analyses (Appendix C)

SAMPLE ID	Chloride	DRO	MRO	GRO
SP1 @ 4ft	500	74	61	ND
SP2 @ Bottom	110	170	140	ND
SP3 @ Bottom	110	26	46	ND
Spoils	100	890	680	ND
N Wall @ 1ft	ND	ND	ND	ND
SW Sidewall	ND	ND	ND	ND
SE Sidewall	ND	23	ND	ND

On August 13, 2019 SESI personnel together with personnel and equipment from Custom Welding return to the site in order to further excavate center of impacted area where visual staining from recent rain event caused hydrocarbon leaching to surface of excavation (photo documentation). Upon removal of soil containing staining and or odor, SESI representative contacted NMOCD representative Mr. Rose-Coss and advised him of excavation and dangers to livestock with an open excavation. He gave conditional permission to begin backfilling activity. Additional sidewall and bottom soil samples are grabbed from the center most area of the excavation now at 4ft bgs., packaged, preserved, and transported to Hall Laboratories for analyses of Chloride (CL Method 300.0 Anions), and Total Petroleum Hydrocarbons (TPH Method 8015). The table below is a recap of the results from the Hall Laboratory Analyses (Appendix C).

SAMPLE ID	Chloride	DRO	GRO
W. Sidewall #1	690	49	ND
Sidewall @ 2ft	540	9.6	ND
SP2 East Wall	920	1400	21
SP3 SW @ 4ft	380	24	ND
E Sidewall @ 2ft	380	580	ND
W Sidewall @ 2ft	74	280	ND
E SE Sidewall @ 4ft	700	80	ND

On August 16, 2019 and based on the results from Hall laboratories: SESI together with equipment and personnel from Custom Welding of Hobbs return to the site in order to further excavate the East and West Sidewalls respectively. An additional foot of sidewall is advanced from the East-southeast wall as well as the West Sidewall. Backfill with clean native topsoil is complete. Soil samples are grabbed, packaged, and preserved, for transport to Hall Laboratories via Chain of Custody and analyzed for Chloride (CL Method 300.0 Anions), and Total Petroleum Hydrocarbons (TPH Method 8015). The table below is a recap of the results from the Hall Laboratory Analyses (Appendix C).

SAMPLE ID	Chloride	DRO	MRO	GRO
SP2 E Wall (B)	ND	86	79	ND
W Sidewall #1 (B)	ND	NA	NA	NA
E SE Sidewall @ 5ft	ND	NA	NA	NA

#### VI. Conclusions

The spill area was excavated and remediated to the NMOCD approved work plan protocol. All impacted soil was transported to Sundance Disposal of Eunice, NM (an NMOCD approved facility) for disposal. According to the disposal manifests a total of 1,540 yards of impacted soil were disposed of. Local soil was transported in for backfill material of the excavated area. The pasture area was restored with 4ft of clean native topsoil, terraced to dunal feature and reseeded in order to promote revegetation.

SESI, on behalf of Maverick Resources respectfully submits this closure report for your consideration and conclusion of the associated remediation permit.

#### VII. Figures & Appendices

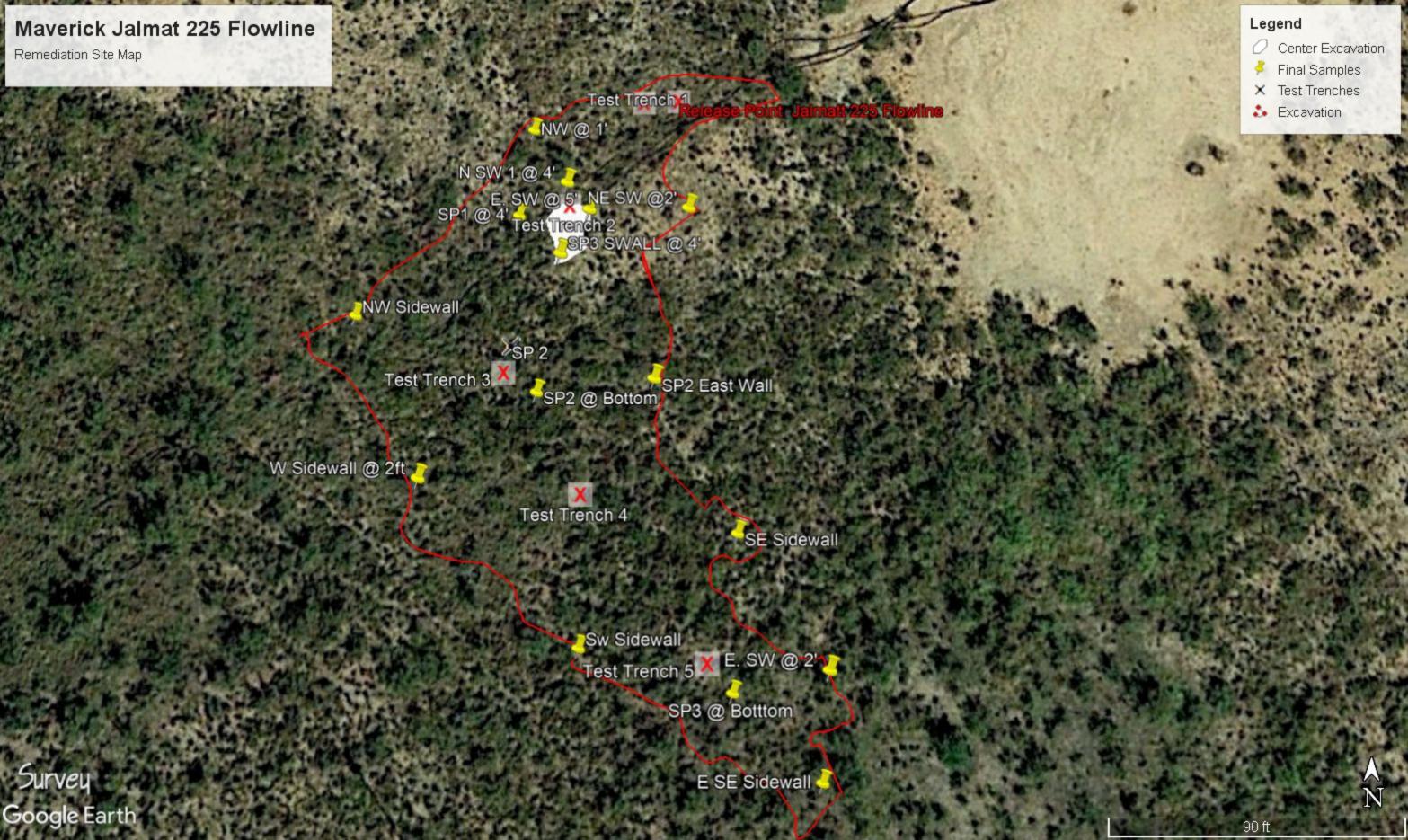
Figure 1 – Site Plan

Appendix A – Site Photographs

Appendix B – C-141

Appendix C – Analytical

# Figure 1 Site Map



# Appendix A Site Photographs

Breitburn Jalmat #225



Excavation NE at Flowline (source)



West Sidewall



Entire excavation (center at 5' bgs)

Breitburn Jalmat #225 Completion



Appendix B C-141 Form C-141 Page 6

# State of New Mexico Oil Conservation Division

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

Incident ID	
District RP	
Facility ID	
Application ID	

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

A scaled site and sampling diagram as described in 19.15.29.1	11 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODG	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rephuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification with 19.1	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in DCD when reclamation and re-vegetation are complete.
OCD_Only	
Received by:	Date:
	y of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:
	,

# Appendix C Analytical Data

Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Date Reported:

CLIENT: Safety & Environmental Solutions

Client Sample ID: TT-1 Surface

Project: Jalmat 225

Collection Date: 3/14/2019 8:45:00 AM

**Lab ID:** 1903729-001 **Matrix:** SOIL **Received Date:** 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	730	60		mg/Kg	20	3/18/2019 4:31:53 PM	43722
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: Irm
Diesel Range Organics (DRO)	21000	490		mg/Kg	50	3/18/2019 12:29:50 PM	43711
Motor Oil Range Organics (MRO)	9000	2500		mg/Kg	50	3/18/2019 12:29:50 PM	43711
Surr: DNOP	0	70-130	S	%Rec	50	3/18/2019 12:29:50 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	1400	250		mg/Kg	50	3/18/2019 8:32:26 AM	43708
Surr: BFB	243	73.8-119	S	%Rec	50	3/18/2019 8:32:26 AM	43708
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	1.2	D	mg/Kg	50	3/18/2019 8:32:26 AM	43708
Toluene	ND	2.5	D	mg/Kg	50	3/18/2019 8:32:26 AM	43708
Ethylbenzene	ND	2.5	D	mg/Kg	50	3/18/2019 8:32:26 AM	43708
Xylenes, Total	62	5.0	D	mg/Kg	50	3/18/2019 8:32:26 AM	43708
Surr: 4-Bromofluorobenzene	112	80-120	D	%Rec	50	3/18/2019 8:32:26 AM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Ε Value above quantitation range Analyte detected below quantitation limits Н Holding times for preparation or analysis exceeded J Page 1 of 0 Not Detected at the Reporting Limit Sample pH Not In Range ND P PQL Practical Quanitative Limit Reporting Detection Limit RL

% Recovery outside of range due to dilution or matrix

Date Reported:

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-1 1ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 8:50:00 AM

 Lab ID:
 1903729-002
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	640	61		mg/Kg	20	3/18/2019 5:09:06 PM	43722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	6600	98		mg/Kg	10	3/18/2019 1:18:23 PM	43711
Motor Oil Range Organics (MRO)	2300	490		mg/Kg	10	3/18/2019 1:18:23 PM	43711
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2019 1:18:23 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	710	100		mg/Kg	20	3/18/2019 8:39:59 PM	43708
Surr: BFB	268	73.8-119	S	%Rec	20	3/18/2019 8:39:59 PM	43708
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.50	D	mg/Kg	20	3/18/2019 8:39:59 PM	43708
Toluene	ND	1.0	D	mg/Kg	20	3/18/2019 8:39:59 PM	43708
Ethylbenzene	ND	1.0	D	mg/Kg	20	3/18/2019 8:39:59 PM	43708
Xylenes, Total	30	2.0	D	mg/Kg	20	3/18/2019 8:39:59 PM	43708
Surr: 4-Bromofluorobenzene	106	80-120	D	%Rec	20	3/18/2019 8:39:59 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 2 of 0

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Date Reported:

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-1 2ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 9:10:00 AM

 Lab ID:
 1903729-003
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	1000	60	mg/Kg	20	3/18/2019 9:17:16 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: Irm
Diesel Range Organics (DRO)	29	9.6	mg/Kg	1	3/19/2019 1:15:54 PM	43711
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/19/2019 1:15:54 PM	43711
Surr: DNOP	81.8	70-130	%Rec	1	3/19/2019 1:15:54 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/18/2019 2:48:31 PM	43708
Surr: BFB	94.9	73.8-119	%Rec	1	3/18/2019 2:48:31 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	3/18/2019 2:48:31 PM	43708
Toluene	ND	0.050	mg/Kg	1	3/18/2019 2:48:31 PM	43708
Ethylbenzene	ND	0.050	mg/Kg	1	3/18/2019 2:48:31 PM	43708
Xylenes, Total	ND	0.10	mg/Kg	1	3/18/2019 2:48:31 PM	43708
Surr: 4-Bromofluorobenzene	97.2	80-120	%Rec	1	3/18/2019 2:48:31 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported:

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-1 3ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 9:20:00 AM

 Lab ID:
 1903729-004
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	560	59	mg/Kg	20	3/18/2019 10:19:20 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	3/21/2019 3:28:22 PM	43711
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/21/2019 3:28:22 PM	43711
Surr: DNOP	79.2	70-130	%Rec	1	3/21/2019 3:28:22 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	3/18/2019 4:45:55 PM	43708
Surr: BFB	95.0	73.8-119	%Rec	1	3/18/2019 4:45:55 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	3/18/2019 4:45:55 PM	43708
Toluene	ND	0.048	mg/Kg	1	3/18/2019 4:45:55 PM	43708
Ethylbenzene	ND	0.048	mg/Kg	1	3/18/2019 4:45:55 PM	43708
Xylenes, Total	ND	0.096	mg/Kg	1	3/18/2019 4:45:55 PM	43708
Surr: 4-Bromofluorobenzene	99.6	80-120	%Rec	1	3/18/2019 4:45:55 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-1 4ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 9:45:00 AM

 Lab ID:
 1903729-005
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	520	60	mg/Kg	20	3/18/2019 10:31:44 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: Irm
Diesel Range Organics (DRO)	24	9.9	mg/Kg	1	3/25/2019 12:05:48 PM	43711
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/25/2019 12:05:48 PM	43711
Surr: DNOP	105	70-130	%Rec	1	3/25/2019 12:05:48 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/18/2019 5:09:08 PM	43708
Surr: BFB	92.8	73.8-119	%Rec	1	3/18/2019 5:09:08 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	3/18/2019 5:09:08 PM	43708
Toluene	ND	0.046	mg/Kg	1	3/18/2019 5:09:08 PM	43708
Ethylbenzene	ND	0.046	mg/Kg	1	3/18/2019 5:09:08 PM	43708
Xylenes, Total	ND	0.092	mg/Kg	1	3/18/2019 5:09:08 PM	43708
Surr: 4-Bromofluorobenzene	97.7	80-120	%Rec	1	3/18/2019 5:09:08 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: TT-2 Surface

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 10:00:00 AM

 Lab ID:
 1903729-006
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	1500	60		mg/Kg	20	3/18/2019 10:44:09 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	25000	500		mg/Kg	50	3/18/2019 2:07:06 PM	43711
Motor Oil Range Organics (MRO)	11000	2500		mg/Kg	50	3/18/2019 2:07:06 PM	43711
Surr: DNOP	0	70-130	S	%Rec	50	3/18/2019 2:07:06 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	160	25		mg/Kg	5	3/18/2019 10:13:28 PM	43708
Surr: BFB	332	73.8-119	S	%Rec	5	3/18/2019 10:13:28 PM	43708
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12		mg/Kg	5	3/18/2019 10:13:28 PM	43708
Toluene	0.26	0.25		mg/Kg	5	3/18/2019 10:13:28 PM	43708
Ethylbenzene	0.82	0.25		mg/Kg	5	3/18/2019 10:13:28 PM	43708
Xylenes, Total	6.3	0.49		mg/Kg	5	3/18/2019 10:13:28 PM	43708
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	5	3/18/2019 10:13:28 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Ε Value above quantitation range Analyte detected below quantitation limits Н Holding times for preparation or analysis exceeded J Page 6 of 0 Not Detected at the Reporting Limit Sample pH Not In Range ND P PQL Practical Quanitative Limit Reporting Detection Limit RL% Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Date Reported:

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-2 1ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 10:15:00 AM

 Lab ID:
 1903729-007
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	210	61	mg/Kg	20	3/18/2019 10:56:34 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	14	10	mg/Kg	1	3/19/2019 2:28:12 PM	43711
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/19/2019 2:28:12 PM	43711
Surr: DNOP	81.1	70-130	%Rec	1	3/19/2019 2:28:12 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/18/2019 5:32:21 PM	43708
Surr: BFB	96.7	73.8-119	%Rec	1	3/18/2019 5:32:21 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	3/18/2019 5:32:21 PM	43708
Toluene	ND	0.046	mg/Kg	1	3/18/2019 5:32:21 PM	43708
Ethylbenzene	ND	0.046	mg/Kg	1	3/18/2019 5:32:21 PM	43708
Xylenes, Total	ND	0.093	mg/Kg	1	3/18/2019 5:32:21 PM	43708
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	3/18/2019 5:32:21 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: TT-2 2ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 10:30:00 AM

 Lab ID:
 1903729-008
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	130	60		mg/Kg	20	3/18/2019 11:08:59 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: Irm
Diesel Range Organics (DRO)	59	9.9		mg/Kg	1	3/25/2019 12:27:55 PM	43711
Motor Oil Range Organics (MRO)	75	50		mg/Kg	1	3/25/2019 12:27:55 PM	43711
Surr: DNOP	68.3	70-130	S	%Rec	1	3/25/2019 12:27:55 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/18/2019 5:55:40 PM	43708
Surr: BFB	93.0	73.8-119		%Rec	1	3/18/2019 5:55:40 PM	43708
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	3/18/2019 5:55:40 PM	43708
Toluene	ND	0.048		mg/Kg	1	3/18/2019 5:55:40 PM	43708
Ethylbenzene	ND	0.048		mg/Kg	1	3/18/2019 5:55:40 PM	43708
Xylenes, Total	ND	0.095		mg/Kg	1	3/18/2019 5:55:40 PM	43708
Surr: 4-Bromofluorobenzene	97.7	80-120		%Rec	1	3/18/2019 5:55:40 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page~8~of~0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: TT-3 Surface

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 10:40:00 AM

 Lab ID:
 1903729-009
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	960	60		mg/Kg	20	3/18/2019 11:21:24 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	19000	490		mg/Kg	50	3/18/2019 2:55:40 PM	43711
Motor Oil Range Organics (MRO)	7900	2500		mg/Kg	50	3/18/2019 2:55:40 PM	43711
Surr: DNOP	0	70-130	S	%Rec	50	3/18/2019 2:55:40 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	190	24		mg/Kg	5	3/18/2019 11:00:38 PM	43708
Surr: BFB	434	73.8-119	S	%Rec	5	3/18/2019 11:00:38 PM	43708
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.12		mg/Kg	5	3/18/2019 11:00:38 PM	43708
Toluene	0.30	0.24		mg/Kg	5	3/18/2019 11:00:38 PM	43708
Ethylbenzene	3.8	0.24		mg/Kg	5	3/18/2019 11:00:38 PM	43708
Xylenes, Total	6.1	0.48		mg/Kg	5	3/18/2019 11:00:38 PM	43708
Surr: 4-Bromofluorobenzene	137	80-120	S	%Rec	5	3/18/2019 11:00:38 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 9 of 0

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: TT-3 1ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 11:00:00 AM

 Lab ID:
 1903729-010
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	410	60	mg/Kg	20	3/18/2019 11:33:49 PM	43728
EPA METHOD 8015M/D: DIESEL RANGE ORG				Analyst	Irm	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/19/2019 3:16:55 PM	43711
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/19/2019 3:16:55 PM	43711
Surr: DNOP	77.9	70-130	%Rec	1	3/19/2019 3:16:55 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/18/2019 6:19:07 PM	43708
Surr: BFB	97.2	73.8-119	%Rec	1	3/18/2019 6:19:07 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	3/18/2019 6:19:07 PM	43708
Toluene	ND	0.047	mg/Kg	1	3/18/2019 6:19:07 PM	43708
Ethylbenzene	ND	0.047	mg/Kg	1	3/18/2019 6:19:07 PM	43708
Xylenes, Total	ND	0.094	mg/Kg	1	3/18/2019 6:19:07 PM	43708
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	3/18/2019 6:19:07 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported:

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-4 Surface

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 11:15:00 AM

 Lab ID:
 1903729-011
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	300	60		mg/Kg	20	3/19/2019 12:03:58 PM	43755
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst	: Irm
Diesel Range Organics (DRO)	36000	500		mg/Kg	50	3/18/2019 3:44:11 PM	43711
Motor Oil Range Organics (MRO)	15000	2500		mg/Kg	50	3/18/2019 3:44:11 PM	43711
Surr: DNOP	0	70-130	S	%Rec	50	3/18/2019 3:44:11 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	81	9.7		mg/Kg	2	3/18/2019 11:47:33 PM	43708
Surr: BFB	390	73.8-119	S	%Rec	2	3/18/2019 11:47:33 PM	43708
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.049		mg/Kg	2	3/18/2019 11:47:33 PM	43708
Toluene	0.097	0.097		mg/Kg	2	3/18/2019 11:47:33 PM	43708
Ethylbenzene	0.98	0.097		mg/Kg	2	3/18/2019 11:47:33 PM	43708
Xylenes, Total	3.3	0.19		mg/Kg	2	3/18/2019 11:47:33 PM	43708
Surr: 4-Bromofluorobenzene	135	80-120	S	%Rec	2	3/18/2019 11:47:33 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 11 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: TT-4 1ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 11:30:00 AM

 Lab ID:
 1903729-012
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	3/19/2019 12:16:23 PM	43755
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	32	9.5	mg/Kg	1	3/25/2019 12:49:59 PM	43711
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/25/2019 12:49:59 PM	43711
Surr: DNOP	96.7	70-130	%Rec	1	3/25/2019 12:49:59 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	3/18/2019 6:42:36 PM	43708
Surr: BFB	96.7	73.8-119	%Rec	1	3/18/2019 6:42:36 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	3/18/2019 6:42:36 PM	43708
Toluene	ND	0.048	mg/Kg	1	3/18/2019 6:42:36 PM	43708
Ethylbenzene	ND	0.048	mg/Kg	1	3/18/2019 6:42:36 PM	43708
Xylenes, Total	ND	0.096	mg/Kg	1	3/18/2019 6:42:36 PM	43708
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	3/18/2019 6:42:36 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported:

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-5 Surface

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 11:45:00 AM

 Lab ID:
 1903729-013
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	210	60		mg/Kg	20	3/19/2019 12:28:48 PM	43755
EPA METHOD 8015M/D: DIESEL RANGE ORG					Analyst	: Irm	
Diesel Range Organics (DRO)	32000	500		mg/Kg	50	3/18/2019 4:32:47 PM	43711
Motor Oil Range Organics (MRO)	15000	2500		mg/Kg	50	3/18/2019 4:32:47 PM	43711
Surr: DNOP	0	70-130	S	%Rec	50	3/18/2019 4:32:47 PM	43711
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	12	9.5		mg/Kg	2	3/19/2019 12:34:43 AM	43708
Surr: BFB	124	73.8-119	S	%Rec	2	3/19/2019 12:34:43 AM	43708
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.048	D	mg/Kg	2	3/19/2019 12:34:43 AM	43708
Toluene	ND	0.095	D	mg/Kg	2	3/19/2019 12:34:43 AM	43708
Ethylbenzene	ND	0.095	D	mg/Kg	2	3/19/2019 12:34:43 AM	43708
Xylenes, Total	0.20	0.19	D	mg/Kg	2	3/19/2019 12:34:43 AM	43708
Surr: 4-Bromofluorobenzene	99.3	80-120	D	%Rec	2	3/19/2019 12:34:43 AM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 13 of 0
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: TT-5 1ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 12:05:00 PM

 Lab ID:
 1903729-014
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	860	60	mg/Kg	20	3/19/2019 12:41:12 PM	43755
EPA METHOD 8015M/D: DIESEL RANGE ORG				Analyst	: Irm	
Diesel Range Organics (DRO)	110	9.7	mg/Kg	1	3/19/2019 4:06:24 PM	43711
Motor Oil Range Organics (MRO)	58	49	mg/Kg	1	3/19/2019 4:06:24 PM	43711
Surr: DNOP	74.8	70-130	%Rec	1	3/19/2019 4:06:24 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	3/18/2019 7:06:05 PM	43708
Surr: BFB	95.2	73.8-119	%Rec	1	3/18/2019 7:06:05 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	3/18/2019 7:06:05 PM	43708
Toluene	ND	0.049	mg/Kg	1	3/18/2019 7:06:05 PM	43708
Ethylbenzene	ND	0.049	mg/Kg	1	3/18/2019 7:06:05 PM	43708
Xylenes, Total	ND	0.099	mg/Kg	1	3/18/2019 7:06:05 PM	43708
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	3/18/2019 7:06:05 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 14 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: TT-5 2ft

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 12:30:00 PM

 Lab ID:
 1903729-015
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	300	60	mg/Kg	20	3/19/2019 12:53:37 PM	43755
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	150	9.6	mg/Kg	1	3/19/2019 4:30:37 PM	43711
Motor Oil Range Organics (MRO)	78	48	mg/Kg	1	3/19/2019 4:30:37 PM	43711
Surr: DNOP	78.6	70-130	%Rec	1	3/19/2019 4:30:37 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	3/18/2019 7:29:33 PM	43708
Surr: BFB	96.7	73.8-119	%Rec	1	3/18/2019 7:29:33 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	3/18/2019 7:29:33 PM	43708
Toluene	ND	0.048	mg/Kg	1	3/18/2019 7:29:33 PM	43708
Ethylbenzene	ND	0.048	mg/Kg	1	3/18/2019 7:29:33 PM	43708
Xylenes, Total	ND	0.096	mg/Kg	1	3/18/2019 7:29:33 PM	43708
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	3/18/2019 7:29:33 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 15 of 0

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: Background

 Project:
 Jalmat 225
 Collection Date: 3/14/2019 1:00:00 PM

 Lab ID:
 1903729-016
 Matrix: SOIL
 Received Date: 3/15/2019 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	3/19/2019 1:30:51 PM	43755
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	3/19/2019 4:54:54 PM	43711
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/19/2019 4:54:54 PM	43711
Surr: DNOP	81.0	70-130	%Rec	1	3/19/2019 4:54:54 PM	43711
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	3/18/2019 7:53:01 PM	43708
Surr: BFB	95.1	73.8-119	%Rec	1	3/18/2019 7:53:01 PM	43708
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	3/18/2019 7:53:01 PM	43708
Toluene	ND	0.049	mg/Kg	1	3/18/2019 7:53:01 PM	43708
Ethylbenzene	ND	0.049	mg/Kg	1	3/18/2019 7:53:01 PM	43708
Xylenes, Total	ND	0.098	mg/Kg	1	3/18/2019 7:53:01 PM	43708
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	3/18/2019 7:53:01 PM	43708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 16 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 20, 2019

Rebecca Pons Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241

TEL: (575) 397-0510 FAX (575) 393-4388

RE: May 19 003 OrderNo.: 1908772

#### Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/14/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1908772**

Date Reported: 8/20/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: W. SW #1

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 10:10:00 AM

 Lab ID:
 1908772-001
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	690	60	mg/Ko	20	8/16/2019 2:06:29 PM	46848
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	: JME
Diesel Range Organics (DRO)	49	9.6	mg/Kg	1	8/17/2019 1:03:23 PM	46851
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	, 1	8/17/2019 1:03:23 PM	46851
Surr: DNOP	106	70-130	%Red	1	8/17/2019 1:03:23 PM	46851
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/16/2019 4:02:52 PM	46816
Surr: BFB	96.6	77.4-118	%Rec	1	8/16/2019 4:02:52 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

porting Limit Page 1 of 10

#### Lab Order **1908772**

Date Reported: 8/20/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: NE SW @ 2'

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 11:16:00 AM

 Lab ID:
 1908772-002
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: CAS
Chloride	540	60		mg/Kg	20	8/16/2019 2:43:41 PM	46848
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: JME
Diesel Range Organics (DRO)	9.6	9.5		mg/Kg	1	8/17/2019 2:10:03 PM	46851
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2019 2:10:03 PM	46851
Surr: DNOP	47.4	70-130	S	%Rec	1	8/17/2019 2:10:03 PM	46851
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/16/2019 4:26:25 PM	46816
Surr: BFB	99.9	77.4-118		%Rec	1	8/16/2019 4:26:25 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 10

#### Lab Order **1908772**

Date Reported: 8/20/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP2 E. Wall

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 10:10:00 AM

 Lab ID:
 1908772-003
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: CAS
Chloride	920	60		mg/Kg	20	8/16/2019 3:20:56 PM	46848
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	:: TOM
Diesel Range Organics (DRO)	1400	95		mg/Kg	10	8/19/2019 12:14:00 AM	l 46851
Motor Oil Range Organics (MRO)	670	480		mg/Kg	10	8/19/2019 12:14:00 AM	l 46851
Surr: DNOP	0	70-130	S	%Rec	10	8/19/2019 12:14:00 AM	l 46851
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	21	12		mg/Kg	5	8/16/2019 3:39:19 PM	46816
Surr: BFB	150	77.4-118	S	%Rec	5	8/16/2019 3:39:19 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 10

#### Lab Order 1908772

Date Reported: 8/20/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP3 SW @ 4ft

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 10:15:00 AM

 Lab ID:
 1908772-004
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: CAS
Chloride	380	60		mg/Kg	20	8/16/2019 3:33:21 PM	46848
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: JME
Diesel Range Organics (DRO)	24	9.7		mg/Kg	1	8/17/2019 3:17:00 PM	46851
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2019 3:17:00 PM	46851
Surr: DNOP	59.2	70-130	S	%Rec	1	8/17/2019 3:17:00 PM	46851
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/16/2019 4:50:01 PM	46816
Surr: BFB	104	77.4-118		%Rec	1	8/16/2019 4:50:01 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 10

#### Lab Order **1908772**

Date Reported: 8/20/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: E SW @ 2ft

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 11:15:00 AM

 Lab ID:
 1908772-005
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CAS
Chloride	380	60	mg/Kg	20	8/16/2019 3:45:46 PM	46848
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	:: TOM
Diesel Range Organics (DRO)	580	8.5	mg/Kg	1	8/19/2019 8:48:08 AM	46851
Motor Oil Range Organics (MRO)	390	42	mg/Kg	1	8/19/2019 8:48:08 AM	46851
Surr: DNOP	96.5	70-130	%Rec	1	8/19/2019 8:48:08 AM	46851
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/16/2019 5:13:31 PM	46816
Surr: BFB	88.9	77.4-118	%Rec	1	8/16/2019 5:13:31 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 10

#### Lab Order **1908772**

Date Reported: 8/20/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: W SW @ 2ft

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 11:05:00 AM

 Lab ID:
 1908772-006
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CAS
Chloride	74	60	mg/Kg	20	8/16/2019 3:58:10 PM	46848
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	:: ТОМ
Diesel Range Organics (DRO)	280	9.4	mg/Kg	1	8/19/2019 9:42:49 AM	46851
Motor Oil Range Organics (MRO)	210	47	mg/Kg	1	8/19/2019 9:42:49 AM	46851
Surr: DNOP	84.7	70-130	%Rec	1	8/19/2019 9:42:49 AM	46851
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/16/2019 7:11:03 PM	46816
Surr: BFB	99.9	77.4-118	%Rec	1	8/16/2019 7:11:03 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 10

#### Lab Order **1908772**

Date Reported: 8/20/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: E SE @ 4ft

 Project:
 Mav 19 003
 Collection Date: 8/13/2019 10:20:00 AM

 Lab ID:
 1908772-007
 Matrix: SOIL
 Received Date: 8/14/2019 9:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CAS
Chloride	700	61	mg/Kg	20	8/16/2019 8:43:34 PM	46862
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	:: JME
Diesel Range Organics (DRO)	80	9.6	mg/Kg	1	8/17/2019 4:46:43 PM	46851
Motor Oil Range Organics (MRO)	50	48	mg/Kg	1	8/17/2019 4:46:43 PM	46851
Surr: DNOP	75.0	70-130	%Rec	1	8/17/2019 4:46:43 PM	46851
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/16/2019 7:34:34 PM	46816
Surr: BFB	94.2	77.4-118	%Rec	1	8/16/2019 7:34:34 PM	46816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908772** 

20-Aug-19

Client: Safety & Environmental Solutions

**Project:** May 19 003

Sample ID: MB-46848 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **46848** RunNo: **62203** 

Prep Date: 8/16/2019 Analysis Date: 8/16/2019 SeqNo: 2113198 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 4.5

Sample ID: LCS-46848 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 46848 RunNo: 62203

Prep Date: 8/16/2019 Analysis Date: 8/16/2019 SeqNo: 2113199 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.0 90 110

Sample ID: MB-46862 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 46862 RunNo: 62203

Prep Date: **8/16/2019** Analysis Date: **8/16/2019** SeqNo: **2113238** Units: **mg/Kg** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-46862 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 46862 RunNo: 62203

Prep Date: 8/16/2019 Analysis Date: 8/16/2019 SeqNo: 2113239 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 15 1.5 15.00 0 98.4 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908772** 

20-Aug-19

Client: Safety & Environmental Solutions

**Project:** May 19 003

Sample ID: MB-46851 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 46851 RunNo: 62213 Prep Date: 8/16/2019 Analysis Date: 8/17/2019 SeqNo: 2112564 Units: mq/Kq SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result PQL Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 70 9.2 10.00 92.3 130 Sample ID: MB-46852 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 46852 RunNo: 62213 Prep Date: 8/16/2019 Analysis Date: 8/17/2019 SeqNo: 2112565 Units: %Rec Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: DNOP 10.00 130 8.3 83.0

Sample ID: LCS-46851 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 46851 RunNo: 62213 Prep Date: 8/16/2019 Analysis Date: 8/17/2019 SeqNo: 2112567 Units: mg/Kg SPK value SPK Ref Val %REC Result PQL HighLimit %RPD **RPDLimit** Analyte LowLimit Qual Diesel Range Organics (DRO) 47 10 50.00 0 94.9 63.9 124 Surr: DNOP 70 77.7 3.9 5.000 130

Sample ID: LCS-46852 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS Client ID: LCSS Batch ID: 46852 RunNo: 62213 Prep Date: 8/16/2019 Analysis Date: 8/17/2019 SeqNo: 2112568 Units: %Rec SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Surr: DNOP 3.6 5.000 72.9 70 130

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 9 of 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908772** 

20-Aug-19

Client: Safety & Environmental Solutions

**Project:** May 19 003

Sample ID: MB-46816 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 46816 RunNo: 62170

Prep Date: 8/15/2019 Analysis Date: 8/16/2019 SeqNo: 2112385 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 940 1000 94.1 77.4 118

Sample ID: LCS-46816 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 46816 RunNo: 62170

1000

Prep Date: **8/15/2019** Analysis Date: **8/16/2019** SeqNo: **2112386** Units: **mg/Kg** 

1000

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 5.0 25.00 0 90.3 80 120

104

77.4

118

#### Qualifiers:

Surr: BFB

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 10 of 10



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name:	Safety Env Solutions	Work Order Nu	mber: 1908772		DestNe	
					RcptNo:	1
Received By:	Desiree Dominguez	8/14/2019 9:00:00	) AM	T		
Completed By:	Erin Melendrez	8/14/2019 10:25:3	5 AM	u u	/	
Reviewed By:	LB	8/14/19		more		
•	<i>/ -r</i>					
Chain of Cust	odv					
1. Is Chain of Cu	·		Yes 🗹	No 🗌	N. D.	
2. How was the s			Courier	NO [_	Not Present	
<u>Log In</u>			<u>.==+,151</u>			
	ot made to cool the samples?		🗔	<u>_</u>		
	remade to door the samples?		Yes 🗸	No 🗀	NA 🗌	
4. Were all sampl	es received at a temperature	of >0° C to 6.0°C	Yes 🗸	No 🗔	NA 🗌	
			.00 🖭	_	NA 🗀	
5. Sample(s) in pr	oper container(s)?		Yes 🗹	No 🗌		
6. Sufficient samp	le volume for indicated test(s	)?	Yes 🗸	No 🗌		
7. Are samples (ex	cept VOA and ONG) properly	v preserved?	Yes 🗹	No 🗌		
	re added to bottles?	•	Yes 🗌	No 🗹	NA 🗔	
0			, 30	140 🗷	NA L	
9. VOA vials have	•		Yes 🗌	No 🗌	No VOA Vials 🗹	,
10. Were any samp	le containers received broker	1?	Yes	No 🗹		/_
11 Does nanonwell	match bottle labels?				# of preserved bottles checked	
(Note discrepand	cies on chain of custody)		Yes 🗸	No 🗌	for pH:	
	rectly identified on Chain of C	Sustody?	Yes 🗸	No 🗔	(<2 or > Adjusted?	2 unless noted)
	nalyses were requested?	,	Yes 🗹	No 🗆		~
14. Were all holding	times able to be met?		Yes 🗹	No 🗆	Checked by: DA	08/14/19
(If no, notify cust	omer for authorization.)		/ <b></b> -		y should by. Vi	
Special Handlin	g (if applicable)					
15. Was client notifi	ed of all discrepancies with th	is order?	Yes 🗌	No 🗌	na 🗹	
Person No	tified:	Date:				
By Whom:		Via:		none  Fax		
Regarding				ione 🗌 Fax	In Person	
Client Instr	ructions:					
16. Additional rema	rks:					
17. Cooler Informa	tion					
5 4 mm 51.575 m 31.474	Open demonstrate our value     Open demonstrate our v	l Intact │ Seal No ┼	Seal Date	Signed P.		
1	9 Good Yes			Signed By		
		3				

10 2 5	Client: / / /		TAL DESCRIPTION
Mov   9   003   104   105	265T		TALL ENVIRONMENTAL
Illy   A   A   A   A   A   A   A   A   A			
10   10   10   10   10   10   10   10		90 19 003 C	WWW.n.
10   10   10   10   10   10   10   10	S. A.M.		Tol FOR 24F 202F
Standard   Container   Conta	575-597 J		1 el. 303-345-3978
Standard   Container   Conta	mail or Fax#:	N ST	
Sandard   Couple	JA/QC Package:	-	OS/ S, S, O3/V
Sampler:   Sampler:   Orther		Such	O <sup>†</sup> °
Time   Contains   Co	on:		DRQ 4 S88 (1) 2703 7 , sC
Time   Container   Type and # Type   Type and # Type   Type   Time   Container   Type and # Type   Type   Type   Time   Container   Type		W.Yes ⊟ No	) \ O \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
11   11   11   12   12   13   14   15   15   15   15   15   15   15	1 EDD (Type)		GR6 d 50 3, als
Time   EDM SigNA   Container   Preservative   Container   Preservative   Container   Preservative   Container		ding CF:   . 9 . 0 . 0	thoiction (A)
Time   Matrix   Sample Name   Type and # Type   T			Pes (Me s by βr, (VO
1116   12 5.42 #1	Time Matrix	Type   G 18777	1081 3081 3081 3081 3081
1916 12 2 2 2001  1915 2 2 2001  1915 2 2 2001  1915 2 2 2001  105 2 2 2 2001  105 2 2 2 2001  105 2 2 2 2001  105	48 1010 SDI 1 119,5412	A 60 - ANI	3 4 4 8
1610	1111 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2		
1115 \$ 500 Ut0004 1115 \$ 500 0 2 tt0004 1105 [105   12 0 2 tt.   -0005 1105   12 0 2 tt.   -0005 1105   12 0 2 tt.   -0005 1105   12 0 0	2007	200-	3
1115 5 5 0 0 2 1 - 0 0 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		)	
1115 5 50 0 20 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0	3 2 2 WB	1	7
1020 _ St. 20 167000  1020 _ St. 20 167007  1020 _ St. 20 167007  Time: Relinquished by: Received by: Via: Date Time	3.50	-005	)
1620 L & St. 20 Her Time: Relinquished by:  1620 L & St. 20 Her Time	1 10.5	7 - 006	,
Time: Relinquished by:    Date Time	15.31	100-	
Time: Relinquished by:  Received by:  Received by:  Time	7		
Time: Relinquished by: Received by: Na: Date Time	Town I		
Time: Relinquished by: Received by: Date Time			
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Time: Relinquished by: Received by: Date Time	<		
Merico Control	Time:	Vis.	
THE CHERRY TANO 1	3	8/13/19 1/-40	amarks:
I'me: Relinquished by: Received by Via:	ille:	Via:	
19 170 11 1 123 Courier 8/14/19 9:00		- 1	



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 07, 2019

Rebecca Pons Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241

TEL: (575) 397-0510 FAX (575) 393-4388

RE: Jalmat 225 OrderNo.: 1908018

#### Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/1/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1908018

**C.** Date Reported: **8/7/2019** 

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP1 @ 4'

 Project:
 Jalmat 225
 Collection Date: 7/31/2019 12:05:00 PM

 Lab ID:
 1908018-001
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: CJS
Chloride	500	60	mg/Kg	20	8/5/2019 11:11:52 PM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst	: BRM
Diesel Range Organics (DRO)	74	9.6	mg/Kg	1	8/5/2019 11:02:28 AM	46571
Motor Oil Range Organics (MRO)	61	48	mg/Kg	1	8/5/2019 11:02:28 AM	46571
Surr: DNOP	102	70-130	%Rec	1	8/5/2019 11:02:28 AM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/6/2019 1:51:02 PM	46565
Surr: BFB	98.8	73.8-119	%Rec	1	8/6/2019 1:51:02 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 11

#### Lab Order **1908018**

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP2 @ Bottom

 Project:
 Jalmat 225
 Collection Date: 7/31/2019 12:30:00 PM

 Lab ID:
 1908018-002
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: CJS
Chloride	110	60	mg/Kg	20	8/5/2019 11:24:16 PM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: BRM
Diesel Range Organics (DRO)	170	9.7	mg/Kg	1	8/6/2019 11:17:09 AM	46571
Motor Oil Range Organics (MRO)	140	48	mg/Kg	1	8/6/2019 11:17:09 AM	46571
Surr: DNOP	103	70-130	%Rec	1	8/6/2019 11:17:09 AM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	:: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/5/2019 9:29:00 PM	46565
Surr: BFB	110	73.8-119	%Rec	1	8/5/2019 9:29:00 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 11

#### Lab Order 1908018

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP3 @ Bottom

 Project:
 Jalmat 225
 Collection Date: 7/31/2019 1:15:00 PM

 Lab ID:
 1908018-003
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: CJS
Chloride	110	60	mg/Kg	20	8/5/2019 11:36:40 PM	46597
EPA METHOD 8015M/D: DIESEL RANGE OR				Analyst	: BRM	
Diesel Range Organics (DRO)	26	9.0	mg/Kg	1	8/5/2019 2:25:46 PM	46571
Motor Oil Range Organics (MRO)	46	45	mg/Kg	1	8/5/2019 2:25:46 PM	46571
Surr: DNOP	102	70-130	%Rec	1	8/5/2019 2:25:46 PM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/5/2019 9:52:35 PM	46565
Surr: BFB	94.5	73.8-119	%Rec	1	8/5/2019 9:52:35 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 11

#### Lab Order **1908018**

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: Spoils

 Project:
 Jalmat 225
 Collection Date: 7/31/2019 11:30:00 AM

 Lab ID:
 1908018-004
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: CJS
Chloride	100	60		mg/Kg	20	8/5/2019 11:49:05 PM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: BRM
Diesel Range Organics (DRO)	890	94		mg/Kg	10	8/5/2019 2:48:18 PM	46571
Motor Oil Range Organics (MRO)	680	470		mg/Kg	10	8/5/2019 2:48:18 PM	46571
Surr: DNOP	0	70-130	S	%Rec	10	8/5/2019 2:48:18 PM	46571
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/5/2019 10:16:09 PM	46565
Surr: BFB	94.8	73.8-119		%Rec	1	8/5/2019 10:16:09 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

ole pH Not In Range
Page 4 of 11

#### Lab Order **1908018**

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: N Wall @ 1'

**Project:** Jalmat 225
 Collection Date: 7/31/2019 2:20:00 PM

 **Lab ID:** 1908018-005
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: CJS
Chloride	ND	60	mg/Kg	20	8/6/2019 12:26:19 AM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: BRM
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	8/5/2019 3:10:42 PM	46571
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	8/5/2019 3:10:42 PM	46571
Surr: DNOP	97.4	70-130	%Rec	1	8/5/2019 3:10:42 PM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/5/2019 10:39:44 PM	46565
Surr: BFB	90.9	73.8-119	%Rec	1	8/5/2019 10:39:44 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 11

#### Lab Order 1908018

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: NW Sidewall

**Project:** Jalmat 225
 Collection Date: 7/31/2019 2:30:00 PM

 **Lab ID:** 1908018-006
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/6/2019 12:38:44 AM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: BRM
Diesel Range Organics (DRO)	100	10	mg/Kg	1	8/6/2019 11:41:13 AM	46571
Motor Oil Range Organics (MRO)	180	50	mg/Kg	1	8/6/2019 11:41:13 AM	46571
Surr: DNOP	104	70-130	%Rec	1	8/6/2019 11:41:13 AM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/5/2019 11:03:19 PM	46565
Surr: BFB	92.1	73.8-119	%Rec	1	8/5/2019 11:03:19 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

porting Limit Page 6 of 11

#### Lab Order **1908018**

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SW Sidewall

 Project:
 Jalmat 225
 Collection Date: 7/31/2019 2:55:00 PM

 Lab ID:
 1908018-007
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	t: CJS
Chloride	ND	60	mg/Kg	20	8/6/2019 1:15:58 AM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: BRM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	8/5/2019 3:55:40 PM	46571
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/5/2019 3:55:40 PM	46571
Surr: DNOP	99.0	70-130	%Rec	1	8/5/2019 3:55:40 PM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	t: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/5/2019 11:26:55 PM	46565
Surr: BFB	89.1	73.8-119	%Rec	1	8/5/2019 11:26:55 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 11

#### Lab Order **1908018**

Date Reported: 8/7/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SE Sidewall

**Project:** Jalmat 225
 Collection Date: 7/31/2019 2:40:00 PM

 **Lab ID:** 1908018-008
 Matrix: SOIL
 Received Date: 8/1/2019 9:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	t: CJS
Chloride	ND	60	mg/Kg	20	8/6/2019 1:28:23 AM	46597
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: BRM
Diesel Range Organics (DRO)	23	9.6	mg/Kg	1	8/5/2019 4:18:14 PM	46571
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/5/2019 4:18:14 PM	46571
Surr: DNOP	79.0	70-130	%Rec	1	8/5/2019 4:18:14 PM	46571
EPA METHOD 8015D: GASOLINE RANGE					Analyst	t: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/5/2019 11:50:24 PM	46565
Surr: BFB	101	73.8-119	%Rec	1	8/5/2019 11:50:24 PM	46565

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1908018

07-Aug-19

Client: Safety & Environmental Solutions

**Project:** Jalmat 225

Sample ID: MB-46597 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 46597 RunNo: 61924

Prep Date: 8/5/2019 Analysis Date: 8/5/2019 SeqNo: 2100044 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-46597 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 46597 RunNo: 61924

Prep Date: 8/5/2019 Analysis Date: 8/5/2019 SeqNo: 2100046 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 15 1.5 15.00 0 97.8 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

5.1

WO#: **1908018** 

07-Aug-19

Client: Safety & Environmental Solutions

**Project:** Jalmat 225

Sample ID: LCS-46571	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 46571	RunNo: 61865	
Prep Date: 8/2/2019	Analysis Date: 8/5/2019	SeqNo: 2098678	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	50 10 50.00	0 100 63.9	124
Surr: DNOP	4.5 5.000	89.1 70	130
Sample ID: MB-46571	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 46571	RunNo: 61865	
Prep Date: 8/2/2019	Analysis Date: 8/5/2019	SeqNo: <b>2098679</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10		
Motor Oil Range Organics (MRO)	ND 50		
Surr: DNOP	9.4 10.00	94.3 70	130
Sample ID: LCS-46595	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 46595	RunNo: 61925	
Prep Date: 8/5/2019	Analysis Date: 8/6/2019	SeqNo: <b>2100152</b>	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual

Sample ID: MB-46595	SampTy	pe: <b>M</b> I	BLK	Test	tCode: E	PA Method	8015M/D: Die	sel Range	organics	
Client ID: PBS	Batch	ID: <b>46</b>	5595	R	RunNo: 6	1925				
Prep Date: 8/5/2019	Analysis Da	ite: 8	/6/2019	S	SeqNo: 2	100153	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	70	130			

5.000

70

130

102

#### Qualifiers:

Surr: DNOP

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1908018

07-Aug-19

**Client:** Safety & Environmental Solutions

**Project:** Jalmat 225

Surr: BFB

Sample ID: LCS-46565 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 46565 RunNo: 61895 Prep Date: 8/2/2019 Analysis Date: 8/5/2019 SeqNo: 2099101 Units: mg/Kg PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual 23 5.0 25.00 Λ 92.0 80.1 123

Gasoline Range Organics (GRO) Surr: BFB 1100 1000 106 73.8 119

Sample ID: MB-46565 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 46565 RunNo: 61895

Prep Date: 8/2/2019 Analysis Date: 8/5/2019 SeqNo: 2099102 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit Analyte Result PQL HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0

94.9

73.8

119

Sample ID: MB-46580 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

1000

Client ID: PBS Batch ID: 46580 RunNo: 61943

950

Prep Date: 8/5/2019 Analysis Date: 8/7/2019 SeqNo: 2100730 Units: %Rec

PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual

Surr: BFB 980 1000 98.1 73.8 119

Sample ID: LCS-46580 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 46580 RunNo: 61943

Analysis Date: 8/7/2019 SeqNo: 2100749 Units: %Rec Prep Date: 8/5/2019

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1100 1000 Surr: BFB 108 73.8 119

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 11 of 11



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

# Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107

	Website: www	w.hallenvironmenta	l.com		
Client Name: Safety Env Solutions	Work Order Num	ber: 1908018		RcptNo: 1	
Received By: Leah Baca	8/1/2019 9:05:00 A	M	Load Base	<b>t</b>	
Completed By: Erin Melendrez	8/1/2019 10:47:10	АМ	Look Base		
Reviewed By: ENH	8/1/19				
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
Log In					
Was an attempt made to cool the samp	oles?	Yes 🗸	No 🗔	NA 🗔	
4. Were all samples received at a tempera	ature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA $\square$	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated to	est(s)?	Yes 🗸	No 🗆		
7. Are samples (except VOA and ONG) pro	operly preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes	No 🗸	NA $\square$	
9. VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials 🗸	)
10. Were any sample containers received b	oroken?	Yes 🗀	No 🗸	# of preserved	
11. Does paperwork match bottle labels?		Yes 🗸	No 🗆	bottles checked for pH:	unless noted)
(Note discrepancies on chain of custody 12. Are matrices correctly identified on Chai	35	Yes 🗸	No 🗆	Adjusted?	. uniess noteu)
13. Is it clear what analyses were requested	9.53	Yes 🗸	No 🗆		
14. Were all holding times able to be met?	-	Yes 🗸	No 🗆	Checked by: DA	0 8/1/19
(If no, notify customer for authorization.)				-	
Special Handling (if applicable)					
15. Was client notified of all discrepancies	with this order?	Yes	No 🗌	NA 🗹	
Person Notified:	Date:				
By Whom:	Via:	eMail F	Phone  Fax	In Person	
Regarding:					
Client Instructions:					
16 Additional remarks:					

Additional remarks:

17. Cooler Information

POOLET HITOTT	Hation					
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY	www.nailenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	(4) · 建	O <sup>†</sup> )	(SM	) () () () () () () () () () ()	(f.81 (f.80) 7528 (A) (A)	(GER)	A + MTI (Metho (Metho (Metho)	ТРН РАН' РАН' ВОВ' 8260 8260 8270	2	7	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			<u> </u>				Remarks: * Please Put Spoils on a		All (4 U/10) Change from (48 hour to 5 Day Rush per 3 K1) This serves as notice of this possibility. My sub-contracted data will be clearly notated on the analytical report.
Turn-Around Time: Standard Flow Standard Flow Standard Project Name:	Leighet 225		MQU-19-603	Project Manager:	Carlo	1-0x	On Ice: These Invo	Temperature <sup>(2)</sup> 08 ⋅ 0.2 = 0.6C	ive		704 -001	7an -002	-003	7an - 04	Tan -005	Jan -006	76 C - 007	Ja. R 008		Received by:)  Received by:  7/3/19 1600	Cowier	人しんでついる。 る   「「
Chain-of-Custody Record	Mailing Address: E Class	60000 NM 882.50	75-397-0510		QA/QC Package:	ביייין (י מון למוויממוטון)	□ Other	□ EDD (Type)	Date Time Matrix Sample Request ID		2/21 121.06.50il 5p1 0 4'	2/41 12130 \ 502 @ 12050W.		7/31 11:20 < SOULLS	1/21 2120 Mr. Wall @ 11	2/31 2130 1147 481940001		1/31 2040 L St Sicre wall		C.	Time: Relinquished by:	- F

70/14

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 28, 2019

Rebecca Pons Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241

TEL: (575) 397-0510 FAX: (575) 393-4388

RE: 225 Flowline OrderNo.: 1908B96

#### Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/21/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1908B96**

Date Reported: 8/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP2 E Wall (B)

**Project:** 225 Flowline **Collection Date:** 8/16/2019

**Lab ID:** 1908B96-001 **Matrix:** SOIL **Received Date:** 8/21/2019 9:02:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	8/28/2019 7:09:58 AM	47105
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	BRM
Diesel Range Organics (DRO)	86	9.4	mg/Kg	1	8/26/2019 12:24:23 PM	46960
Motor Oil Range Organics (MRO)	79	47	mg/Kg	1	8/26/2019 12:24:23 PM	46960
Surr: DNOP	83.6	70-130	%Rec	1	8/26/2019 12:24:23 PM	46960
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/22/2019 7:57:34 PM	46958
Surr: BFB	96.5	77.4-118	%Rec	1	8/22/2019 7:57:34 PM	46958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 6

#### Lab Order **1908B96**

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/28/2019

**CLIENT:** Safety & Environmental Solutions Client Sample ID: W SW #1 (B)

**Project:** 225 Flowline Collection Date: 8/16/2019

**Lab ID:** 1908B96-002 **Matrix:** SOIL **Received Date:** 8/21/2019 9:02:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 300.0: ANIONS
 Chloride
 ND
 60
 mg/Kg
 20
 8/28/2019 7:22:23 AM
 47105

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

#### Lab Order 1908B96

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/28/2019

CLIENT: Safety & Environmental Solutions Client Sample ID: E. SE @ 5'(B)

**Project:** 225 Flowline **Collection Date:** 8/16/2019

**Lab ID:** 1908B96-003 **Matrix:** SOIL **Received Date:** 8/21/2019 9:02:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: CAS
Chloride	ND	60	mg/Kg	20	8/28/2019 7:34:48 AM	47105

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

ting Limit Page 3 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B96** 

28-Aug-19

Client: Safety & Environmental Solutions

**Project:** 225 Flowline

Sample ID: MB-47105 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 47105 RunNo: 62447

Prep Date: 8/27/2019 Analysis Date: 8/28/2019 SeqNo: 2124915 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-47105 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 47105 RunNo: 62447

Prep Date: 8/27/2019 Analysis Date: 8/28/2019 SeqNo: 2124916 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 95.3 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1908B96

28-Aug-19

**Client:** Safety & Environmental Solutions

**Project:** 225 Flowline

Sample ID: LCS-46960 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 46960 RunNo: 62322 Prep Date: 8/21/2019 Analysis Date: 8/22/2019 SeqNo: 2117903 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Diesel Range Organics (DRO) 10 0 53 50.00 107 63.9 124

Surr: DNOP 4.7 5.000 94.8 130

Sample ID: MB-46960 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 46960 RunNo: 62322

Prep Date: 8/21/2019 Analysis Date: 8/22/2019 SeqNo: 2117906 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit Analyte Result PQL HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10

Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 9.5 10.00 95.5 70 130

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1908B96** 

28-Aug-19

Client: Safety & Environmental Solutions

**Project:** 225 Flowline

Sample ID: MB-46958 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 46958 RunNo: 62340

Prep Date: 8/21/2019 Analysis Date: 8/22/2019 SeqNo: 2119209 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 910 1000 91.3 77.4 118

Sample ID: LCS-46958 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 46958 RunNo: 62340

1000

Prep Date: 8/21/2019 Analysis Date: 8/22/2019 SeqNo: 2119210 Units: mg/Kg

1000

LowLimit Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual 80 Gasoline Range Organics (GRO) 21 5.0 25.00 0 84.5 120

103

77.4

118

#### Qualifiers:

Surr: BFB

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client N	Name: Safety En	v Solutions	Work	Order Num	ber: 1908B96		RcptN	o: <b>1</b>
Receive	d By: Isaiah O	rtiz	8/21/20	19 9:02:00	АМ	I	2/	
Comple	ted By: Erin Mel	endrez	8/21/20	19 10:13:16	6 AM	I U	5	
Reviewe	ed By:		8/	21/19				
Chain e	of Custody							
1. Is Ch	ain of Custody com	plete?			Yes 🗹	No 🗌	Not Present	
2. How	was the sample deli	vered?			Courier			
Log In	,							
	an attempt made to	cool the sam	oles?		Yes 🗸	No 🗌	NA 🗆	
4. Were	all samples receive	d at a temper	ature of >0° C	to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
5. Samp	ole(s) in proper conta	ainer(s)?			Yes 🗸	No 🗌		
6. Suffici	ient sample volume	for indicated t	est(s)?		Yes 🗸	No 🗌		
7. Are sa	amples (except VOA	and ONG) p	operly preserve	ed?	Yes 🗸	No 🗌		
8. Was p	reservative added t	o bottles?			Yes	No 🗸	NA 🗌	
9. VOA v	vials have zero head	Ispace?			Yes	No 🗌	No VOA Vials 🗹	
10. Were	any sample contain	ers received	oroken?		Yes 🗀	No 🗸	# of preserved	
11 Doos	paperwork match bo	ottle lebele?			Yes 🗸	No 🗌	bottles checked	
	discrepancies on ch		<b>(</b> )		res 💌	NO L	for pH: (<2 g	or >12 unless noted)
12. Are m	atrices correctly ide	ntified on Cha	in of Custody?		Yes 🗸	No 🗌	Adjusted?	
13. Is it cl	ear what analyses w	ere requested	1?		Yes 🗸	No 🗌		
	all holding times abl		)		Yes 🗸	No 🗌	Checked by:	DAD 8/21/19
	Handling (if ap							
ne saerosamo	client notified of all	No. 10 10 10 10 10 10 10 10 10 10 10 10 10	with this order?	•	Yes	No 🗌	NA 🗹	
	Person Notified:			Date	: [	MANAGEMENT AND		
	By Whom:			Via:	eMail	Phone  Fax	☐ In Person	
	Regarding:					for the contract of the thorough the contract		
	Client Instructions:							
16. Addit	ional remarks:							
17. <u>Coo</u> l	er Information							
	ooler No Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By		
1 2	2.7	Good	Yes Yes					
_	2.3	Good	100					

Mailing Address:   Project Name:   Project N	Chi	ain-of	10 Cu	Chain-of-Custody Record	cord	Turn-Around Time:	Ime:	Jan		199	I		Ш		RO	2	FZ	
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	Phone #:	575	-39	7-0510		MA	-12 19-	003					Analy	sis Re	ednest			
	email or Fa	:#x				Project Mana	ıger:					-	<sup>⊅</sup> O	H	(11	Date of		
	QA/QC Pack	(age:				<u></u>						SIA	S '*		ıəsq			
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