State of New Mexico
Oil Conservation Division

Incident ID	NAB1807555191
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: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 3/13/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: OCD Date: 3/13/2023

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: Ashley Maxwell Date: 3/30/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

Devon Energy Production Company
Snapping 10 Fed #1H Battery

Closure Report
UL H, Section 10, T26S, R31E
Eddy County, New Mexico
NAB1807555191 (2RP-4661)

July 22, 2021

Prepared for:

Devon Energy Production Company
6488 Seven Rivers Hwy
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240

Company Contacts

Representative	Company	Telephone	E-mail
Tom Bynum	Devon Energy	580-748-1613	Tom.Bynum@dvn.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Devon Energy to perform a site assessment at the Snapping 10 Fed #1H Battery concerning a 16 bbls oil release on location with overspray into the adjoining pasture. According to the C-141, failure of the back pressure valve caused the spill. Approximately 15.5 bbls were spilled on location and 0.5 bbls overspray into the pasture, no fluids were recovered. This site is situated in Eddy County, Section 10, Township 26S, and Range 31E.

SESI personnel performed an assessment of the site in February of 2020 based on generator knowledge of the leak location. SESI personnel mapped the leak and performed delineation.

Surface and Ground Water

Based on the NMOCD Oil and Gas map included in this report, surface water is not present within 3,000 feet of this release. The New Mexico Office of the State Engineer records indicates the average depth to groundwater for the area to be between 250' and 260' bgs; however, since no wells less than 25 years old and less than a half mile away are known to be present, SESI will delineate this release to the most stringent criteria established by NMOCD.

Characterization

In March of 2020, SESI personnel performed sampling to determine vertical extent of the release on the pad, and subsequently sampled the pasture in April of 2020. SESI advanced 5 auger holes within the pad area, and 3 sample points in the pasture (sampling map attached). The samples were properly packaged and preserved and sent to Hall Environmental Laboratories for analysis. The results of the testing are captured in the summary below:

Devon Energy Snapping 10 Fed 1H Battery Soil Sample Results: Hall Environmental Laboratories 3/19/20 and 4/8/20								
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes
AH1 @ SURFACE	600	390	8200	3900	0.18	6.6	1.7	17
AH1 @ 1'	120	24	710	310	ND	ND	ND	0.50
AH2 @ SURFACE	830	130	1600	570	ND	0.25	0.17	2.7
AH2 @ 1'	120	27	650	300	ND	ND	ND	0.55
AH3 @ SURFACE	ND	4.9	350	170	ND	ND	ND	ND
AH3 @ 1'	ND	ND	12	ND	ND	ND	ND	ND
AH4 @ SURFACE	880	110	1600	550	ND	0.18	0.12	1.9
AH4 @ 1'	ND	ND	16	ND	ND	ND	ND	ND
AH5 @ SURFACE	ND	21	310	190	ND	ND	ND	0.31
AH5 @ 1'	ND	ND	12	ND	ND	ND	ND	ND

Pasture Samples 4/8/20								
SA9 @ SURFACE	ND	NS	NS	NS	NS	NS	NS	NS
SA9 @ 1'	ND	ND	46	80	ND	ND	ND	ND
SA10 @ SURFACE	ND	NS	NS	NS	NS	NS	NS	NS
SA10 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND
SA11 @ SURFACE	ND	NS	NS	NS	NS	NS	NS	NS
SA11 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND

Remediation

Based on the results of the delineation, SESI, determined the best course of action is to excavate the contaminated soil to a depth of 1 to 2 feet as practicable. In June of 2020, contaminated soil was excavated and removed. Confirmation samples of vertical and horizontal extent were taken to ensure remediation was successful. The samples were properly preserved and packaged then sent to Hall Laboratories for analysis. The results of the sampling is captured in the table below.

Devon Energy Snapping 10 Fed 1h Battery Soil Sample Results: Hall Environmental Laboratories 2RP-4661 6/17/20								
SAMPLE ID	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Total Xylenes (mg/kg)
SP6 2' BTM	ND	ND	ND	ND	ND	ND	ND	ND
SP7 2'BTM	ND	ND	ND	ND	ND	ND	ND	ND
SP8 2' BTM	ND	ND	ND	ND	ND	ND	ND	ND
SP9 1' BTM	ND	ND	ND	ND	ND	ND	ND	ND
SP10 1' BTM	180	ND	ND	ND	ND	ND	ND	ND
SP21 2' BTM	600	ND	ND	ND	ND	ND	ND	ND
Horizontal Extent								
SP-11 WEST H	63	ND	34	76	ND	ND	ND	ND
SP-12 EAST H	240	ND	ND	ND	ND	ND	ND	ND
SP-13 WEST H	65	ND	35	80	ND	ND	ND	ND
SP-14 EAST H	ND	ND	ND	ND	ND	ND	ND	ND
SP-15 WEST H	190	ND	ND	ND	ND	ND	ND	ND
SP-16 NORTH H	460	ND	ND	ND	ND	ND	ND	ND
SP-17 NORTH H	ND	ND	29	94	ND	ND	ND	ND
SP-18 EAST H	ND	ND	34	100	ND	ND	ND	ND
SP-19 SOUTH H	ND	ND	31	100	ND	ND	ND	ND
SP-20 WEST H	ND	ND	29	81	ND	ND	ND	ND
Horizontal Extent Retest – 7/22/20								
SP-H-11A	70	ND	ND	ND	ND	ND	ND	ND
SP-H-13A	130	ND	ND	ND	ND	ND	ND	ND
SP-H-17A	ND	ND	ND	ND	ND	ND	ND	ND
SP-H-18A	ND	ND	ND	ND	ND	ND	ND	ND
SP-H-19A	ND	ND	ND	ND	ND	ND	ND	ND
SP-H-20A	ND	ND	ND	ND	ND	ND	ND	ND

Once sample results verified both successful remediation and horizontal extent, the site was backfilled with clean soil. Pictures of the remediation are included in this report.

Closure Request

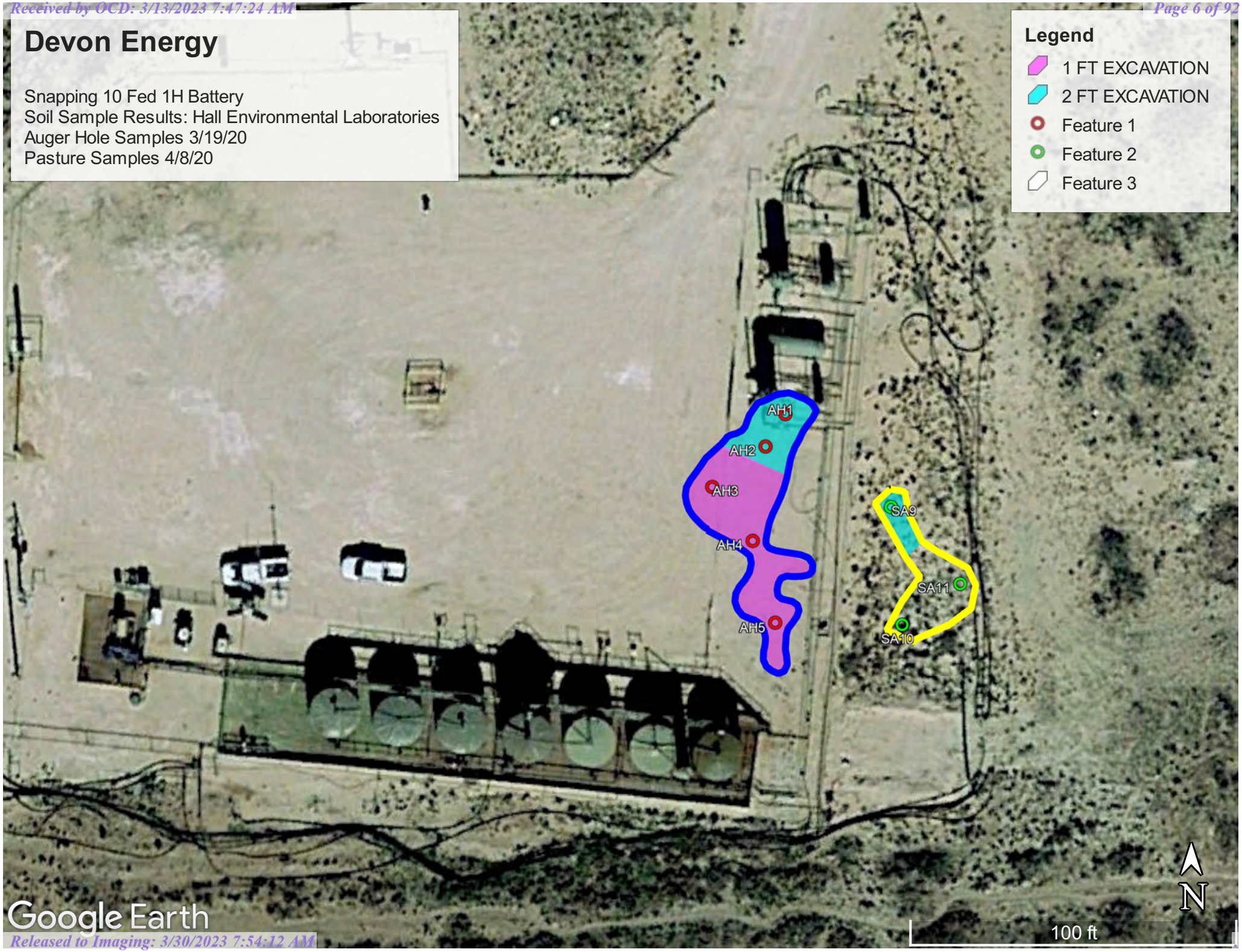
Based on the confirmation and horizontal sample results, SESI believes the release area to be properly remediated according to the closure criteria set forth in Table I of the Spill Rule 19.15.29 NMAC. Therefore, SESI, on behalf of Devon respectfully requests closure of this release. Supplemental information has been included in this report to support our closure request.

Supplemental Documentation for Closure

Map of Release with sample locations
Photos of release and remediation
NMOCD Oil and Gas Map
BLM Cave Karst Map
Laboratory Analysis 2/6/20 - 7/22/20
C-141, pages 3-6

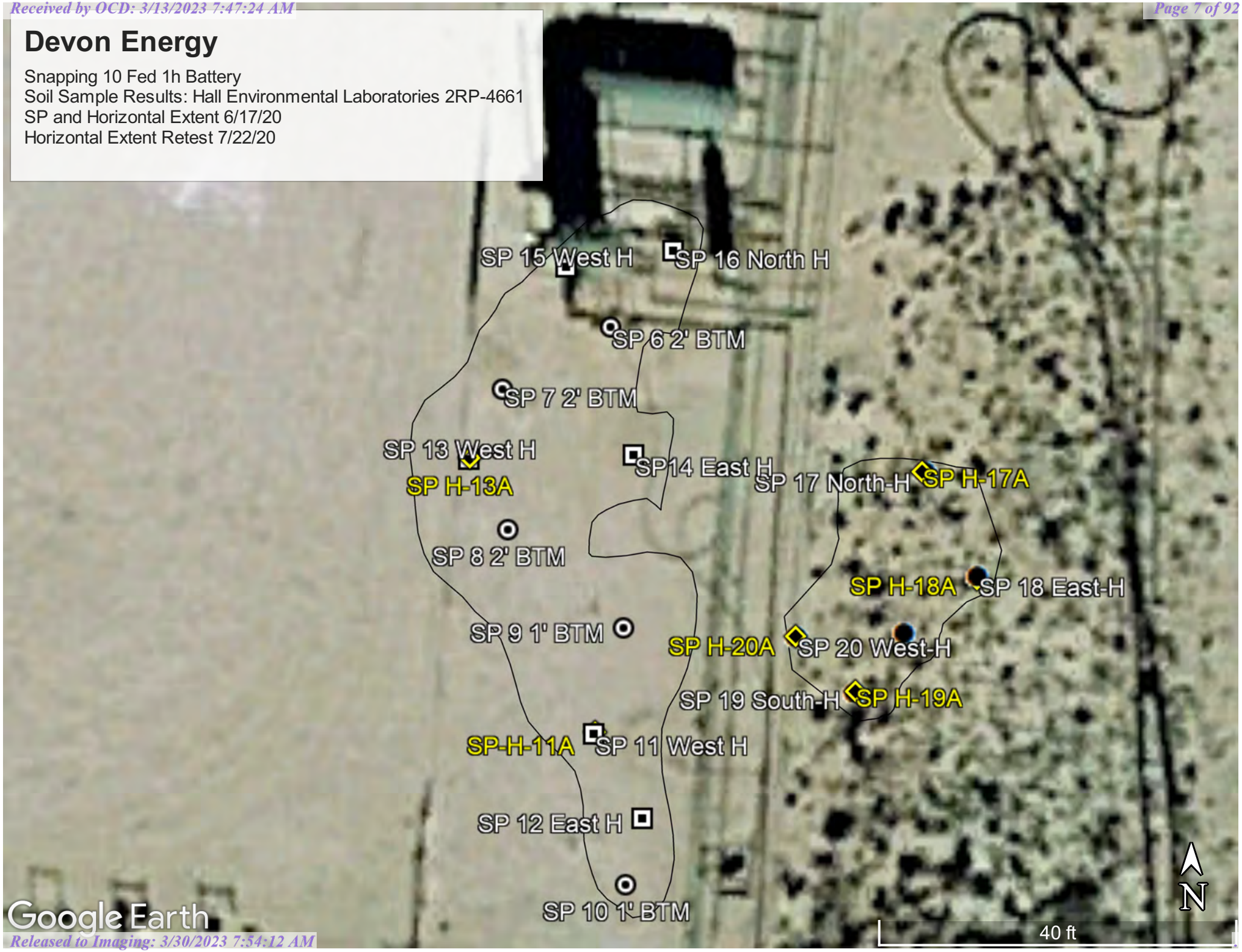
Devon Energy

Snapping 10 Fed 1H Battery
Soil Sample Results: Hall Environmental Laboratories
Auger Hole Samples 3/19/20
Pasture Samples 4/8/20



Devon Energy

Snapping 10 Fed 1h Battery
Soil Sample Results: Hall Environmental Laboratories 2RP-4661
SP and Horizontal Extent 6/17/20
Horizontal Extent Retest 7/22/20



Devon Energy

Snapping 10 Fed 1H Battery
Karst Map - High
UL-H-Sec10-T26S-R31E

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

* IMPORTANT: Next Generation Station Page

Site Selection Results -- 7 sites found

Site name contains string = 26S.31E
Minimum number of levels = 1

Save file of selected sites to local disk for future upload

Data for individual sites can be obtained by selecting the site number below

Agency	Site Number	Site Name	Period of Record		
			Begin Date	End Date	Levels
USGS	320330103462401	26S.31E.08.321434	1983-02-16	1998-01-29	4
USGS	320016103434201	26S.31E.35.13131	1983-02-14	1998-01-29	4
USGS	320424103415401	26S.31E.01.421322	1983-01-26	1987-10-21	3
USGS	320001103433501	26S.31E.35.312333	1964-03-30	1964-03-30	1
USGS	320330103462501	26S.31E.08.32143	1959-02-18	1959-02-18	1
USGS	320329103462501	26S.31E.08.321433	1949-03-10	1958-08-18	2
USGS	320425103415401	26S.31E.01.42110	1949-03-10	1949-03-10	1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 30, 2020

Bob Allen

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

RE: Devon Snapping 10 Fed 1h 20836060 OrderNo.: 2003986

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/21/2020 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 or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-1 Surface
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 10:15:00 AM
Lab ID: 2003986-001 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	600	60		mg/Kg	20	3/26/2020 11:00:39 PM	51353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	390	49		mg/Kg	10	3/26/2020 4:12:30 PM	51277
Surr: BFB	104	70-130		%Rec	10	3/26/2020 4:12:30 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	8200	92		mg/Kg	10	3/25/2020 1:18:39 AM	51283
Motor Oil Range Organics (MRO)	3900	460		mg/Kg	10	3/25/2020 1:18:39 AM	51283
Surr: DNOP	0	55.1-146	S	%Rec	10	3/25/2020 1:18:39 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	0.18	0.025		mg/Kg	1	3/25/2020 2:04:39 PM	51277
Toluene	6.6	0.49		mg/Kg	10	3/26/2020 4:12:30 PM	51277
Ethylbenzene	1.7	0.049		mg/Kg	1	3/25/2020 2:04:39 PM	51277
Xylenes, Total	17	0.99		mg/Kg	10	3/26/2020 4:12:30 PM	51277
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	3/25/2020 2:04:39 PM	51277
Surr: 4-Bromofluorobenzene	69.1	70-130	S	%Rec	1	3/25/2020 2:04:39 PM	51277
Surr: Dibromofluoromethane	92.4	70-130		%Rec	1	3/25/2020 2:04:39 PM	51277
Surr: Toluene-d8	93.8	70-130		%Rec	1	3/25/2020 2:04:39 PM	51277

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

Qualifiers:

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

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-1 1ft
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 10:25:00 AM
Lab ID: 2003986-002 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	120	60		mg/Kg	20	3/26/2020 11:13:00 PM	51353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	24	4.9		mg/Kg	1	3/25/2020 3:58:48 PM	51277
Surr: BFB	109	70-130		%Rec	1	3/25/2020 3:58:48 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	710	8.9		mg/Kg	1	3/25/2020 1:42:52 AM	51283
Motor Oil Range Organics (MRO)	310	45		mg/Kg	1	3/25/2020 1:42:52 AM	51283
Surr: DNOP	109	55.1-146		%Rec	1	3/25/2020 1:42:52 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/25/2020 3:58:48 PM	51277
Toluene	ND	0.049		mg/Kg	1	3/25/2020 3:58:48 PM	51277
Ethylbenzene	ND	0.049		mg/Kg	1	3/25/2020 3:58:48 PM	51277
Xylenes, Total	0.50	0.099		mg/Kg	1	3/25/2020 3:58:48 PM	51277
Surr: 1,2-Dichloroethane-d4	87.4	70-130		%Rec	1	3/25/2020 3:58:48 PM	51277
Surr: 4-Bromofluorobenzene	82.2	70-130		%Rec	1	3/25/2020 3:58:48 PM	51277
Surr: Dibromofluoromethane	94.0	70-130		%Rec	1	3/25/2020 3:58:48 PM	51277
Surr: Toluene-d8	93.4	70-130		%Rec	1	3/25/2020 3:58:48 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-2 Surface
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 10:55:00 AM
Lab ID: 2003986-003 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	830	60		mg/Kg	20	3/26/2020 11:25:23 PM	51353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	130	5.0		mg/Kg	1	3/25/2020 5:24:03 PM	51277
Surr: BFB	122	70-130		%Rec	1	3/25/2020 5:24:03 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	1600	89		mg/Kg	10	3/25/2020 2:52:49 PM	51283
Motor Oil Range Organics (MRO)	570	440		mg/Kg	10	3/25/2020 2:52:49 PM	51283
Surr: DNOP	0	55.1-146	S	%Rec	10	3/25/2020 2:52:49 PM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/25/2020 5:24:03 PM	51277
Toluene	0.25	0.050		mg/Kg	1	3/25/2020 5:24:03 PM	51277
Ethylbenzene	0.17	0.050		mg/Kg	1	3/25/2020 5:24:03 PM	51277
Xylenes, Total	2.7	0.099		mg/Kg	1	3/25/2020 5:24:03 PM	51277
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	3/25/2020 5:24:03 PM	51277
Surr: 4-Bromofluorobenzene	72.5	70-130		%Rec	1	3/25/2020 5:24:03 PM	51277
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	3/25/2020 5:24:03 PM	51277
Surr: Toluene-d8	93.2	70-130		%Rec	1	3/25/2020 5:24:03 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-2 1ft
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 10:45:00 AM
Lab ID: 2003986-004 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	120	60		mg/Kg	20	3/27/2020 12:02:25 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	27	4.9		mg/Kg	1	3/25/2020 5:52:35 PM	51277
Surr: BFB	112	70-130		%Rec	1	3/25/2020 5:52:35 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	650	9.5		mg/Kg	1	3/25/2020 2:31:05 AM	51283
Motor Oil Range Organics (MRO)	300	48		mg/Kg	1	3/25/2020 2:31:05 AM	51283
Surr: DNOP	108	55.1-146		%Rec	1	3/25/2020 2:31:05 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/25/2020 5:52:35 PM	51277
Toluene	ND	0.049		mg/Kg	1	3/25/2020 5:52:35 PM	51277
Ethylbenzene	ND	0.049		mg/Kg	1	3/25/2020 5:52:35 PM	51277
Xylenes, Total	0.55	0.098		mg/Kg	1	3/25/2020 5:52:35 PM	51277
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%Rec	1	3/25/2020 5:52:35 PM	51277
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	3/25/2020 5:52:35 PM	51277
Surr: Dibromofluoromethane	93.8	70-130		%Rec	1	3/25/2020 5:52:35 PM	51277
Surr: Toluene-d8	94.3	70-130		%Rec	1	3/25/2020 5:52:35 PM	51277

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

Qualifiers:

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

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-3 Surface
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 10:55:00 AM
Lab ID: 2003986-005 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/27/2020 12:39:26 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	4.9	4.8		mg/Kg	1	3/25/2020 6:21:19 PM	51277
Surr: BFB	106	70-130		%Rec	1	3/25/2020 6:21:19 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	350	9.0		mg/Kg	1	3/25/2020 2:55:03 AM	51283
Motor Oil Range Organics (MRO)	170	45		mg/Kg	1	3/25/2020 2:55:03 AM	51283
Surr: DNOP	103	55.1-146		%Rec	1	3/25/2020 2:55:03 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/25/2020 6:21:19 PM	51277
Toluene	ND	0.048		mg/Kg	1	3/25/2020 6:21:19 PM	51277
Ethylbenzene	ND	0.048		mg/Kg	1	3/25/2020 6:21:19 PM	51277
Xylenes, Total	ND	0.097		mg/Kg	1	3/25/2020 6:21:19 PM	51277
Surr: 1,2-Dichloroethane-d4	86.3	70-130		%Rec	1	3/25/2020 6:21:19 PM	51277
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	3/25/2020 6:21:19 PM	51277
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	3/25/2020 6:21:19 PM	51277
Surr: Toluene-d8	94.3	70-130		%Rec	1	3/25/2020 6:21:19 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-3 1ft
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 11:05:00 AM
Lab ID: 2003986-006 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/27/2020 1:16:28 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/25/2020 6:49:47 PM	51277
Surr: BFB	104	70-130		%Rec	1	3/25/2020 6:49:47 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	12	8.7		mg/Kg	1	3/25/2020 3:19:10 AM	51283
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	3/25/2020 3:19:10 AM	51283
Surr: DNOP	93.8	55.1-146		%Rec	1	3/25/2020 3:19:10 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/25/2020 6:49:47 PM	51277
Toluene	ND	0.049		mg/Kg	1	3/25/2020 6:49:47 PM	51277
Ethylbenzene	ND	0.049		mg/Kg	1	3/25/2020 6:49:47 PM	51277
Xylenes, Total	ND	0.098		mg/Kg	1	3/25/2020 6:49:47 PM	51277
Surr: 1,2-Dichloroethane-d4	83.1	70-130		%Rec	1	3/25/2020 6:49:47 PM	51277
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	3/25/2020 6:49:47 PM	51277
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	3/25/2020 6:49:47 PM	51277
Surr: Toluene-d8	93.2	70-130		%Rec	1	3/25/2020 6:49:47 PM	51277

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

Qualifiers:

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

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-4 Surface
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 11:15:00 AM
Lab ID: 2003986-007 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	880	60		mg/Kg	20	3/27/2020 1:28:48 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	110	4.7		mg/Kg	1	3/25/2020 7:18:11 PM	51277
Surr: BFB	116	70-130		%Rec	1	3/25/2020 7:18:11 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	1600	87		mg/Kg	10	3/25/2020 3:17:26 PM	51283
Motor Oil Range Organics (MRO)	550	440		mg/Kg	10	3/25/2020 3:17:26 PM	51283
Surr: DNOP	0	55.1-146	S	%Rec	10	3/25/2020 3:17:26 PM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/25/2020 7:18:11 PM	51277
Toluene	0.18	0.047		mg/Kg	1	3/25/2020 7:18:11 PM	51277
Ethylbenzene	0.12	0.047		mg/Kg	1	3/25/2020 7:18:11 PM	51277
Xylenes, Total	1.9	0.095		mg/Kg	1	3/25/2020 7:18:11 PM	51277
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	3/25/2020 7:18:11 PM	51277
Surr: 4-Bromofluorobenzene	70.6	70-130		%Rec	1	3/25/2020 7:18:11 PM	51277
Surr: Dibromofluoromethane	92.8	70-130		%Rec	1	3/25/2020 7:18:11 PM	51277
Surr: Toluene-d8	89.8	70-130		%Rec	1	3/25/2020 7:18:11 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-4 1ft
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 11:25:00 AM
Lab ID: 2003986-008 **Matrix:** SOIL **Received Date:** 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/27/2020 1:41:08 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/25/2020 7:46:48 PM	51277
Surr: BFB	108	70-130		%Rec	1	3/25/2020 7:46:48 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	16	9.5		mg/Kg	1	3/25/2020 4:31:18 AM	51283
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/25/2020 4:31:18 AM	51283
Surr: DNOP	96.1	55.1-146		%Rec	1	3/25/2020 4:31:18 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	3/25/2020 7:46:48 PM	51277
Toluene	ND	0.049		mg/Kg	1	3/25/2020 7:46:48 PM	51277
Ethylbenzene	ND	0.049		mg/Kg	1	3/25/2020 7:46:48 PM	51277
Xylenes, Total	ND	0.098		mg/Kg	1	3/25/2020 7:46:48 PM	51277
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%Rec	1	3/25/2020 7:46:48 PM	51277
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	3/25/2020 7:46:48 PM	51277
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	3/25/2020 7:46:48 PM	51277
Surr: Toluene-d8	96.6	70-130		%Rec	1	3/25/2020 7:46:48 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-5 Surface
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 11:35:00 AM
Lab ID: 2003986-009 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/27/2020 1:53:28 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	21	4.9		mg/Kg	1	3/25/2020 8:15:21 PM	51277
Surr: BFB	104	70-130		%Rec	1	3/25/2020 8:15:21 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	310	9.3		mg/Kg	1	3/25/2020 4:55:19 AM	51283
Motor Oil Range Organics (MRO)	190	47		mg/Kg	1	3/25/2020 4:55:19 AM	51283
Surr: DNOP	106	55.1-146		%Rec	1	3/25/2020 4:55:19 AM	51283
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	3/25/2020 8:15:21 PM	51277
Toluene	ND	0.049		mg/Kg	1	3/25/2020 8:15:21 PM	51277
Ethylbenzene	ND	0.049		mg/Kg	1	3/25/2020 8:15:21 PM	51277
Xylenes, Total	0.31	0.098		mg/Kg	1	3/25/2020 8:15:21 PM	51277
Surr: 1,2-Dichloroethane-d4	86.1	70-130		%Rec	1	3/25/2020 8:15:21 PM	51277
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	3/25/2020 8:15:21 PM	51277
Surr: Dibromofluoromethane	91.3	70-130		%Rec	1	3/25/2020 8:15:21 PM	51277
Surr: Toluene-d8	95.3	70-130		%Rec	1	3/25/2020 8:15:21 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003986**
Date Reported: **3/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-5 1ft
Project: Devon Snapping 10 Fed 1h 20836060
Collection Date: 3/19/2020 11:50:00 AM
Lab ID: 2003986-010 **Matrix:** SOIL
Received Date: 3/21/2020 8:06:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	3/27/2020 2:05:49 AM	51356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/25/2020 8:43:48 PM	51277
Surr: BFB	102	70-130		%Rec	1	3/25/2020 8:43:48 PM	51277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	12	9.7		mg/Kg	1	3/25/2020 6:59:28 PM	51299
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/25/2020 6:59:28 PM	51299
Surr: DNOP	111	55.1-146		%Rec	1	3/25/2020 6:59:28 PM	51299
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	3/25/2020 8:43:48 PM	51277
Toluene	ND	0.046		mg/Kg	1	3/25/2020 8:43:48 PM	51277
Ethylbenzene	ND	0.046		mg/Kg	1	3/25/2020 8:43:48 PM	51277
Xylenes, Total	ND	0.093		mg/Kg	1	3/25/2020 8:43:48 PM	51277
Surr: 1,2-Dichloroethane-d4	80.2	70-130		%Rec	1	3/25/2020 8:43:48 PM	51277
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	3/25/2020 8:43:48 PM	51277
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	3/25/2020 8:43:48 PM	51277
Surr: Toluene-d8	91.9	70-130		%Rec	1	3/25/2020 8:43:48 PM	51277

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003986**

30-Mar-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1h 20836060

Sample ID: **MB-51353**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51353**	RunNo: **67593**							
Prep Date: **3/26/2020**	Analysis Date: **3/26/2020**	SeqNo: **2334151**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51353**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51353**	RunNo: **67593**							
Prep Date: **3/26/2020**	Analysis Date: **3/26/2020**	SeqNo: **2334152**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

Sample ID: **MB-51356**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51356**	RunNo: **67593**							
Prep Date: **3/26/2020**	Analysis Date: **3/26/2020**	SeqNo: **2334183**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51356**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51356**	RunNo: **67593**							
Prep Date: **3/26/2020**	Analysis Date: **3/26/2020**	SeqNo: **2334184**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003986**

30-Mar-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1h 20836060

Sample ID: **MB-51283** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **51283** RunNo: **67512**
Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2330406** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.5	55.1	146			

Sample ID: **LCS-51283** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **51283** RunNo: **67512**
Prep Date: **3/24/2020** Analysis Date: **3/24/2020** SeqNo: **2330509** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.2	70	130			
Surr: DNOP	4.3		5.000		86.4	55.1	146			

Sample ID: **MB-51257** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **51257** RunNo: **67512**
Prep Date: **3/23/2020** Analysis Date: **3/24/2020** SeqNo: **2330911** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.4	55.1	146			

Sample ID: **LCS-51257** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **51257** RunNo: **67512**
Prep Date: **3/23/2020** Analysis Date: **3/24/2020** SeqNo: **2331072** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.8	55.1	146			

Sample ID: **LCS-51299** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **51299** RunNo: **67548**
Prep Date: **3/24/2020** Analysis Date: **3/25/2020** SeqNo: **2332705** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	120	70	130			
Surr: DNOP	5.3		5.000		105	55.1	146			

Sample ID: **MB-51299** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **51299** RunNo: **67548**
Prep Date: **3/24/2020** Analysis Date: **3/25/2020** SeqNo: **2332706** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003986**
30-Mar-20

Client: Safety & Environmental Solutions
Project: Devon Snapping 10 Fed 1h 20836060

Sample ID: **MB-51299** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **51299** RunNo: **67548**
Prep Date: **3/24/2020** Analysis Date: **3/25/2020** SeqNo: **2332706** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	55.1	146			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003986**

30-Mar-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1h 20836060

Sample ID: **lcs-51277** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **51277** RunNo: **67556**

Prep Date: **3/23/2020** Analysis Date: **3/25/2020** SeqNo: **2332308** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.1	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.5	70	130			
Surr: Toluene-d8	0.47		0.5000		94.2	70	130			

Sample ID: **mb-51277** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **51277** RunNo: **67556**

Prep Date: **3/23/2020** Analysis Date: **3/25/2020** SeqNo: **2332310** Units: **mg/Kg**

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								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		89.1	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.9	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.5	70	130			
Surr: Toluene-d8	0.49		0.5000		97.3	70	130			

Sample ID: **2003986-001ams** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **AH-1 Surface** Batch ID: **51277** RunNo: **67556**

Prep Date: **3/23/2020** Analysis Date: **3/25/2020** SeqNo: **2332974** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9794	0.1810	87.9	70	130			
Toluene	6.8	0.049	0.9794	6.078	73.7	70	130			E
Ethylbenzene	2.7	0.049	0.9794	1.733	100	70	130			
Xylenes, Total	19	0.098	2.938	16.03	92.3	70	130			E
Surr: 1,2-Dichloroethane-d4	0.46		0.4897		94.0	70	130			
Surr: 4-Bromofluorobenzene	0.35		0.4897		70.8	70	130			
Surr: Dibromofluoromethane	0.45		0		0	70	130			
Surr: Toluene-d8	0.45		0.4897		92.7	70	130			

Sample ID: **2003986-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **AH-1 Surface** Batch ID: **51277** RunNo: **67556**

Prep Date: **3/23/2020** Analysis Date: **3/25/2020** SeqNo: **2332975** Units: **mg/Kg**

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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003986**

30-Mar-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1h 20836060

Sample ID: **2003986-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **AH-1 Surface** Batch ID: **51277** RunNo: **67556**

Prep Date: **3/23/2020** Analysis Date: **3/25/2020** SeqNo: **2332975** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9766	0.1810	88.4	70	130	0.233	20	
Toluene	6.7	0.049	0.9766	6.078	60.0	70	130	2.01	20	ES
Ethylbenzene	2.7	0.049	0.9766	1.733	95.0	70	130	2.07	0	
Xylenes, Total	18	0.098	2.930	16.03	81.6	70	130	1.72	0	E
Surr: 1,2-Dichloroethane-d4	0.47		0.4883		97.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.34		0.4883		68.8	70	130	0	0	S
Surr: Dibromofluoromethane	0.47		0.4883		95.7	70	130	0	0	
Surr: Toluene-d8	0.47		0.4883		95.3	70	130	0	0	

Sample ID: **lcs-51320** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **LCSS** Batch ID: **51320** RunNo: **67600**

Prep Date: **3/25/2020** Analysis Date: **3/26/2020** SeqNo: **2334318** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.1	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.8	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: **mb-51320** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **51320** RunNo: **67600**

Prep Date: **3/25/2020** Analysis Date: **3/26/2020** SeqNo: **2334319** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.9	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2003986**

30-Mar-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1h 20836060

Sample ID: **lcs-51277**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51277**	RunNo: **67556**
Prep Date: **3/23/2020**	Analysis Date: **3/25/2020**	SeqNo: **2332351** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	80.5	70	130			
Surr: BFB	500		500.0		99.8	70	130			

Sample ID: **mb-51277**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51277**	RunNo: **67556**
Prep Date: **3/23/2020**	Analysis Date: **3/25/2020**	SeqNo: **2332359** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	500		500.0		101	70	130			

Sample ID: **2003986-002ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **AH-1 1ft**	Batch ID: **51277**	RunNo: **67556**
Prep Date: **3/23/2020**	Analysis Date: **3/25/2020**	SeqNo: **2332998** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	46	4.9	24.30	24.40	89.1	70	130			
Surr: BFB	550		485.9		113	70	130			

Sample ID: **2003986-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **AH-1 1ft**	Batch ID: **51277**	RunNo: **67556**
Prep Date: **3/23/2020**	Analysis Date: **3/25/2020**	SeqNo: **2332999** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	42	4.6	23.17	24.40	77.7	70	130	8.28	20	
Surr: BFB	520		463.4		112	70	130	0	0	

Sample ID: **lcs-51320**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51320**	RunNo: **67600**
Prep Date: **3/25/2020**	Analysis Date: **3/26/2020**	SeqNo: **2334355** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	470		500.0		93.3	70	130			

Sample ID: **mb-51320**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51320**	RunNo: **67600**
Prep Date: **3/25/2020**	Analysis Date: **3/26/2020**	SeqNo: **2334356** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	470		500.0		94.3	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **2003986** RcptNo: **1**

Received By: **Yazmine Garduno** **3/21/2020 8:06:00 AM**

Completed By: **Yazmine Garduno** **3/21/2020 11:07:22 AM**

Reviewed By: JD 3/23/20

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° 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. 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: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 3/23/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good				
2	0.5	Good				

Chain-of-Custody Record

DEVON

Client: Safety & Environmental Solutions

Mailing Address: 703 E. Clinton Hobbs NM 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day
☐ Standard ☐ Rush

Project Name: Devon SNAPPING 10 Fed 1H
WO# 208360 60

Project #: DEV-20-011

Project Manager: Allen Bob

Sampler: Jon Jerry

On Ice: ☑ Yes ☐ No

# of Coolers: 2 (0.3-0.2=0.1)

Cooler Temp(including CF): 0.1-0.2=0.5 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2003986	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
03/19	1015	S	AH-1 Surface	1		-001	X	X									X
	1025	S	AH-1 1ft	1		-002											
	1055	S	AH-2 Surface	1		-003											
	1045	S	AH-2 1ft	1		-004											
	1055	S	AH-3 Surface	1		-005											
	1105	S	AH-3 1ft	1		-006											
	1115	S	AH-4 Surface	1		-007											
	1125	S	AH-4 1ft	1		-008											
	1135	S	AH-5 Surface	1		-009											
03/19	1150	S	AH-5 1ft	1		-010	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
03/20/20	1700	Jon Jerry			3/20/20	1700
3/20	1900			Courier	3/21/20	0804

Remarks: Bill Devon Direct

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

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

June 04, 2020

Bob Allen

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

RE: Ross Ranch OrderNo.: 2004552

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 22 sample(s) on 4/11/2020 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 17, 2020.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2004552**
Date Reported: **6/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SA9 Surface
Project: Ross Ranch
Collection Date: 4/8/2020 2:10:00 PM
Lab ID: 2004552-009 **Matrix:** SOIL **Received Date:** 4/11/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/15/2020 8:13:19 PM	51819

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004552**
Date Reported: **6/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SA10 Surface
Project: Ross Ranch
Collection Date: 4/8/2020 2:40:00 PM
Lab ID: 2004552-010 **Matrix:** SOIL **Received Date:** 4/11/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	4/15/2020 8:25:43 PM	51819

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004552**
Date Reported: **6/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SA11 Surface
Project: Ross Ranch
Collection Date: 4/8/2020 3:10:00 PM
Lab ID: 2004552-011 **Matrix:** SOIL **Received Date:** 4/11/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	61		mg/Kg	20	4/15/2020 8:38:07 PM	51819

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004552**
Date Reported: **6/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SA9 1Ft
Project: Ross Ranch
Collection Date: 4/8/2020 2:20:00 PM
Lab ID: 2004552-020 **Matrix:** SOIL **Received Date:** 4/11/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/15/2020 8:13:07 PM	51836
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/15/2020 2:43:23 AM	51747
Surr: BFB	97.4	70-130		%Rec	1	4/15/2020 2:43:23 AM	51747
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	46	9.6		mg/Kg	1	4/14/2020 4:18:18 PM	51754
Motor Oil Range Organics (MRO)	80	48		mg/Kg	1	4/14/2020 4:18:18 PM	51754
Surr: DNOP	93.7	55.1-146		%Rec	1	4/14/2020 4:18:18 PM	51754
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	4/15/2020 2:43:23 AM	51747
Toluene	ND	0.050		mg/Kg	1	4/15/2020 2:43:23 AM	51747
Ethylbenzene	ND	0.050		mg/Kg	1	4/15/2020 2:43:23 AM	51747
Xylenes, Total	ND	0.099		mg/Kg	1	4/15/2020 2:43:23 AM	51747
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	4/15/2020 2:43:23 AM	51747
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	4/15/2020 2:43:23 AM	51747
Surr: Dibromofluoromethane	99.9	70-130		%Rec	1	4/15/2020 2:43:23 AM	51747
Surr: Toluene-d8	93.5	70-130		%Rec	1	4/15/2020 2:43:23 AM	51747

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004552**
Date Reported: **6/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SA10 1Ft
Project: Ross Ranch
Collection Date: 4/8/2020 2:50:00 PM
Lab ID: 2004552-021 **Matrix:** SOIL **Received Date:** 4/11/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/15/2020 8:25:31 PM	51836
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/15/2020 3:11:42 AM	51747
Surr: BFB	99.0	70-130		%Rec	1	4/15/2020 3:11:42 AM	51747
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	4/14/2020 5:30:01 PM	51754
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	4/14/2020 5:30:01 PM	51754
Surr: DNOP	103	55.1-146		%Rec	1	4/14/2020 5:30:01 PM	51754
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	4/15/2020 3:11:42 AM	51747
Toluene	ND	0.050		mg/Kg	1	4/15/2020 3:11:42 AM	51747
Ethylbenzene	ND	0.050		mg/Kg	1	4/15/2020 3:11:42 AM	51747
Xylenes, Total	ND	0.10		mg/Kg	1	4/15/2020 3:11:42 AM	51747
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	4/15/2020 3:11:42 AM	51747
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	4/15/2020 3:11:42 AM	51747
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	4/15/2020 3:11:42 AM	51747
Surr: Toluene-d8	94.0	70-130		%Rec	1	4/15/2020 3:11:42 AM	51747

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004552**
Date Reported: **6/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SA11 1Ft
Project: Ross Ranch
Collection Date: 4/8/2020 3:20:00 PM
Lab ID: 2004552-022 **Matrix:** SOIL **Received Date:** 4/11/2020 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	4/15/2020 8:37:56 PM	51836
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/15/2020 3:40:05 AM	51747
Surr: BFB	100	70-130		%Rec	1	4/15/2020 3:40:05 AM	51747
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	4/14/2020 5:53:56 PM	51754
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/14/2020 5:53:56 PM	51754
Surr: DNOP	110	55.1-146		%Rec	1	4/14/2020 5:53:56 PM	51754
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	4/15/2020 3:40:05 AM	51747
Toluene	ND	0.050		mg/Kg	1	4/15/2020 3:40:05 AM	51747
Ethylbenzene	ND	0.050		mg/Kg	1	4/15/2020 3:40:05 AM	51747
Xylenes, Total	ND	0.10		mg/Kg	1	4/15/2020 3:40:05 AM	51747
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	1	4/15/2020 3:40:05 AM	51747
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	4/15/2020 3:40:05 AM	51747
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	4/15/2020 3:40:05 AM	51747
Surr: Toluene-d8	93.5	70-130		%Rec	1	4/15/2020 3:40:05 AM	51747

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004552**
04-Jun-20

Client: Safety & Environmental Solutions
Project: Ross Ranch

Sample ID: **MB-51836** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **51836** RunNo: **68136**
Prep Date: **4/15/2020** Analysis Date: **4/15/2020** SeqNo: **2356639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51836** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **51836** RunNo: **68136**
Prep Date: **4/15/2020** Analysis Date: **4/15/2020** SeqNo: **2356640** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Sample ID: **MB-51819** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **51819** RunNo: **68146**
Prep Date: **4/15/2020** Analysis Date: **4/15/2020** SeqNo: **2356712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51819** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **51819** RunNo: **68146**
Prep Date: **4/15/2020** Analysis Date: **4/15/2020** SeqNo: **2356713** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004552**
04-Jun-20

Client: Safety & Environmental Solutions
Project: Ross Ranch

Sample ID: **LCS-51753** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **51753** RunNo: **68138**
Prep Date: **4/13/2020** Analysis Date: **4/15/2020** SeqNo: **2355495** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.1	70	130			
Surr: DNOP	4.3		5.000		85.9	55.1	146			

Sample ID: **MB-51753** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **51753** RunNo: **68138**
Prep Date: **4/13/2020** Analysis Date: **4/15/2020** SeqNo: **2355496** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.6		10.00		76.1	55.1	146			

Sample ID: **MB-51754** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **51754** RunNo: **68099**
Prep Date: **4/13/2020** Analysis Date: **4/14/2020** SeqNo: **2355633** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.9		10.00		68.7	55.1	146			

Sample ID: **LCS-51754** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **51754** RunNo: **68099**
Prep Date: **4/13/2020** Analysis Date: **4/14/2020** SeqNo: **2355634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.4	70	130			
Surr: DNOP	4.4		5.000		88.3	55.1	146			

Sample ID: **2004552-020AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SA9 1Ft** Batch ID: **51754** RunNo: **68099**
Prep Date: **4/13/2020** Analysis Date: **4/14/2020** SeqNo: **2355636** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	89	9.5	47.66	45.96	90.1	47.4	136			
Surr: DNOP	4.9		4.766		102	55.1	146			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004552**
04-Jun-20

Client: Safety & Environmental Solutions
Project: Ross Ranch

Sample ID: **2004552-020AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SA9 1Ft** Batch ID: **51754** RunNo: **68099**
Prep Date: **4/13/2020** Analysis Date: **4/14/2020** SeqNo: **2355637** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	91	9.2	46.13	45.96	97.5	47.4	136	2.27	43.4	
Surr: DNOP	4.3		4.613		93.7	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004552**
04-Jun-20

Client: Safety & Environmental Solutions
Project: Ross Ranch

Sample ID: **2004552-012ams** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SA1 1Ft** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355174** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	0.9862	0	87.1	70	130			
Toluene	0.96	0.049	0.9862	0	97.0	70	130			
Ethylbenzene	0.96	0.049	0.9862	0	97.2	70	130			
Xylenes, Total	2.9	0.099	2.959	0	99.1	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.4931		91.7	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4931		93.8	70	130			
Surr: Dibromofluoromethane	0.49		0.4931		100	70	130			
Surr: Toluene-d8	0.45		0.4931		91.7	70	130			

Sample ID: **2004552-012amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SA1 1Ft** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355175** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	0.9930	0	83.9	70	130	3.00	20	
Toluene	0.94	0.050	0.9930	0	94.6	70	130	1.82	20	
Ethylbenzene	0.97	0.050	0.9930	0	97.6	70	130	1.06	0	
Xylenes, Total	2.9	0.099	2.979	0	97.5	70	130	0.944	0	
Surr: 1,2-Dichloroethane-d4	0.47		0.4965		94.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.48		0.4965		96.2	70	130	0	0	
Surr: Dibromofluoromethane	0.51		0.4965		102	70	130	0	0	
Surr: Toluene-d8	0.47		0.4965		95.2	70	130	0	0	

Sample ID: **lcs-51747** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355186** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.1	70	130			
Toluene	1.0	0.050	1.000	0	101	70	130			
Ethylbenzene	1.0	0.050	1.000	0	102	70	130			
Xylenes, Total	3.1	0.10	3.000	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.8	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		101	70	130			
Surr: Toluene-d8	0.48		0.5000		96.5	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004552**
04-Jun-20

Client: Safety & Environmental Solutions
Project: Ross Ranch

Sample ID: **mb-51747** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355187** Units: **mg/Kg**

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								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.7	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.48		0.5000		95.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004552**
04-Jun-20

Client: Safety & Environmental Solutions
Project: Ross Ranch

Sample ID: **2004552-013ams** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **SA2 1Ft** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355208** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.73	0	81.2	70	130			
Surr: BFB	480		494.6		97.9	70	130			

Sample ID: **2004552-013amsd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **SA2 1Ft** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355209** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.73	0	82.4	70	130	1.52	20	
Surr: BFB	480		494.6		97.2	70	130	0	0	

Sample ID: **lcs-51747** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.9	70	130			
Surr: BFB	490		500.0		98.5	70	130			

Sample ID: **mb-51747** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **51747** RunNo: **68126**
Prep Date: **4/12/2020** Analysis Date: **4/14/2020** SeqNo: **2355220** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.6	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2004552 RcptNo: 1

Received By: **Erin Melendrez** 4/11/2020 10:00:00 AM

Completed By: **Erin Melendrez** 4/11/2020 11:09:27 AM

Reviewed By:

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° 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. 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: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: ENM 4/11/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good				
2	3.3	Good				

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 Clinton
Hobbs NM 88240

Phone #: 575 397 0510

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day Turn
☒ Standard ☐ Rush

Project Name: Ross Ranch

Project #: DEV-19-008

Project Manager:
Bob Allen

Sampler:

On Ice: ☒ Yes ☐ No

# of Coolers: X2 EDH 4/11/20

Cooler Temp (including CF): 0.9-0.3(CF)=0.6(°C)
3.6-0.3(CF)=3.3°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2004552	Analysis Request: BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
4-8-20	1100	~~Soil~~ S	SA1 1Ft	1-4oz Jar	Ice	-017	X	X									X
	1120	S	SA2 1Ft			-013		X									X
	1145	S	SA3 1Ft			-014		X									X
	1215	S	SA4 1Ft			-015		X									X
	1240	S	SA5 1Ft			-016		X									X
	1300	S	SA6 1Ft			-017		X									X
	1330	S	SA7 1Ft			-018		X									X
	1355	S	SA8 1Ft			-019		X									X
	1420	S	SA9 1Ft			-020		X									X
	1450	S	SA10 1Ft			-021		X									X
4-8-20	1520	~~Soil~~ S	SA11 1Ft	4oz Jar	ICE	-022	X	X									X

Date	Time	Relinquished by	Received by	Via	Date	Time
4-9-20	1630	Roberto Martinez Jr				
4/10	1900			Courier	4/11/20	1000

Remarks:
Bill Directly To Devon
As per Katherine Purvis. MMG 6/4/20
Lab ids 001-008 and 012-019 stay on this Ross Ranch 10 Federal #1 lab
Lab ids 009-011 and 020-022 move to a new lab with site name Snapping 10-1

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.

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 Clinton
Hobbs NM 88240

Phone #: 575 397 0510

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day Turn
☒ Standard ☐ Rush

Project Name: ~~DEV-19-008~~ Ross Ranch

Project #: DEV-19-008

Project Manager: Bob Allen

Sampler:

On Ice: ☒ Yes ☐ No

# of Coolers: 1 (ENP 4/11/20)

Cooler Temp(including CF): 0.9-0.3(CF)=0.6(°C) 3.6-0.3(CF)=3.3C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
4-8	1050	S	SA1 Surface	1-4oz Jar	Ice	-001											X
4-8	1110	S	SA2 Surface	1-4oz Jar	Ice	-002											X
4-8	1130	S	SA3 Surface	1-4oz Jar	Ice	-003											X
4-8	1240	S	SA4 Surface	1-4oz Jar	Ice	-004											X
4-8	1235	S	SA5 Surface	1-4oz Jar	Ice	-005											X
4-8	1250	S	SA6 Surface	1-4oz Jar	Ice	-006											X
4-8	1315	S	SA7 Surface	1-4oz Jar	Ice	-007											X
4-8	1340	S	SA8 Surface	1-4oz Jar	Ice	-008											X
4-8	1410	S	SA9 Surface	1-4oz Jar	Ice	-009											X
4-8	1440	S	SA10 Surface	1-4oz Jar	Ice	-010											X
4-8	1510	S	SA11 Surface	1-4oz Jar	Ice	-011											X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4-9-20	1630	Roberto Martinez Jr			4/9/20	1630
4/10	1900			Courier	4/11/20	1000

Remarks: Bill Directly To Devon

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 29, 2020

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

RE: Devon Snapping 10 FED 1H 2RP-4661 OrderNo.: 2006A87

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 16 sample(s) on 6/20/2020 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 or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-6 2ft Bottom
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 9:45:00 AM
Lab ID: 2006A87-001 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	6/26/2020 1:49:03 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2020 6:25:04 PM	53203
Surr: BFB	96.6	70-130		%Rec	1	6/22/2020 6:25:04 PM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/22/2020 9:54:22 AM	53207
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/22/2020 9:54:22 AM	53207
Surr: DNOP	95.0	55.1-146		%Rec	1	6/22/2020 9:54:22 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/22/2020 6:25:04 PM	53203
Toluene	ND	0.049		mg/Kg	1	6/22/2020 6:25:04 PM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2020 6:25:04 PM	53203
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2020 6:25:04 PM	53203
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	1	6/22/2020 6:25:04 PM	53203
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	6/22/2020 6:25:04 PM	53203
Surr: Dibromofluoromethane	106	70-130		%Rec	1	6/22/2020 6:25:04 PM	53203
Surr: Toluene-d8	102	70-130		%Rec	1	6/22/2020 6:25:04 PM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-7 2ft Bottom
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 9:55:00 AM
Lab ID: 2006A87-002 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	6/26/2020 2:01:27 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2020 7:52:03 PM	53203
Surr: BFB	96.8	70-130		%Rec	1	6/22/2020 7:52:03 PM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/22/2020 10:04:17 AM	53207
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/22/2020 10:04:17 AM	53207
Surr: DNOP	94.2	55.1-146		%Rec	1	6/22/2020 10:04:17 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/22/2020 7:52:03 PM	53203
Toluene	ND	0.049		mg/Kg	1	6/22/2020 7:52:03 PM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2020 7:52:03 PM	53203
Xylenes, Total	ND	0.098		mg/Kg	1	6/22/2020 7:52:03 PM	53203
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	6/22/2020 7:52:03 PM	53203
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/22/2020 7:52:03 PM	53203
Surr: Dibromofluoromethane	109	70-130		%Rec	1	6/22/2020 7:52:03 PM	53203
Surr: Toluene-d8	101	70-130		%Rec	1	6/22/2020 7:52:03 PM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-8 2ft Bottom
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 10:15:00 AM
Lab ID: 2006A87-003 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	6/26/2020 2:13:52 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/22/2020 9:18:33 PM	53203
Surr: BFB	98.1	70-130		%Rec	1	6/22/2020 9:18:33 PM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/22/2020 10:14:12 AM	53207
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/22/2020 10:14:12 AM	53207
Surr: DNOP	147	55.1-146	S	%Rec	1	6/22/2020 10:14:12 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/22/2020 9:18:33 PM	53203
Toluene	ND	0.050		mg/Kg	1	6/22/2020 9:18:33 PM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/22/2020 9:18:33 PM	53203
Xylenes, Total	ND	0.10		mg/Kg	1	6/22/2020 9:18:33 PM	53203
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	6/22/2020 9:18:33 PM	53203
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/22/2020 9:18:33 PM	53203
Surr: Dibromofluoromethane	112	70-130		%Rec	1	6/22/2020 9:18:33 PM	53203
Surr: Toluene-d8	104	70-130		%Rec	1	6/22/2020 9:18:33 PM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-9 1ft Bottom
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 10:35:00 AM
Lab ID: 2006A87-004 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	6/26/2020 2:26:16 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/22/2020 9:47:18 PM	53203
Surr: BFB	98.3	70-130		%Rec	1	6/22/2020 9:47:18 PM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/22/2020 10:24:10 AM	53207
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/22/2020 10:24:10 AM	53207
Surr: DNOP	94.0	55.1-146		%Rec	1	6/22/2020 10:24:10 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/22/2020 9:47:18 PM	53203
Toluene	ND	0.050		mg/Kg	1	6/22/2020 9:47:18 PM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/22/2020 9:47:18 PM	53203
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2020 9:47:18 PM	53203
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/22/2020 9:47:18 PM	53203
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	6/22/2020 9:47:18 PM	53203
Surr: Dibromofluoromethane	113	70-130		%Rec	1	6/22/2020 9:47:18 PM	53203
Surr: Toluene-d8	102	70-130		%Rec	1	6/22/2020 9:47:18 PM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-10 1ft Bottom
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 10:55:00 AM
Lab ID: 2006A87-005 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	180	60		mg/Kg	20	6/26/2020 2:38:41 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2020 10:16:03 PM	53203
Surr: BFB	94.4	70-130		%Rec	1	6/22/2020 10:16:03 PM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/22/2020 10:34:09 AM	53207
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/22/2020 10:34:09 AM	53207
Surr: DNOP	70.4	55.1-146		%Rec	1	6/22/2020 10:34:09 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/22/2020 10:16:03 PM	53203
Toluene	ND	0.049		mg/Kg	1	6/22/2020 10:16:03 PM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2020 10:16:03 PM	53203
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2020 10:16:03 PM	53203
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/22/2020 10:16:03 PM	53203
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	6/22/2020 10:16:03 PM	53203
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/22/2020 10:16:03 PM	53203
Surr: Toluene-d8	99.6	70-130		%Rec	1	6/22/2020 10:16:03 PM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-11 West-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 11:20:00 AM
Lab ID: 2006A87-006 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	63	59		mg/Kg	20	6/26/2020 2:51:05 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2020 10:44:42 PM	53203
Surr: BFB	96.2	70-130		%Rec	1	6/22/2020 10:44:42 PM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	34	9.6		mg/Kg	1	6/25/2020 9:53:24 AM	53273
Motor Oil Range Organics (MRO)	76	48		mg/Kg	1	6/25/2020 9:53:24 AM	53273
Surr: DNOP	108	55.1-146		%Rec	1	6/25/2020 9:53:24 AM	53273
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/22/2020 10:44:42 PM	53203
Toluene	ND	0.049		mg/Kg	1	6/22/2020 10:44:42 PM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2020 10:44:42 PM	53203
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2020 10:44:42 PM	53203
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	6/22/2020 10:44:42 PM	53203
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	6/22/2020 10:44:42 PM	53203
Surr: Dibromofluoromethane	109	70-130		%Rec	1	6/22/2020 10:44:42 PM	53203
Surr: Toluene-d8	102	70-130		%Rec	1	6/22/2020 10:44:42 PM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-12 East-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 11:45:00 AM
Lab ID: 2006A87-007 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	240	60		mg/Kg	20	6/26/2020 3:28:19 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/23/2020 1:36:09 AM	53203
Surr: BFB	100	70-130		%Rec	1	6/23/2020 1:36:09 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/22/2020 10:54:07 AM	53207
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/22/2020 10:54:07 AM	53207
Surr: DNOP	84.0	55.1-146		%Rec	1	6/22/2020 10:54:07 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/23/2020 1:36:09 AM	53203
Toluene	ND	0.050		mg/Kg	1	6/23/2020 1:36:09 AM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/23/2020 1:36:09 AM	53203
Xylenes, Total	ND	0.10		mg/Kg	1	6/23/2020 1:36:09 AM	53203
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	6/23/2020 1:36:09 AM	53203
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	6/23/2020 1:36:09 AM	53203
Surr: Dibromofluoromethane	108	70-130		%Rec	1	6/23/2020 1:36:09 AM	53203
Surr: Toluene-d8	108	70-130		%Rec	1	6/23/2020 1:36:09 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-13 West-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 12:10:00 PM
Lab ID: 2006A87-008 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	65	60		mg/Kg	20	6/26/2020 3:40:43 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/23/2020 2:04:40 AM	53203
Surr: BFB	97.8	70-130		%Rec	1	6/23/2020 2:04:40 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	35	9.9		mg/Kg	1	6/25/2020 10:03:16 AM	53273
Motor Oil Range Organics (MRO)	80	50		mg/Kg	1	6/25/2020 10:03:16 AM	53273
Surr: DNOP	105	55.1-146		%Rec	1	6/25/2020 10:03:16 AM	53273
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	6/23/2020 2:04:40 AM	53203
Toluene	ND	0.049		mg/Kg	1	6/23/2020 2:04:40 AM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/23/2020 2:04:40 AM	53203
Xylenes, Total	ND	0.098		mg/Kg	1	6/23/2020 2:04:40 AM	53203
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/23/2020 2:04:40 AM	53203
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	6/23/2020 2:04:40 AM	53203
Surr: Dibromofluoromethane	107	70-130		%Rec	1	6/23/2020 2:04:40 AM	53203
Surr: Toluene-d8	104	70-130		%Rec	1	6/23/2020 2:04:40 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-14 East-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 12:30:00 PM
Lab ID: 2006A87-009 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	61		mg/Kg	20	6/26/2020 3:53:08 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/23/2020 2:33:16 AM	53203
Surr: BFB	95.1	70-130		%Rec	1	6/23/2020 2:33:16 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/22/2020 11:14:09 AM	53207
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/22/2020 11:14:09 AM	53207
Surr: DNOP	95.8	55.1-146		%Rec	1	6/22/2020 11:14:09 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/23/2020 2:33:16 AM	53203
Toluene	ND	0.050		mg/Kg	1	6/23/2020 2:33:16 AM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/23/2020 2:33:16 AM	53203
Xylenes, Total	ND	0.10		mg/Kg	1	6/23/2020 2:33:16 AM	53203
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	6/23/2020 2:33:16 AM	53203
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/23/2020 2:33:16 AM	53203
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/23/2020 2:33:16 AM	53203
Surr: Toluene-d8	106	70-130		%Rec	1	6/23/2020 2:33:16 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-15 West-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 1:00:00 PM
Lab ID: 2006A87-010 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	190	60		mg/Kg	20	6/26/2020 4:05:33 AM	53319
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/23/2020 3:01:54 AM	53203
Surr: BFB	98.5	70-130		%Rec	1	6/23/2020 3:01:54 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/22/2020 11:24:13 AM	53207
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/22/2020 11:24:13 AM	53207
Surr: DNOP	73.0	55.1-146		%Rec	1	6/22/2020 11:24:13 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/23/2020 3:01:54 AM	53203
Toluene	ND	0.050		mg/Kg	1	6/23/2020 3:01:54 AM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/23/2020 3:01:54 AM	53203
Xylenes, Total	ND	0.099		mg/Kg	1	6/23/2020 3:01:54 AM	53203
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	6/23/2020 3:01:54 AM	53203
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	6/23/2020 3:01:54 AM	53203
Surr: Dibromofluoromethane	107	70-130		%Rec	1	6/23/2020 3:01:54 AM	53203
Surr: Toluene-d8	106	70-130		%Rec	1	6/23/2020 3:01:54 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-16 North-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/18/2020 1:25:00 PM
Lab ID: 2006A87-011 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	460	60		mg/Kg	20	6/26/2020 6:46:51 PM	53333
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/23/2020 3:30:25 AM	53203
Surr: BFB	97.6	70-130		%Rec	1	6/23/2020 3:30:25 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/22/2020 11:34:18 AM	53207
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/22/2020 11:34:18 AM	53207
Surr: DNOP	66.6	55.1-146		%Rec	1	6/22/2020 11:34:18 AM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	6/23/2020 3:30:25 AM	53203
Toluene	ND	0.049		mg/Kg	1	6/23/2020 3:30:25 AM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/23/2020 3:30:25 AM	53203
Xylenes, Total	ND	0.097		mg/Kg	1	6/23/2020 3:30:25 AM	53203
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	6/23/2020 3:30:25 AM	53203
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	6/23/2020 3:30:25 AM	53203
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/23/2020 3:30:25 AM	53203
Surr: Toluene-d8	107	70-130		%Rec	1	6/23/2020 3:30:25 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-17 North-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/17/2020 9:45:00 AM
Lab ID: 2006A87-012 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	6/26/2020 3:04:38 PM	53333
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/23/2020 3:58:53 AM	53203
Surr: BFB	96.5	70-130		%Rec	1	6/23/2020 3:58:53 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	29	9.4		mg/Kg	1	6/25/2020 10:13:11 AM	53273
Motor Oil Range Organics (MRO)	94	47		mg/Kg	1	6/25/2020 10:13:11 AM	53273
Surr: DNOP	102	55.1-146		%Rec	1	6/25/2020 10:13:11 AM	53273
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/23/2020 3:58:53 AM	53203
Toluene	ND	0.050		mg/Kg	1	6/23/2020 3:58:53 AM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/23/2020 3:58:53 AM	53203
Xylenes, Total	ND	0.10		mg/Kg	1	6/23/2020 3:58:53 AM	53203
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	6/23/2020 3:58:53 AM	53203
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/23/2020 3:58:53 AM	53203
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/23/2020 3:58:53 AM	53203
Surr: Toluene-d8	105	70-130		%Rec	1	6/23/2020 3:58:53 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-18 East-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/17/2020 9:55:00 AM
Lab ID: 2006A87-013 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	6/26/2020 3:16:59 PM	53333
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/23/2020 4:27:21 AM	53203
Surr: BFB	93.6	70-130		%Rec	1	6/23/2020 4:27:21 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	34	9.1		mg/Kg	1	6/25/2020 10:23:06 AM	53273
Motor Oil Range Organics (MRO)	100	46		mg/Kg	1	6/25/2020 10:23:06 AM	53273
Surr: DNOP	109	55.1-146		%Rec	1	6/25/2020 10:23:06 AM	53273
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/23/2020 4:27:21 AM	53203
Toluene	ND	0.050		mg/Kg	1	6/23/2020 4:27:21 AM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/23/2020 4:27:21 AM	53203
Xylenes, Total	ND	0.10		mg/Kg	1	6/23/2020 4:27:21 AM	53203
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/23/2020 4:27:21 AM	53203
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	6/23/2020 4:27:21 AM	53203
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/23/2020 4:27:21 AM	53203
Surr: Toluene-d8	106	70-130		%Rec	1	6/23/2020 4:27:21 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-19 South-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/17/2020 10:20:00 AM
Lab ID: 2006A87-014 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	6/26/2020 3:29:20 PM	53333
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/23/2020 4:55:54 AM	53203
Surr: BFB	98.6	70-130		%Rec	1	6/23/2020 4:55:54 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	31	9.6		mg/Kg	1	6/25/2020 10:33:00 AM	53273
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	6/25/2020 10:33:00 AM	53273
Surr: DNOP	110	55.1-146		%Rec	1	6/25/2020 10:33:00 AM	53273
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	6/23/2020 4:55:54 AM	53203
Toluene	ND	0.050		mg/Kg	1	6/23/2020 4:55:54 AM	53203
Ethylbenzene	ND	0.050		mg/Kg	1	6/23/2020 4:55:54 AM	53203
Xylenes, Total	ND	0.10		mg/Kg	1	6/23/2020 4:55:54 AM	53203
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	6/23/2020 4:55:54 AM	53203
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	6/23/2020 4:55:54 AM	53203
Surr: Dibromofluoromethane	108	70-130		%Rec	1	6/23/2020 4:55:54 AM	53203
Surr: Toluene-d8	108	70-130		%Rec	1	6/23/2020 4:55:54 AM	53203

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

Qualifiers:

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

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-20 West-H
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/17/2020 10:40:00 AM
Lab ID: 2006A87-015 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	6/26/2020 3:41:41 PM	53333
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/23/2020 5:24:23 AM	53203
Surr: BFB	98.1	70-130		%Rec	1	6/23/2020 5:24:23 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	29	9.7		mg/Kg	1	6/25/2020 10:42:58 AM	53273
Motor Oil Range Organics (MRO)	81	49		mg/Kg	1	6/25/2020 10:42:58 AM	53273
Surr: DNOP	113	55.1-146		%Rec	1	6/25/2020 10:42:58 AM	53273
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	6/23/2020 5:24:23 AM	53203
Toluene	ND	0.048		mg/Kg	1	6/23/2020 5:24:23 AM	53203
Ethylbenzene	ND	0.048		mg/Kg	1	6/23/2020 5:24:23 AM	53203
Xylenes, Total	ND	0.096		mg/Kg	1	6/23/2020 5:24:23 AM	53203
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	6/23/2020 5:24:23 AM	53203
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/23/2020 5:24:23 AM	53203
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/23/2020 5:24:23 AM	53203
Surr: Toluene-d8	106	70-130		%Rec	1	6/23/2020 5:24:23 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006A87**
Date Reported: **6/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-21 2ft Bottom
Project: Devon Snapping 10 FED 1H 2RP-4661
Collection Date: 6/17/2020 11:00:00 AM
Lab ID: 2006A87-016 **Matrix:** SOIL
Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	600	60		mg/Kg	20	6/26/2020 3:54:02 PM	53333
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/23/2020 5:52:55 AM	53203
Surr: BFB	93.8	70-130		%Rec	1	6/23/2020 5:52:55 AM	53203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/22/2020 12:25:42 PM	53207
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/22/2020 12:25:42 PM	53207
Surr: DNOP	82.0	55.1-146		%Rec	1	6/22/2020 12:25:42 PM	53207
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	6/23/2020 5:52:55 AM	53203
Toluene	ND	0.049		mg/Kg	1	6/23/2020 5:52:55 AM	53203
Ethylbenzene	ND	0.049		mg/Kg	1	6/23/2020 5:52:55 AM	53203
Xylenes, Total	ND	0.097		mg/Kg	1	6/23/2020 5:52:55 AM	53203
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	6/23/2020 5:52:55 AM	53203
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	6/23/2020 5:52:55 AM	53203
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/23/2020 5:52:55 AM	53203
Surr: Toluene-d8	103	70-130		%Rec	1	6/23/2020 5:52:55 AM	53203

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006A87**

29-Jun-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 FED 1H 2RP-4661

Sample ID: **MB-53319** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **53319** RunNo: **69924**

Prep Date: **6/25/2020** Analysis Date: **6/25/2020** SeqNo: **2428644** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-53319** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **53319** RunNo: **69924**

Prep Date: **6/25/2020** Analysis Date: **6/25/2020** SeqNo: **2428645** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.0	90	110			

Sample ID: **MB-53333** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **53333** RunNo: **69932**

Prep Date: **6/26/2020** Analysis Date: **6/26/2020** SeqNo: **2429479** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-53333** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **53333** RunNo: **69932**

Prep Date: **6/26/2020** Analysis Date: **6/26/2020** SeqNo: **2429487** Units: **mg/Kg**

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006A87**
29-Jun-20

Client: Safety & Environmental Solutions
Project: Devon Snapping 10 FED 1H 2RP-4661

Sample ID: **LCS-53207** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **53207** RunNo: **69799**
Prep Date: **6/21/2020** Analysis Date: **6/22/2020** SeqNo: **2423722** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	10	50.00	0	134	70	130			S
Surr: DNOP	7.5		5.000		150	55.1	146			S

Sample ID: **MB-53207** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **53207** RunNo: **69799**
Prep Date: **6/21/2020** Analysis Date: **6/22/2020** SeqNo: **2423723** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	17		10.00		166	55.1	146			S

Sample ID: **MB-53273** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **53273** RunNo: **69876**
Prep Date: **6/24/2020** Analysis Date: **6/25/2020** SeqNo: **2426530** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	55.1	146			

Sample ID: **LCS-53273** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **53273** RunNo: **69876**
Prep Date: **6/24/2020** Analysis Date: **6/25/2020** SeqNo: **2426555** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	123	70	130			
Surr: DNOP	5.9		5.000		118	55.1	146			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006A87**
29-Jun-20

Client: Safety & Environmental Solutions
Project: Devon Snapping 10 FED 1H 2RP-4661

Sample ID: **mb-53203** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424390** Units: **mg/Kg**

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								
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.2	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.53		0.5000		106	70	130			

Sample ID: **lcs-53203** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424391** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	108	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.5	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID: **2006a87-001ams** SampType: **MS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SP-6 2ft Bottom** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424398** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9930	0	113	71.1	115			
Toluene	1.1	0.050	0.9930	0	112	79.6	132			
Ethylbenzene	1.1	0.050	0.9930	0	112	83.8	134			
Xylenes, Total	3.6	0.099	2.979	0	119	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.53		0.4965		107	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.4965		99.3	70	130			
Surr: Dibromofluoromethane	0.55		0.4965		110	70	130			
Surr: Toluene-d8	0.53		0.4965		107	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006A87**
29-Jun-20

Client: Safety & Environmental Solutions
Project: Devon Snapping 10 FED 1H 2RP-4661

Sample ID: **2006a87-001amsd** SampType: **MSD4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SP-6 2ft Bottom** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424399** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9737	0	107	71.1	115	7.59	20	
Toluene	0.98	0.049	0.9737	0	101	79.6	132	12.5	20	
Ethylbenzene	0.95	0.049	0.9737	0	97.8	83.8	134	15.4	20	
Xylenes, Total	3.1	0.097	2.921	0	107	82.4	132	13.3	20	
Surr: 1,2-Dichloroethane-d4	0.54		0.4869		112	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.49		0.4869		101	70	130	0	0	
Surr: Dibromofluoromethane	0.55		0.4869		113	70	130	0	0	
Surr: Toluene-d8	0.48		0.4869		98.6	70	130	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006A87**
29-Jun-20

Client: Safety & Environmental Solutions
Project: Devon Snapping 10 FED 1H 2RP-4661

Sample ID: **mb-53203** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424417** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.8	70	130			

Sample ID: **lcs-53203** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424418** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	25.00	0	77.2	70	130			
Surr: BFB	470		500.0		94.4	70	130			

Sample ID: **2006a87-002ams** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **SP-7 2ft Bottom** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.8	24.04	0	78.4	70	130			
Surr: BFB	450		480.8		92.8	70	130			

Sample ID: **2006a87-002amsd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **SP-7 2ft Bottom** Batch ID: **53203** RunNo: **69819**
Prep Date: **6/20/2020** Analysis Date: **6/22/2020** SeqNo: **2424427** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.9	24.58	0	77.2	70	130	0.693	20	
Surr: BFB	490		491.6		98.9	70	130	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 & Environmental Solutions | Work Order Number: 2006A87 | RcptNo: 1

Received By: **Juan Rojas** 6/20/2020 7:40:00 AM

Completed By: **Juan Rojas** 6/20/2020 8:29:03 AM

Reviewed By: DF 6/20/2020

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. 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: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 6/20/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 E Clinton Hobbs N.M 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush 5 day

Project Name: Devon SWD Piping 10 70 1H 2RP-4861

Project #: DEV-20-011

Project Manager: Allen, Bob

Sampler: Sean Jerry

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.4-0=0.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006A87	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
06/18	0945	S	SP-6 2Ft Bottom	1	Ice	-001	X	X									X
	0955	S	SP-7 2Ft Bottom	1		-002											
	1015	S	SP-8 2Ft Bottom	1		-003											
	1035	S	SP-9 1Ft Bottom	1		-004											
	1055	S	SP-10 1Ft Bottom	1		-005											
	1120	S	SP-11 WEST-H	1		-006											
	1145	S	SP-12 EAST-H	1		-007											
	1210	S	SP-13 WEST-H	1		-008											
	1230	S	SP-14 EAST-H	1		-009											
	1300	S	SP-15 WEST-H	1		-010											
06/18	1325	S	SP-16 NORTH-H	1		-011	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
06/19	0800	Sean Jerry			6/19/20	1400
6/19/20	1700			Courier	6/20/20	7:40

Remarks: Bill Devon

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.

Chain-of-Custody Record

Client: Safety & Environmental Solution

Mailing Address: 703 E. Clinton Hobbs N.M 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush

Project Name: Devon Snapping 10 7D 1H 2RP-4661

Project #: DEV-20-011

Project Manager: Allen, Bob

Sampler: Sosa, Jerry

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.4-0=0.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006A87	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
06/17	0945	S	SP-17 North-H	1	Ice	-012	X	X									X
	0955	S	SP-18 East-H	1		-013	X	X									X
	1020	S	SP-19 South-H	1		-014	X	X									X
	1040	S	SP-20 West-H	1		-015	X	X									X
06/17	1100	S	SP-21 2ft Bottom	1		-016	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
06/19	0800	Sosa Jerry				
6/19/20	1900			courier	6/20/20	7:40

Remarks: Bill Devon

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

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

August 04, 2020

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

RE: Devon Snapping 10 Fed 1H OrderNo.: 2007C54

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/24/2020 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 or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2007C54**
Date Reported: **8/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-H-11A
Project: Devon Snapping 10 Fed 1H
Collection Date: 7/22/2020 9:55:00 AM
Lab ID: 2007C54-001 **Matrix:** SOIL **Received Date:** 7/24/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	70	60		mg/Kg	20	7/30/2020 5:20:57 PM	54063
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/27/2020 11:05:45 PM	53952
Surr: BFB	100	70-130		%Rec	1	7/27/2020 11:05:45 PM	53952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/31/2020 12:20:31 AM	54001
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/31/2020 12:20:31 AM	54001
Surr: DNOP	89.1	30.4-154		%Rec	1	7/31/2020 12:20:31 AM	54001
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	7/27/2020 11:05:45 PM	53952
Toluene	ND	0.050		mg/Kg	1	7/27/2020 11:05:45 PM	53952
Ethylbenzene	ND	0.050		mg/Kg	1	7/27/2020 11:05:45 PM	53952
Xylenes, Total	ND	0.10		mg/Kg	1	7/27/2020 11:05:45 PM	53952
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	7/27/2020 11:05:45 PM	53952
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	7/27/2020 11:05:45 PM	53952
Surr: Dibromofluoromethane	100	70-130		%Rec	1	7/27/2020 11:05:45 PM	53952
Surr: Toluene-d8	99.4	70-130		%Rec	1	7/27/2020 11:05:45 PM	53952

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2007C54**
Date Reported: **8/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-H-13A
Project: Devon Snapping 10 Fed 1H
Collection Date: 7/22/2020 10:35:00 AM
Lab ID: 2007C54-002 **Matrix:** SOIL **Received Date:** 7/24/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	130	59		mg/Kg	20	7/30/2020 5:57:59 PM	54063
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/27/2020 11:34:17 PM	53952
Surr: BFB	103	70-130		%Rec	1	7/27/2020 11:34:17 PM	53952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/31/2020 12:44:55 AM	54001
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/31/2020 12:44:55 AM	54001
Surr: DNOP	87.6	30.4-154		%Rec	1	7/31/2020 12:44:55 AM	54001
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	7/27/2020 11:34:17 PM	53952
Toluene	ND	0.049		mg/Kg	1	7/27/2020 11:34:17 PM	53952
Ethylbenzene	ND	0.049		mg/Kg	1	7/27/2020 11:34:17 PM	53952
Xylenes, Total	ND	0.098		mg/Kg	1	7/27/2020 11:34:17 PM	53952
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	7/27/2020 11:34:17 PM	53952
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	7/27/2020 11:34:17 PM	53952
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/27/2020 11:34:17 PM	53952
Surr: Toluene-d8	101	70-130		%Rec	1	7/27/2020 11:34:17 PM	53952

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007C54**
Date Reported: **8/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-H-17A
Project: Devon Snapping 10 Fed 1H
Collection Date: 7/22/2020 11:00:00 AM
Lab ID: 2007C54-003 **Matrix:** SOIL
Received Date: 7/24/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/30/2020 6:10:20 PM	54063
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2020 12:02:47 AM	53952
Surr: BFB	98.0	70-130		%Rec	1	7/28/2020 12:02:47 AM	53952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/31/2020 1:09:18 AM	54001
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/31/2020 1:09:18 AM	54001
Surr: DNOP	89.5	30.4-154		%Rec	1	7/31/2020 1:09:18 AM	54001
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	7/28/2020 12:02:47 AM	53952
Toluene	ND	0.049		mg/Kg	1	7/28/2020 12:02:47 AM	53952
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2020 12:02:47 AM	53952
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2020 12:02:47 AM	53952
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/28/2020 12:02:47 AM	53952
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	7/28/2020 12:02:47 AM	53952
Surr: Dibromofluoromethane	105	70-130		%Rec	1	7/28/2020 12:02:47 AM	53952
Surr: Toluene-d8	98.6	70-130		%Rec	1	7/28/2020 12:02:47 AM	53952

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2007C54**
Date Reported: **8/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-H-18A
Project: Devon Snapping 10 Fed 1H
Collection Date: 7/22/2020 11:30:00 AM
Lab ID: 2007C54-004 **Matrix:** SOIL
Received Date: 7/24/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/30/2020 6:22:41 PM	54063
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/28/2020 12:31:18 AM	53952
Surr: BFB	92.7	70-130		%Rec	1	7/28/2020 12:31:18 AM	53952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/31/2020 1:33:48 AM	54001
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/31/2020 1:33:48 AM	54001
Surr: DNOP	87.8	30.4-154		%Rec	1	7/31/2020 1:33:48 AM	54001
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	7/28/2020 12:31:18 AM	53952
Toluene	ND	0.050		mg/Kg	1	7/28/2020 12:31:18 AM	53952
Ethylbenzene	ND	0.050		mg/Kg	1	7/28/2020 12:31:18 AM	53952
Xylenes, Total	ND	0.10		mg/Kg	1	7/28/2020 12:31:18 AM	53952
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	7/28/2020 12:31:18 AM	53952
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	7/28/2020 12:31:18 AM	53952
Surr: Dibromofluoromethane	99.7	70-130		%Rec	1	7/28/2020 12:31:18 AM	53952
Surr: Toluene-d8	95.8	70-130		%Rec	1	7/28/2020 12:31:18 AM	53952

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007C54**
Date Reported: **8/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-H-19A
Project: Devon Snapping 10 Fed 1H
Collection Date: 7/22/2020 12:10:00 PM
Lab ID: 2007C54-005 **Matrix:** SOIL
Received Date: 7/24/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/30/2020 6:35:01 PM	54063
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2020 12:59:48 AM	53952
Surr: BFB	99.9	70-130		%Rec	1	7/28/2020 12:59:48 AM	53952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/31/2020 1:58:19 AM	54001
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/31/2020 1:58:19 AM	54001
Surr: DNOP	92.0	30.4-154		%Rec	1	7/31/2020 1:58:19 AM	54001
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	7/28/2020 12:59:48 AM	53952
Toluene	ND	0.049		mg/Kg	1	7/28/2020 12:59:48 AM	53952
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2020 12:59:48 AM	53952
Xylenes, Total	ND	0.099		mg/Kg	1	7/28/2020 12:59:48 AM	53952
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	7/28/2020 12:59:48 AM	53952
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	7/28/2020 12:59:48 AM	53952
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/28/2020 12:59:48 AM	53952
Surr: Toluene-d8	97.5	70-130		%Rec	1	7/28/2020 12:59:48 AM	53952

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2007C54**
Date Reported: **8/4/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-H-20A
Project: Devon Snapping 10 Fed 1H
Collection Date: 7/22/2020 12:50:00 PM
Lab ID: 2007C54-006 **Matrix:** SOIL
Received Date: 7/24/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/30/2020 6:47:22 PM	54063
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2020 1:28:23 AM	53952
Surr: BFB	104	70-130		%Rec	1	7/28/2020 1:28:23 AM	53952
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	7/31/2020 2:22:53 AM	54001
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/31/2020 2:22:53 AM	54001
Surr: DNOP	89.6	30.4-154		%Rec	1	7/31/2020 2:22:53 AM	54001
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	7/28/2020 1:28:23 AM	53952
Toluene	ND	0.049		mg/Kg	1	7/28/2020 1:28:23 AM	53952
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2020 1:28:23 AM	53952
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2020 1:28:23 AM	53952
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%Rec	1	7/28/2020 1:28:23 AM	53952
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	7/28/2020 1:28:23 AM	53952
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	7/28/2020 1:28:23 AM	53952
Surr: Toluene-d8	102	70-130		%Rec	1	7/28/2020 1:28:23 AM	53952

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007C54**

04-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1H

Sample ID: **MB-54063**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **54063**	RunNo: **70743**							
Prep Date: **7/30/2020**	Analysis Date: **7/30/2020**	SeqNo: **2461854**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-54063**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **54063**	RunNo: **70743**							
Prep Date: **7/30/2020**	Analysis Date: **7/30/2020**	SeqNo: **2461855**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007C54**

04-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1H

Sample ID: **MB-54001** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54001** RunNo: **70722**

Prep Date: **7/28/2020** Analysis Date: **7/30/2020** SeqNo: **2462290** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.1	30.4	154			

Sample ID: **LCS-54001** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54001** RunNo: **70722**

Prep Date: **7/28/2020** Analysis Date: **7/30/2020** SeqNo: **2462291** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	70	130			
Surr: DNOP	4.7		5.000		93.7	30.4	154			

Sample ID: **MB-54086** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54086** RunNo: **70751**

Prep Date: **7/31/2020** Analysis Date: **7/31/2020** SeqNo: **2462385** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		103	30.4	154			

Sample ID: **LCS-54086** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54086** RunNo: **70751**

Prep Date: **7/31/2020** Analysis Date: **7/31/2020** SeqNo: **2462386** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.4	30.4	154			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2007C54**
04-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Snapping 10 Fed 1H

Sample ID: **mb-53952** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **53952** RunNo: **70643**
Prep Date: **7/25/2020** Analysis Date: **7/27/2020** SeqNo: **2458337** Units: **mg/Kg**

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								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.4	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.6	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.50		0.5000		99.9	70	130			

Sample ID: **lcs-53952** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **53952** RunNo: **70643**
Prep Date: **7/25/2020** Analysis Date: **7/27/2020** SeqNo: **2458338** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	0.95	0.050	1.000	0	94.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.1	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.8	70	130			
Surr: Toluene-d8	0.48		0.5000		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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007C54**

04-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Snapping 10 Fed 1H

Sample ID: **mb-53952** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **53952** RunNo: **70643**

Prep Date: **7/25/2020** Analysis Date: **7/27/2020** SeqNo: **2458363** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		101	70	130			

Sample ID: **lcs-53952** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **LCSS** Batch ID: **53952** RunNo: **70643**

Prep Date: **7/25/2020** Analysis Date: **7/27/2020** SeqNo: **2458364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.0	70	130			
Surr: BFB	520		500.0		104	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Safety & Environmental Solutions | Work Order Number: 2007C54 | RcptNo: 1

Received By: **Scott Anderson** 7/24/2020 9:50:00 AM

Completed By: **Isaiah Ortiz** 7/24/2020 10:27:46 AM I-OK

Reviewed By: QM 7/24/20

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. 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: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: SRA 7-24-20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Not Present			

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 E. Clinton Hobbs N.M 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Days
☑ Standard ☐ Rush

Project Name: Devon Swapping to Fed 1H

Project #: DEV-20-011

Project Manager: Allen, Bob

Sampler: Son Jay

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.1-0=2.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2007CS41	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
7/22	0955	S	SP-H-11A	1	Ice	001	X	X									X
	1035	S	SP-H-13A	1		002											
	1100	S	SP-H-17A	1		003											
	1130	S	SP-H-18A	1		004											
	1210	S	SP-H-19A	1		005											
7/22	1250	S	SP-H-20A	1		006	X	X									X

Date	Time	Relinquished by	Received by	Via	Date	Time
7/23	0800	Son Jay	Cummings		7/23/20	0930
7/23/20	1900	Cummings	SPA	courier UPS	7.24.20	9:50

Remarks:

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.

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 13 2018
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1807555191

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company 6137	Contact Wesley Ryan, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No. 575-390-5436
Facility Name Snapping 10 Federal 1H (release occurred at Ross Ranch 10 Federal 1 location API # 30-015-29605)	Facility Type Oil

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-37899

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	10	26S	31E					Eddy

Latitude_32.059217_ **Longitude**_103.759247_ NAD83

NATURE OF RELEASE

Type of Release Oil	Volume of Release 16bbls Oil	Volume Recovered None
Source of Release PSI Valve	Date and Hour of Occurrence February 27, 2018 @ 12:30 PM MST	Date and Hour of Discovery February 27, 2018 @ 12:30 PM MST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD-Mike Bratcher & Crystal Weaver BLM-Shelly Tucker	
By Whom? Mike Shoemaker, EHS Professional	Date and Hour February 28, 2018 @ 9:48 AM MST	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
The back psi valve failed on the 2 phase separator causing the vessel to swamp out causing a release and misting overspray to the pad and adjacent pasture. Switched out of the production separator to prevent any further release.

Describe Area Affected and Cleanup Action Taken.*
A total of approximately 16 bbbls of oil (approximately 15.5 bbls to the pad surface and approximately 0.5 bbls overspray was released to the adjacent pasture). None was recovered. An environmental contractor will be called to assist with delineation and remediation efforts.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Dana DeLaRosa	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: Dana DeLaRosa		
Title: Field Admin Support	Approval Date: 3/14/18	Expiration Date: N/A
E-mail Address: Dana.Delarosa@dvn.com	Conditions of Approval: See attached	Attached ☐ 2RP-4160
Date: 3/13/2018 Phone: 575.746.5594		

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/13/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number nAPP-4001 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 4/13/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Devon Energy

Snapping 10 Fed 1h Battery Excavation & Remediation

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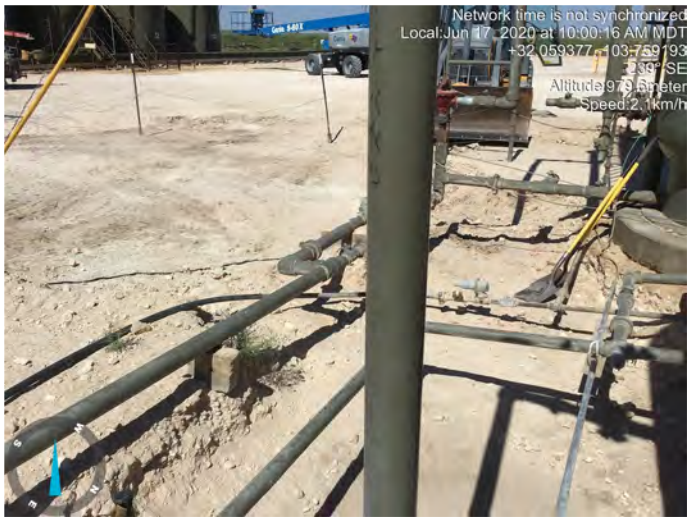

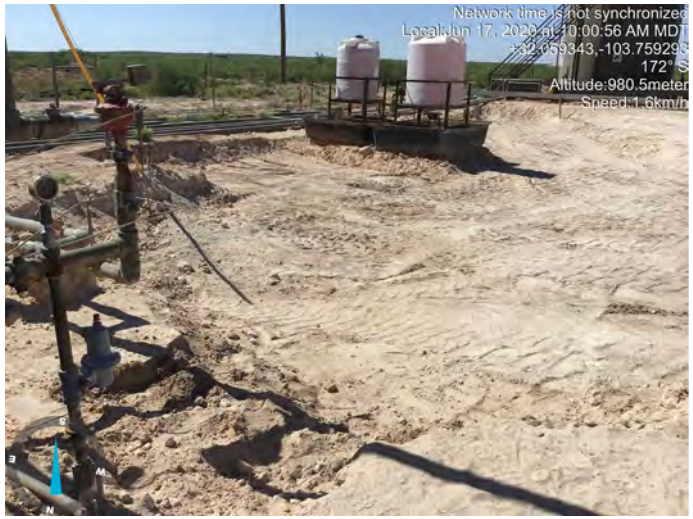

Devon Energy

Snapping 10 Fed 1h Battery Excavation & Remediation

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Snapping 10 Fed 1h Battery Excavation & Remediation

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 196003

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 196003
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	3/30/2023