

**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, NAB1904453396**

**March 27, 2020**



**Prepared for:**

**Maverick Resources  
PO Box 678  
Andrews, TX**

**By:**

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

**I. Contacts**

Representative	Company	Telephone	E-mail
Thomas Haigood	Maverick Resources	432-701-7802	Thomas.haigood@mavresources.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

**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. 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 Crude oil. 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:

Table 1 Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l	Constituent	Method*	Limit**
TDS			
<50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015B	100 mg/kg
	BTEX	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 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015B	2,500 mg/kg
	BTEX	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
	BTEX	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 to 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	GRO	BTEX
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, then transported to Sundance for disposal. 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. 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. Closure Denial

In September of 2019, SESI personnel sent in a closure report to NMOCD based on the approved work plan completion. However, NMOCD denied the closure plan citing the need for TPH contaminates in the pasture to be excavated below a level of 100 mg/kg. (Email included in this report). Therefore, SESI personnel returned to the Jalmat #225 to perform the requested work.

#### VII. Work Performed to Fulfill Closure Denial Request

On March 17, 2020, SESI personnel begin excavation of the hotspots reported in the closure denial. SESI excavated 3 different areas in order to meet the NMOCD established criteria of <100 mg/kg of TPH. Excavation 1 was completed to a depth of 3 feet to address the concerns in the closure denial including TT-5 @ 2ft and E Sidewall @ 2ft. Excavation 2 is also completed to a depth of 3 feet to addresses the closure denial concerns with SP2 @ Bottom and SP2 East Wall. And, Excavation 3 was completed to a depth of 5 feet to address the SP1 @ 4ft concern. These concerns were outlined in an email dated 10/15/2019 and again this month between NMOCD, SESI, and Maverick. Once excavation was complete, confirmation samples were taken to ensure compliance with the closure criteria. Excavation 1 samples were labeled 1-, Excavation 2 samples were labeled 2-, and Excavation 3 samples were labeled 3-. The samples were taken to Hall Laboratory and the results are outlined in the table below:

SAMPLE ID	Chloride	DRO	MRO	GRO
1-SP1 @ BTM 3'	ND	ND	ND	ND
1-SP2 @ E WALL	ND	ND	ND	ND
1-SP3 @ BTM 3'	ND	ND	ND	ND
1-SP4 @ S WALL	ND	ND	ND	ND
1-SP5 @ N WALL	ND	ND	ND	ND
1-SP6 @ W WALL	ND	ND	ND	ND
2-SP1 @ BTM 3'	ND	ND	ND	ND
2-SP2 @ N WALL	ND	ND	ND	ND
2-SP3 @ S WALL	ND	ND	ND	ND
2-SP4 @ E WALL	ND	ND	ND	ND
2-SP5 @ W WALL	ND	ND	ND	ND
2-SP6 @ BTM 3'	ND	ND	ND	ND
3-SP1 @ BTM 5'	ND	ND	ND	ND
3-SP2 @ N WALL	64	ND	ND	ND
3-SP3 @ E WALL	63	ND	ND	ND
3-SP4 @ W WALL	63	ND	ND	ND
3-SP5 @ S WALL	61	ND	ND	ND

## **VIII. 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 re-vegetation.

Due to closure denial of the completed work, SESI personnel returned to the Jalmat #225 and completed all the requested excavation as outlined in the closure denial email from NMOCD. An additional 4,600 ft<sup>3</sup> of contaminated material was removed and disposed of in a NMOCD approved facility. Confirmation samples were obtained and the results confirmed that all contaminants were removed to meet the criteria of <600 mg/kg Chlorides and <100 mg/kg TPH.

Therefore, since all requested criteria have been met, SESI, on behalf of Maverick Resources respectfully submits this closure report for your consideration.

## **IX. Supporting Documentation**

Initial Remediation and Delineation Site Map  
Map Addressing Closure Denial Concerns  
Original Remediation Photos  
Photos of the Closure Denial Excavations (3)  
Closure Denial Email  
C-141, page 6  
Lab Analysis



**Legend**

- Center Excavation
- Final Samples
- Test Trenches
- Excavation





# Maverick Natural Resources, Jalmat #225

Lea County, NM  
1RP-5365

## Legend

- Confirmation samples points 3-17-20
- Excavation 1 (Red), Excavation 2 (Green), Excavation 3 (Purple)

## MAP ADDRESSING OCD CLOSURE DENIAL





**Breitburn  
Jalmat #225**



Excavation NE at Flowline (source)



West Sidewall



Entire excavation (center at 5' bgs)

**Breitburn  
Jalmat #225  
Completion**













**From:** [Hamlet, Robert, EMNRD](#)  
**To:** [Rebecca Pons](#)  
**Cc:** [Bratcher, Mike, EMNRD](#); [Venegas, Victoria, EMNRD](#); [Mann, Ryan](#)  
**Subject:** Closure Denied - Breitburn - Jalmat Field Yates Unit 225 - (1RP-5365) 2-7-2019  
**Date:** Tuesday, October 15, 2019 7:43:44 AM  
**Attachments:** [Closure Denied - Breitburn - Jalmat Field Yates Unit 225 - \(1RP-5365\) 10.11.19.pdf](#)

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**Rebecca,**

We have received your closure report and final C-141 for **1RP-5365 Jalmat Field Yates Unit 225**, thank you. This closure is denied.

The entire spill is in the pasture. The closure report says, "The impacted area was excavated to depths whereby soil screening levels for chloride constituency >600 ppm, and TPH screening levels of >1000 ppm". The TPH in the pasture needs to be excavated to a level <100 mg/kg.

Please continue the excavation on the following sample point locations until they are under the 100 mg/kg limit in the pasture area or until they contain a minimum of four feet of non-waste containing, uncontaminated, earthen material:

- TT-5@2ft
- SP1@4ft
- SP2@Bottom
- E Sidewall@2ft
- SP2 East Wall

Please let me know if you have any further questions.

Regards,

Robert J Hamlet  
State of New Mexico  
Energy, Minerals, and Natural Resources  
Oil Conservation Division  
811 S. First St., Artesia NM 88210  
(575) 748-1283  
[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Incident ID	NAB1904453396
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.

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

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Thomas Haigood Title: Permian HSE Specialist

Signature: 

Date: 09/06/2019

email: Thomas.haigood@maverickresources.com

Telephone: (432) 701-7802

**OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-1 Surface

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	730	60		mg/Kg	20	3/18/2019 4:31:53 PM	43722
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative 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	

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-1 1ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	640	61		mg/Kg	20	3/18/2019 5:09:06 PM	43722
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative 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	

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-1 2ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1000	60		mg/Kg	20	3/18/2019 9:17:16 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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
<b>EPA METHOD 8021B: VOLATILES</b>							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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-1 3ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	560	59		mg/Kg	20	3/18/2019 10:19:20 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/19/2019 1:39:55 PM	43711
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2019 1:39:55 PM	43711
Surr: DNOP	66.6	70-130	S	%Rec	1	3/19/2019 1:39:55 PM	43711
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative 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	

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-1 4ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	520	60		mg/Kg	20	3/18/2019 10:31:44 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	14	9.9		mg/Kg	1	3/19/2019 2:03:58 PM	43711
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/19/2019 2:03:58 PM	43711
Surr: DNOP	68.0	70-130	S	%Rec	1	3/19/2019 2:03:58 PM	43711
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative 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	

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-2 Surface

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1500	60		mg/Kg	20	3/18/2019 10:44:09 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative 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	



## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-2 1ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	210	61		mg/Kg	20	3/18/2019 10:56:34 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative 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	

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-2 2ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	130	60		mg/Kg	20	3/18/2019 11:08:59 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	61	9.9		mg/Kg	1	3/19/2019 2:52:23 PM	43711
Motor Oil Range Organics (MRO)	57	50		mg/Kg	1	3/19/2019 2:52:23 PM	43711
Surr: DNOP	66.3	70-130	S	%Rec	1	3/19/2019 2:52:23 PM	43711
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-3 Surface

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	960	60		mg/Kg	20	3/18/2019 11:21:24 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-3 1ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	410	60		mg/Kg	20	3/18/2019 11:33:49 PM	43728
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-4 Surface

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	300	60		mg/Kg	20	3/19/2019 12:03:58 PM	43755
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-4 1ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	60		mg/Kg	20	3/19/2019 12:16:23 PM	43755
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	31	9.5		mg/Kg	1	3/19/2019 3:40:59 PM	43711
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2019 3:40:59 PM	43711
Surr: DNOP	64.9	70-130	S	%Rec	1	3/19/2019 3:40:59 PM	43711
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-5 Surface

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	210	60		mg/Kg	20	3/19/2019 12:28:48 PM	43755
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-5 1ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	860	60		mg/Kg	20	3/19/2019 12:41:12 PM	43755
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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



## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: TT-5 2ft

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	300	60		mg/Kg	20	3/19/2019 12:53:37 PM	43755
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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

## Analytical Report

Lab Order 1903729

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: Background

Project: Gasmat 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	60		mg/Kg	20	3/19/2019 1:30:51 PM	43755
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative 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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	500	60		mg/Kg	20	8/5/2019 11:11:52 PM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	110	60		mg/Kg	20	8/5/2019 11:24:16 PM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	110	60		mg/Kg	20	8/5/2019 11:36:40 PM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	100	60		mg/Kg	20	8/5/2019 11:49:05 PM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	8/6/2019 12:26:19 AM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	8/6/2019 12:38:44 AM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	8/6/2019 1:15:58 AM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908018

Date Reported: 8/7/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	8/6/2019 1:28:23 AM	46597
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1908018****07-Aug-19****Client:** Safety & Environmental Solutions**Project:** Jalmat 225

Sample ID: <b>MB-46597</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46597</b>	RunNo: <b>61924</b>								
Prep Date: <b>8/5/2019</b>	Analysis Date: <b>8/5/2019</b>	SeqNo: <b>2100044</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46597</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46597</b>	RunNo: <b>61924</b>								
Prep Date: <b>8/5/2019</b>	Analysis Date: <b>8/5/2019</b>	SeqNo: <b>2100046</b>	Units: <b>mg/Kg</b>							
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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908018

07-Aug-19

**Client:** Safety & Environmental Solutions**Project:** Jalmat 225

Sample ID: <b>LCS-46571</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46571</b>	RunNo: <b>61865</b>								
Prep Date: <b>8/2/2019</b>	Analysis Date: <b>8/5/2019</b>	SeqNo: <b>2098678</b>			Units: <b>mg/Kg</b>					
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: <b>MB-46571</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46571</b>	RunNo: <b>61865</b>								
Prep Date: <b>8/2/2019</b>	Analysis Date: <b>8/5/2019</b>	SeqNo: <b>2098679</b>			Units: <b>mg/Kg</b>					
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: <b>LCS-46595</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46595</b>	RunNo: <b>61925</b>								
Prep Date: <b>8/5/2019</b>	Analysis Date: <b>8/6/2019</b>	SeqNo: <b>2100152</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		102	70	130			

Sample ID: <b>MB-46595</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46595</b>	RunNo: <b>61925</b>								
Prep Date: <b>8/5/2019</b>	Analysis Date: <b>8/6/2019</b>	SeqNo: <b>2100153</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1908018****07-Aug-19****Client:** Safety & Environmental Solutions**Project:** Jalmat 225

Sample ID: <b>LCS-46565</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46565</b>	RunNo: <b>61895</b>								
Prep Date: <b>8/2/2019</b>	Analysis Date: <b>8/5/2019</b>	SeqNo: <b>2099101</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.0	80.1	123			
Surr: BFB	1100		1000		106	73.8	119			

Sample ID: <b>MB-46565</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46565</b>	RunNo: <b>61895</b>								
Prep Date: <b>8/2/2019</b>	Analysis Date: <b>8/5/2019</b>	SeqNo: <b>2099102</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.9	73.8	119			

Sample ID: <b>MB-46580</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46580</b>	RunNo: <b>61943</b>								
Prep Date: <b>8/5/2019</b>	Analysis Date: <b>8/7/2019</b>	SeqNo: <b>2100730</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.1	73.8	119			

Sample ID: <b>LCS-46580</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46580</b>	RunNo: <b>61943</b>								
Prep Date: <b>8/5/2019</b>	Analysis Date: <b>8/7/2019</b>	SeqNo: <b>2100749</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	73.8	119			

**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 Quantitative 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 Name: Safety Env Solutions

Work Order Number: 1908018

RcptNo: 1

Received By: Leah Baca

8/1/2019 9:05:00 AM

Leah Baca

Completed By: Erin Melendrez

8/1/2019 10:47:10 AM

EM

Reviewed By: ENM

8/1/19

Chain of Custody1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? CourierLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 8/1/19

Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Yes			









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

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	690	60		mg/Kg	20	8/16/2019 2:06:29 PM	46848
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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		%Rec	1	8/17/2019 1:03:23 PM	46851
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	540	60		mg/Kg	20	8/16/2019 2:43:41 PM	46848
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	920	60		mg/Kg	20	8/16/2019 3:20:56 PM	46848
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	1400	95		mg/Kg	10	8/19/2019 12:14:00 AM	46851
Motor Oil Range Organics (MRO)	670	480		mg/Kg	10	8/19/2019 12:14:00 AM	46851
Surr: DNOP	0	70-130	S	%Rec	10	8/19/2019 12:14:00 AM	46851
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	380	60		mg/Kg	20	8/16/2019 3:33:21 PM	46848
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	380	60		mg/Kg	20	8/16/2019 3:45:46 PM	46848
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	74	60		mg/Kg	20	8/16/2019 3:58:10 PM	46848
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908772

Date Reported: 8/20/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	700	61		mg/Kg	20	8/16/2019 8:43:34 PM	46862
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908772

20-Aug-19

**Client:** Safety & Environmental Solutions**Project:** Mav 19 003

Sample ID: <b>MB-46848</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46848</b>	RunNo: <b>62203</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/16/2019</b>	SeqNo: <b>2113198</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	4.5								

Sample ID: <b>LCS-46848</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46848</b>	RunNo: <b>62203</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/16/2019</b>	SeqNo: <b>2113199</b>			Units: <b>mg/Kg</b>					
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: <b>MB-46862</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46862</b>	RunNo: <b>62203</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/16/2019</b>	SeqNo: <b>2113238</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46862</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46862</b>	RunNo: <b>62203</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/16/2019</b>	SeqNo: <b>2113239</b>			Units: <b>mg/Kg</b>					
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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908772

20-Aug-19

**Client:** Safety & Environmental Solutions**Project:** Mav 19 003

Sample ID: <b>MB-46851</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46851</b>	RunNo: <b>62213</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/17/2019</b>	SeqNo: <b>2112564</b> Units: <b>mg/Kg</b>								
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	9.2		10.00		92.3	70	130			

Sample ID: <b>MB-46852</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46852</b>	RunNo: <b>62213</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/17/2019</b>	SeqNo: <b>2112565</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.0	70	130			

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

Sample ID: <b>LCS-46852</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46852</b>	RunNo: <b>62213</b>								
Prep Date: <b>8/16/2019</b>	Analysis Date: <b>8/17/2019</b>	SeqNo: <b>2112568</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908772

20-Aug-19

**Client:** Safety & Environmental Solutions**Project:** Mav 19 003

Sample ID: <b>MB-46816</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46816</b>	RunNo: <b>62170</b>								
Prep Date: <b>8/15/2019</b>	Analysis Date: <b>8/16/2019</b>	SeqNo: <b>2112385</b> Units: <b>mg/Kg</b>								
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: <b>LCS-46816</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46816</b>	RunNo: <b>62170</b>								
Prep Date: <b>8/15/2019</b>	Analysis Date: <b>8/16/2019</b>	SeqNo: <b>2112386</b> Units: <b>mg/Kg</b>								
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			
Surr: BFB	1000		1000		104	77.4	118			

**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 Quantitative 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 Name: **Safety Env Solutions**Work Order Number: **1908772**RcptNo: **1**Received By: **Desiree Dominguez**

8/14/2019 9:00:00 AM

Completed By: **Erin Melendrez**

8/14/2019 10:25:35 AM

Reviewed By: **LB**

8/14/19

*DD*  
*EM*

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 8/14/19

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

[illegible]

Remarks:

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
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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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1908B96

Date Reported: 8/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/28/2019 7:09:58 AM	47105
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1908B96

Date Reported: 8/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order 1908B96

Date Reported: 8/28/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: 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.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908B96

28-Aug-19

**Client:** Safety & Environmental Solutions**Project:** 225 Flowline

Sample ID: <b>MB-47105</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>47105</b>	RunNo: <b>62447</b>								
Prep Date: <b>8/27/2019</b>	Analysis Date: <b>8/28/2019</b>	SeqNo: <b>2124915</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-47105</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>47105</b>	RunNo: <b>62447</b>								
Prep Date: <b>8/27/2019</b>	Analysis Date: <b>8/28/2019</b>	SeqNo: <b>2124916</b>	Units: <b>mg/Kg</b>							
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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908B96

28-Aug-19

**Client:** Safety & Environmental Solutions**Project:** 225 Flowline

Sample ID: <b>LCS-46960</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>46960</b>		RunNo: <b>62322</b>							
Prep Date: <b>8/21/2019</b>	Analysis Date: <b>8/22/2019</b>		SeqNo: <b>2117903</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	107	63.9	124			
Surr: DNOP	4.7		5.000		94.8	70	130			

Sample ID: <b>MB-46960</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>46960</b>		RunNo: <b>62322</b>							
Prep Date: <b>8/21/2019</b>	Analysis Date: <b>8/22/2019</b>		SeqNo: <b>2117906</b>		Units: <b>mg/Kg</b>					
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	9.5		10.00		95.5	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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1908B96

28-Aug-19

**Client:** Safety & Environmental Solutions**Project:** 225 Flowline

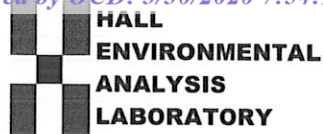
Sample ID: <b>MB-46958</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46958</b>	RunNo: <b>62340</b>								
Prep Date: <b>8/21/2019</b>	Analysis Date: <b>8/22/2019</b>	SeqNo: <b>2119209</b>	Units: <b>mg/Kg</b>							
Analyte	Result	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: <b>LCS-46958</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46958</b>	RunNo: <b>62340</b>								
Prep Date: <b>8/21/2019</b>	Analysis Date: <b>8/22/2019</b>	SeqNo: <b>2119210</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.5	80	120			
Surr: BFB	1000		1000		103	77.4	118			

**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 Quantitative 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  
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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 Number: **1908B96**RcptNo: **1**Received By: **Isaiah Ortiz**

8/21/2019 9:02:00 AM

Completed By: **Erin Melendrez**

8/21/2019 10:13:16 AM

Reviewed By: *LB**8/21/19**IOX*  
*uug*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: *DAD 8/21/19*

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

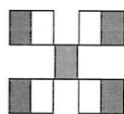
16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes			
2	2.3	Good	Yes			

Chain-of-Custody Record									
Client: <u>SESI</u>		Turn-Around Time: <u>5 day</u> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush							
Mailing Address:		Project Name:							
<u>703 E Clinton Highway, NM</u>		<u>225 Florence</u>							
Phone #: <u>575-397-0510</u>		Project #:							
email or Fax#:		<u>MMV 19-003</u>							
QA/QC Package:		Project Manager:							
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		<u>Rebecca Pons</u>							
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____		Sampler: <u>RP005</u>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
<input type="checkbox"/> EDD (Type) _____		# of Coolers: <u>2</u>		Cooler Temp (including CF): <u>28-0.1 (C)</u> <u>2.7-C</u>					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	24-Hour Seal No. <u>1908396</u>			
<u>8/16</u>	<u>Am</u>	<u>SOIL</u>	<u>502 E 100th (B)</u>	<u>JAR</u>	<u>Loz</u>	<u>-001</u>			
<u>✓</u>	<u>✓</u>	<u>I</u>	<u>W. 50th (B)</u>	<u>JAR</u>	<u>Loz</u>	<u>-007</u>			
<u>✓</u>	<u>✓</u>	<u>I</u>	<u>E. 26th (B)</u>	<u>JAR</u>	<u>Loz</u>	<u>-003</u>			
Date:	Time:	Relinquished by:		Received by:		Date		Time	
<u>8/20</u>	<u>1530</u>	<u>Rebecca Pons</u>		<u>[Signature]</u>		<u>8/21/19</u>		<u>1530</u>	
Date:	Time:	Relinquished by:		Received by:		Date		Time	
<u>8/20/19</u>	<u>1900</u>	<u>[Signature]</u>		<u>[Signature]</u>		<u>8/21/19</u>		<u>0902</u>	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

[illegible]

Remarks:

Date:	Time:	Relinquished by:	Received by:	Via:	Date:	Time:
8/20	1530	Redman, C.D.	[Signature]		8/20/19	1530
8/20/19	1940	[Signature]	[Signature]	Carrie	8/21/19	0902





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

March 25, 2020

Bob Allen  
Safety & Environmental Solutions  
PO Box 1613  
Hobbs, NM 88241  
TEL: (575) 397-0510  
FAX: (575) 393-4388

RE: Maverick Jalmat 225 Flow Line

OrderNo.: 2003799

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 17 sample(s) on 3/18/2020 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](http://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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 1SP-1 Bottom 3ft.

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 9:00:00 AM

Lab ID: 2003799-001

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 3:11:10 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2020 6:01:38 PM	51192
Surr: BFB	95.8	70-130		%Rec	1	3/21/2020 6:01:38 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/19/2020 12:41:27 PM	51195
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/19/2020 12:41:27 PM	51195
Surr: DNOP	96.8	55.1-146		%Rec	1	3/19/2020 12:41:27 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 6:01:38 PM	51192
Toluene	ND	0.049		mg/Kg	1	3/21/2020 6:01:38 PM	51192
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2020 6:01:38 PM	51192
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2020 6:01:38 PM	51192
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	3/21/2020 6:01:38 PM	51192
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	3/21/2020 6:01:38 PM	51192
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	3/21/2020 6:01:38 PM	51192
Surr: Toluene-d8	99.2	70-130		%Rec	1	3/21/2020 6:01:38 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 1SP-2 East Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 9:10:00 AM

Lab ID: 2003799-002

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 3:48:12 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2020 7:27:11 PM	51192
Surr: BFB	99.7	70-130		%Rec	1	3/21/2020 7:27:11 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/19/2020 1:52:44 PM	51195
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2020 1:52:44 PM	51195
Surr: DNOP	95.7	55.1-146		%Rec	1	3/19/2020 1:52:44 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 7:27:11 PM	51192
Toluene	ND	0.050		mg/Kg	1	3/21/2020 7:27:11 PM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/21/2020 7:27:11 PM	51192
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2020 7:27:11 PM	51192
Surr: 1,2-Dichloroethane-d4	86.1	70-130		%Rec	1	3/21/2020 7:27:11 PM	51192
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	3/21/2020 7:27:11 PM	51192
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	3/21/2020 7:27:11 PM	51192
Surr: Toluene-d8	103	70-130		%Rec	1	3/21/2020 7:27:11 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 1SP-3 Bottom 3ft

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 9:25:00 AM

Lab ID: 2003799-003

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 4:00:32 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2020 8:52:42 PM	51192
Surr: BFB	97.0	70-130		%Rec	1	3/21/2020 8:52:42 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/19/2020 2:16:41 PM	51195
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2020 2:16:41 PM	51195
Surr: DNOP	96.4	55.1-146		%Rec	1	3/19/2020 2:16:41 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 8:52:42 PM	51192
Toluene	ND	0.050		mg/Kg	1	3/21/2020 8:52:42 PM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/21/2020 8:52:42 PM	51192
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2020 8:52:42 PM	51192
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%Rec	1	3/21/2020 8:52:42 PM	51192
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	3/21/2020 8:52:42 PM	51192
Surr: Dibromofluoromethane	96.8	70-130		%Rec	1	3/21/2020 8:52:42 PM	51192
Surr: Toluene-d8	99.8	70-130		%Rec	1	3/21/2020 8:52:42 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 1SP-4 South Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 9:40:00 AM

Lab ID: 2003799-004

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 4:12:53 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2020 9:21:18 PM	51192
Surr: BFB	97.5	70-130		%Rec	1	3/21/2020 9:21:18 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/19/2020 2:40:32 PM	51195
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2020 2:40:32 PM	51195
Surr: DNOP	96.5	55.1-146		%Rec	1	3/19/2020 2:40:32 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 9:21:18 PM	51192
Toluene	ND	0.050		mg/Kg	1	3/21/2020 9:21:18 PM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/21/2020 9:21:18 PM	51192
Xylenes, Total	ND	0.10		mg/Kg	1	3/21/2020 9:21:18 PM	51192
Surr: 1,2-Dichloroethane-d4	84.4	70-130		%Rec	1	3/21/2020 9:21:18 PM	51192
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	3/21/2020 9:21:18 PM	51192
Surr: Dibromofluoromethane	94.7	70-130		%Rec	1	3/21/2020 9:21:18 PM	51192
Surr: Toluene-d8	98.4	70-130		%Rec	1	3/21/2020 9:21:18 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 1SP-5 North Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 10:00:00 AM

Lab ID: 2003799-005

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 4:49:54 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/21/2020 9:49:55 PM	51192
Surr: BFB	98.6	70-130		%Rec	1	3/21/2020 9:49:55 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/19/2020 3:04:20 PM	51195
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2020 3:04:20 PM	51195
Surr: DNOP	98.1	55.1-146		%Rec	1	3/19/2020 3:04:20 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	3/21/2020 9:49:55 PM	51192
Toluene	ND	0.048		mg/Kg	1	3/21/2020 9:49:55 PM	51192
Ethylbenzene	ND	0.048		mg/Kg	1	3/21/2020 9:49:55 PM	51192
Xylenes, Total	ND	0.095		mg/Kg	1	3/21/2020 9:49:55 PM	51192
Surr: 1,2-Dichloroethane-d4	85.5	70-130		%Rec	1	3/21/2020 9:49:55 PM	51192
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	3/21/2020 9:49:55 PM	51192
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	3/21/2020 9:49:55 PM	51192
Surr: Toluene-d8	102	70-130		%Rec	1	3/21/2020 9:49:55 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 1SP-6 West Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 10:10:00 AM

Lab ID: 2003799-006

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 5:02:15 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2020 10:18:39 PM	51192
Surr: BFB	97.8	70-130		%Rec	1	3/21/2020 10:18:39 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/19/2020 3:28:07 PM	51195
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2020 3:28:07 PM	51195
Surr: DNOP	98.0	55.1-146		%Rec	1	3/19/2020 3:28:07 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 10:18:39 PM	51192
Toluene	ND	0.049		mg/Kg	1	3/21/2020 10:18:39 PM	51192
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2020 10:18:39 PM	51192
Xylenes, Total	ND	0.098		mg/Kg	1	3/21/2020 10:18:39 PM	51192
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	3/21/2020 10:18:39 PM	51192
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	3/21/2020 10:18:39 PM	51192
Surr: Dibromofluoromethane	100	70-130		%Rec	1	3/21/2020 10:18:39 PM	51192
Surr: Toluene-d8	103	70-130		%Rec	1	3/21/2020 10:18:39 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 2SP-1 Bottom 3ft.

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 11:20:00 AM

Lab ID: 2003799-007

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 5:14:35 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2020 10:47:18 PM	51192
Surr: BFB	96.0	70-130		%Rec	1	3/21/2020 10:47:18 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/19/2020 3:51:53 PM	51195
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2020 3:51:53 PM	51195
Surr: DNOP	97.6	55.1-146		%Rec	1	3/19/2020 3:51:53 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 10:47:18 PM	51192
Toluene	ND	0.050		mg/Kg	1	3/21/2020 10:47:18 PM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/21/2020 10:47:18 PM	51192
Xylenes, Total	ND	0.10		mg/Kg	1	3/21/2020 10:47:18 PM	51192
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%Rec	1	3/21/2020 10:47:18 PM	51192
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	3/21/2020 10:47:18 PM	51192
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	3/21/2020 10:47:18 PM	51192
Surr: Toluene-d8	99.3	70-130		%Rec	1	3/21/2020 10:47:18 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 2SP-2 North Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 11:35:00 AM

Lab ID: 2003799-008

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 5:26:55 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/21/2020 11:15:56 PM	51192
Surr: BFB	96.5	70-130		%Rec	1	3/21/2020 11:15:56 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/19/2020 4:15:39 PM	51195
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2020 4:15:39 PM	51195
Surr: DNOP	89.4	55.1-146		%Rec	1	3/19/2020 4:15:39 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/21/2020 11:15:56 PM	51192
Toluene	ND	0.049		mg/Kg	1	3/21/2020 11:15:56 PM	51192
Ethylbenzene	ND	0.049		mg/Kg	1	3/21/2020 11:15:56 PM	51192
Xylenes, Total	ND	0.099		mg/Kg	1	3/21/2020 11:15:56 PM	51192
Surr: 1,2-Dichloroethane-d4	84.6	70-130		%Rec	1	3/21/2020 11:15:56 PM	51192
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	3/21/2020 11:15:56 PM	51192
Surr: Dibromofluoromethane	94.7	70-130		%Rec	1	3/21/2020 11:15:56 PM	51192
Surr: Toluene-d8	102	70-130		%Rec	1	3/21/2020 11:15:56 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 2SP-3 South Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 11:50:00 AM

Lab ID: 2003799-009

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 5:39:16 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/21/2020 11:44:33 PM	51192
Surr: BFB	99.1	70-130		%Rec	1	3/21/2020 11:44:33 PM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/19/2020 4:39:26 PM	51195
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2020 4:39:26 PM	51195
Surr: DNOP	88.5	55.1-146		%Rec	1	3/19/2020 4:39:26 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	3/21/2020 11:44:33 PM	51192
Toluene	ND	0.047		mg/Kg	1	3/21/2020 11:44:33 PM	51192
Ethylbenzene	ND	0.047		mg/Kg	1	3/21/2020 11:44:33 PM	51192
Xylenes, Total	ND	0.094		mg/Kg	1	3/21/2020 11:44:33 PM	51192
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	1	3/21/2020 11:44:33 PM	51192
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	3/21/2020 11:44:33 PM	51192
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	3/21/2020 11:44:33 PM	51192
Surr: Toluene-d8	102	70-130		%Rec	1	3/21/2020 11:44:33 PM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 2SP-4 East Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 12:05:00 PM

Lab ID: 2003799-010

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 5:51:36 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 12:13:10 AM	51192
Surr: BFB	97.5	70-130		%Rec	1	3/22/2020 12:13:10 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/19/2020 5:03:10 PM	51195
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/19/2020 5:03:10 PM	51195
Surr: DNOP	86.8	55.1-146		%Rec	1	3/19/2020 5:03:10 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	3/22/2020 12:13:10 AM	51192
Toluene	ND	0.048		mg/Kg	1	3/22/2020 12:13:10 AM	51192
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 12:13:10 AM	51192
Xylenes, Total	ND	0.096		mg/Kg	1	3/22/2020 12:13:10 AM	51192
Surr: 1,2-Dichloroethane-d4	83.0	70-130		%Rec	1	3/22/2020 12:13:10 AM	51192
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	3/22/2020 12:13:10 AM	51192
Surr: Dibromofluoromethane	94.3	70-130		%Rec	1	3/22/2020 12:13:10 AM	51192
Surr: Toluene-d8	101	70-130		%Rec	1	3/22/2020 12:13:10 AM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 2SP-5 West Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 1:35:00 PM

Lab ID: 2003799-011

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	61		mg/Kg	20	3/24/2020 6:03:57 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/22/2020 12:41:52 AM	51192
Surr: BFB	97.2	70-130		%Rec	1	3/22/2020 12:41:52 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/19/2020 5:27:05 PM	51195
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2020 5:27:05 PM	51195
Surr: DNOP	83.2	55.1-146		%Rec	1	3/19/2020 5:27:05 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	3/22/2020 12:41:52 AM	51192
Toluene	ND	0.046		mg/Kg	1	3/22/2020 12:41:52 AM	51192
Ethylbenzene	ND	0.046		mg/Kg	1	3/22/2020 12:41:52 AM	51192
Xylenes, Total	ND	0.092		mg/Kg	1	3/22/2020 12:41:52 AM	51192
Surr: 1,2-Dichloroethane-d4	86.0	70-130		%Rec	1	3/22/2020 12:41:52 AM	51192
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	3/22/2020 12:41:52 AM	51192
Surr: Dibromofluoromethane	93.3	70-130		%Rec	1	3/22/2020 12:41:52 AM	51192
Surr: Toluene-d8	101	70-130		%Rec	1	3/22/2020 12:41:52 AM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 2SP-6 Bottom 3ft.

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 1:45:00 PM

Lab ID: 2003799-012

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 6:16:17 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/22/2020 1:10:28 AM	51192
Surr: BFB	101	70-130		%Rec	1	3/22/2020 1:10:28 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/19/2020 5:50:54 PM	51195
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2020 5:50:54 PM	51195
Surr: DNOP	82.3	55.1-146		%Rec	1	3/19/2020 5:50:54 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/22/2020 1:10:28 AM	51192
Toluene	ND	0.050		mg/Kg	1	3/22/2020 1:10:28 AM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/22/2020 1:10:28 AM	51192
Xylenes, Total	ND	0.099		mg/Kg	1	3/22/2020 1:10:28 AM	51192
Surr: 1,2-Dichloroethane-d4	86.7	70-130		%Rec	1	3/22/2020 1:10:28 AM	51192
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	3/22/2020 1:10:28 AM	51192
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	3/22/2020 1:10:28 AM	51192
Surr: Toluene-d8	103	70-130		%Rec	1	3/22/2020 1:10:28 AM	51192

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 Quantitative 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

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 3SP-1 Bottom 5ft.

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 2:10:00 PM

Lab ID: 2003799-013

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/24/2020 6:28:37 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/22/2020 1:39:04 AM	51192
Surr: BFB	95.1	70-130		%Rec	1	3/22/2020 1:39:04 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/19/2020 6:14:44 PM	51195
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/19/2020 6:14:44 PM	51195
Surr: DNOP	80.2	55.1-146		%Rec	1	3/19/2020 6:14:44 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/22/2020 1:39:04 AM	51192
Toluene	ND	0.050		mg/Kg	1	3/22/2020 1:39:04 AM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/22/2020 1:39:04 AM	51192
Xylenes, Total	ND	0.099		mg/Kg	1	3/22/2020 1:39:04 AM	51192
Surr: 1,2-Dichloroethane-d4	82.4	70-130		%Rec	1	3/22/2020 1:39:04 AM	51192
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	3/22/2020 1:39:04 AM	51192
Surr: Dibromofluoromethane	97.2	70-130		%Rec	1	3/22/2020 1:39:04 AM	51192
Surr: Toluene-d8	102	70-130		%Rec	1	3/22/2020 1:39:04 AM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 3SP-2 North Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 2:20:00 PM

Lab ID: 2003799-014

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	64	60		mg/Kg	20	3/24/2020 6:40:58 AM	51279
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/22/2020 2:07:38 AM	51192
Surr: BFB	97.7	70-130		%Rec	1	3/22/2020 2:07:38 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/19/2020 6:38:29 PM	51195
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2020 6:38:29 PM	51195
Surr: DNOP	86.9	55.1-146		%Rec	1	3/19/2020 6:38:29 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	3/22/2020 2:07:38 AM	51192
Toluene	ND	0.049		mg/Kg	1	3/22/2020 2:07:38 AM	51192
Ethylbenzene	ND	0.049		mg/Kg	1	3/22/2020 2:07:38 AM	51192
Xylenes, Total	ND	0.098		mg/Kg	1	3/22/2020 2:07:38 AM	51192
Surr: 1,2-Dichloroethane-d4	79.2	70-130		%Rec	1	3/22/2020 2:07:38 AM	51192
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	3/22/2020 2:07:38 AM	51192
Surr: Dibromofluoromethane	99.4	70-130		%Rec	1	3/22/2020 2:07:38 AM	51192
Surr: Toluene-d8	98.9	70-130		%Rec	1	3/22/2020 2:07:38 AM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 3SP-3 East Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 2:30:00 PM

Lab ID: 2003799-015

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	63	59		mg/Kg	20	3/24/2020 2:56:24 PM	51292
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/22/2020 2:36:13 AM	51192
Surr: BFB	101	70-130		%Rec	1	3/22/2020 2:36:13 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/19/2020 7:02:10 PM	51195
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2020 7:02:10 PM	51195
Surr: DNOP	81.1	55.1-146		%Rec	1	3/19/2020 7:02:10 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	3/22/2020 2:36:13 AM	51192
Toluene	ND	0.047		mg/Kg	1	3/22/2020 2:36:13 AM	51192
Ethylbenzene	ND	0.047		mg/Kg	1	3/22/2020 2:36:13 AM	51192
Xylenes, Total	ND	0.094		mg/Kg	1	3/22/2020 2:36:13 AM	51192
Surr: 1,2-Dichloroethane-d4	79.9	70-130		%Rec	1	3/22/2020 2:36:13 AM	51192
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	3/22/2020 2:36:13 AM	51192
Surr: Dibromofluoromethane	91.5	70-130		%Rec	1	3/22/2020 2:36:13 AM	51192
Surr: Toluene-d8	102	70-130		%Rec	1	3/22/2020 2:36:13 AM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 3SP-4 West Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 2:45:00 PM

Lab ID: 2003799-016

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	63	60		mg/Kg	20	3/24/2020 3:33:27 PM	51292
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/22/2020 3:04:48 AM	51192
Surr: BFB	102	70-130		%Rec	1	3/22/2020 3:04:48 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/19/2020 7:25:50 PM	51195
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2020 7:25:50 PM	51195
Surr: DNOP	87.7	55.1-146		%Rec	1	3/19/2020 7:25:50 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	3/22/2020 3:04:48 AM	51192
Toluene	ND	0.050		mg/Kg	1	3/22/2020 3:04:48 AM	51192
Ethylbenzene	ND	0.050		mg/Kg	1	3/22/2020 3:04:48 AM	51192
Xylenes, Total	ND	0.10		mg/Kg	1	3/22/2020 3:04:48 AM	51192
Surr: 1,2-Dichloroethane-d4	83.0	70-130		%Rec	1	3/22/2020 3:04:48 AM	51192
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	3/22/2020 3:04:48 AM	51192
Surr: Dibromofluoromethane	93.7	70-130		%Rec	1	3/22/2020 3:04:48 AM	51192
Surr: Toluene-d8	101	70-130		%Rec	1	3/22/2020 3:04:48 AM	51192

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2003799

Date Reported: 3/25/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: 3SP-5 South Wall

Project: Maverick Jalmat 225 Flow Line

Collection Date: 3/17/2020 2:55:00 PM

Lab ID: 2003799-017

Matrix: SOIL

Received Date: 3/18/2020 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	61	60		mg/Kg	20	3/24/2020 3:45:47 PM	51292
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/22/2020 3:33:21 AM	51192
Surr: BFB	97.5	70-130		%Rec	1	3/22/2020 3:33:21 AM	51192
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/19/2020 7:49:25 PM	51195
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2020 7:49:25 PM	51195
Surr: DNOP	80.6	55.1-146		%Rec	1	3/19/2020 7:49:25 PM	51195
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	3/22/2020 3:33:21 AM	51192
Toluene	ND	0.048		mg/Kg	1	3/22/2020 3:33:21 AM	51192
Ethylbenzene	ND	0.048		mg/Kg	1	3/22/2020 3:33:21 AM	51192
Xylenes, Total	ND	0.096		mg/Kg	1	3/22/2020 3:33:21 AM	51192
Surr: 1,2-Dichloroethane-d4	82.4	70-130		%Rec	1	3/22/2020 3:33:21 AM	51192
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	3/22/2020 3:33:21 AM	51192
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	3/22/2020 3:33:21 AM	51192
Surr: Toluene-d8	99.6	70-130		%Rec	1	3/22/2020 3:33:21 AM	51192

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 Quantitative 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



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2003799

25-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Maverick Jalmat 225 Flow Line

Sample ID: <b>MB-51279</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51279</b>	RunNo: <b>67496</b>								
Prep Date: <b>3/23/2020</b>	Analysis Date: <b>3/24/2020</b>	SeqNo: <b>2330761</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-51279</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51279</b>	RunNo: <b>67496</b>								
Prep Date: <b>3/23/2020</b>	Analysis Date: <b>3/24/2020</b>	SeqNo: <b>2330762</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Sample ID: <b>MB-51292</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51292</b>	RunNo: <b>67533</b>								
Prep Date: <b>3/24/2020</b>	Analysis Date: <b>3/24/2020</b>	SeqNo: <b>2331598</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-51292</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51292</b>	RunNo: <b>67533</b>								
Prep Date: <b>3/24/2020</b>	Analysis Date: <b>3/24/2020</b>	SeqNo: <b>2331599</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2003799

25-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Maverick Jalmat 225 Flow Line

Sample ID: <b>MB-51195</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51195</b>	RunNo: <b>67410</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/19/2020</b>	SeqNo: <b>2325769</b>	Units: <b>mg/Kg</b>							
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	9.1		10.00		90.6	55.1	146			

Sample ID: <b>LCS-51195</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51195</b>	RunNo: <b>67410</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/19/2020</b>	SeqNo: <b>2325770</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.0	70	130			
Surr: DNOP	4.5		5.000		89.8	55.1	146			

Sample ID: <b>2003799-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>1SP-1 Bottom 3ft.</b>	Batch ID: <b>51195</b>	RunNo: <b>67410</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/19/2020</b>	SeqNo: <b>2325773</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.7	48.64	0	90.3	47.4	136			
Surr: DNOP	4.6		4.864		94.1	55.1	146			

Sample ID: <b>2003799-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>1SP-1 Bottom 3ft.</b>	Batch ID: <b>51195</b>	RunNo: <b>67410</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/19/2020</b>	SeqNo: <b>2325774</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.8	48.97	0	93.4	47.4	136	4.02	43.4	
Surr: DNOP	4.7		4.897		95.4	55.1	146	0	0	

**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 Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2003799

25-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Maverick Jalmat 225 Flow Line

Sample ID: <b>2003799-001ams</b>	SampType: <b>MS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>1SP-1 Bottom 3ft.</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328422</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	0.9833	0	84.2	80	120			
Toluene	0.99	0.049	0.9833	0	101	80	120			
Ethylbenzene	1.0	0.049	0.9833	0	104	80	120			
Xylenes, Total	3.1	0.098	2.950	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.4916		97.8	70	130			
Surr: Toluene-d8	0.49		0.4916		99.7	70	130			

Sample ID: <b>2003799-001amsd</b>	SampType: <b>MSD4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>1SP-1 Bottom 3ft.</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328423</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.024	0.9625	0	83.3	80	120	3.23	20	
Toluene	0.95	0.048	0.9625	0	98.6	80	120	4.30	20	
Ethylbenzene	0.98	0.048	0.9625	0	102	80	120	4.99	20	
Xylenes, Total	2.9	0.096	2.887	0	101	80	120	4.54	20	
Surr: 4-Bromofluorobenzene	0.50		0.4812		103	70	130	0	0	
Surr: Toluene-d8	0.48		0.4812		99.4	70	130	0	0	

Sample ID: <b>lcs-51192</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328459</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.5	80	120			
Toluene	1.1	0.050	1.000	0	110	80	120			
Ethylbenzene	1.1	0.050	1.000	0	115	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.8	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

Sample ID: <b>mb-51192</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328461</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								

**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 Quantitative 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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2003799

25-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Maverick Jalmat 225 Flow Line

Sample ID: <b>mb-51192</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328461</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.2	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.9	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.3	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

**Qualifiers:**

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H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative 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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2003799

25-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Maverick Jalmat 225 Flow Line

Sample ID: <b>2003799-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>1SP-2 East Wall</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328574</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.7	23.70	0	80.4	70	130			
Surr: BFB	460		473.9		97.2	70	130			

Sample ID: <b>2003799-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>1SP-2 East Wall</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328575</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.70	0	79.0	70	130	2.50	20	
Surr: BFB	490		494.1		99.2	70	130	0	0	

Sample ID: <b>lcs-51192</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328610</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	70	130			
Surr: BFB	500		500.0		99.5	70	130			

Sample ID: <b>mb-51192</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51192</b>	RunNo: <b>67474</b>								
Prep Date: <b>3/18/2020</b>	Analysis Date: <b>3/21/2020</b>	SeqNo: <b>2328612</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.1	70	130			

**Qualifiers:**

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D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative 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 Name: Safety Env Solutions

Work Order Number: 2003799

RcptNo: 1

Received By: Yazmine Garduno

3/18/2020 8:25:00 AM

0805 JU 3-18-20

Completed By: Isaiah Ortiz

3/18/2020 9:01:24 AM

Reviewed By: JR 3/18/20

Yazmine Garduno  
I-OK

### Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $\leq 2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 3/18/20

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Not Present			
2	3.8	Good	Not Present			



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Project Manager:		QA/QC Package:		Level 4 (Full Validation)	
email or Fax#:		Standard		<input type="checkbox"/> Standard <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other	
Project Manager: <b>Allen Bibb</b> Sampler: <b>Don Jensen</b> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No # of Coolers: <b>2</b> Cooler Temp (including C/P): <b>1.3 to 4.1</b>		HEAL No. <b>2003799</b> <b>-012</b>			
Container Type and # <b>1</b>		Preservative Type <b>key</b> <b>next</b>			
Date <b>8/17</b>		Matrix <b>S</b>		Sample Name <b>2SP-6 Bat 3 fa</b>	
Date <b>8/17</b>		Matrix <b>S</b>		Sample Name <b>3SP-1 Bat 5 fa</b>	
Date <b>8/20</b>		Matrix <b>S</b>		Sample Name <b>3SP-2 North</b>	
Date <b>8/20</b>		Matrix <b>S</b>		Sample Name <b>3SP-3 East</b>	
Date <b>8/25</b>		Matrix <b>S</b>		Sample Name <b>3SP-4 West</b>	
Date <b>8/25</b>		Matrix <b>S</b>		Sample Name <b>3SP-5 South</b>	
Date <b>8/17</b>		Time <b>1600</b>		Relinquished by: <b>Don Jensen</b>	
Date <b>3/17/20</b>		Time <b>1900</b>		Relinquished by: <b>[Signature]</b>	

Any sub-contracted data will be clearly notated on the analytical report. This serves as notice of this possibility. Any sub-contracted laboratories may be subcontracted to other accredited laboratories. Environmental samples submitted to Hall Environmental if necessary, samples submitted to Hall Environmental